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HANDBOOKS



The Routledge Handbook of English for Academic Purposes

Edited by Ken Hyland and Philip Shaw

THE ROUTLEDGE HANDBOOK OF ENGLISH FOR ACADEMIC PURPOSES

The Routledge Handbook of English for Academic Purposes provides an accessible, authoritative, and comprehensive introduction to English for academic purposes (EAP), covering the main theories, concepts, contexts, and applications of this fast-growing area of applied linguistics. Forty-five chapters are organised into eight parts covering:

- Conceptions of EAP
- Contexts for EAP
- EAP and language skills
- Research perspectives
- Pedagogic genres
- Research genres
- Pedagogic contexts
- Managing learning.

Authored by specialists from around the world, each chapter focuses on a different area of EAP and provides a state-of-the-art review of the key ideas and concepts. Illustrative case studies are included wherever possible, setting out in an accessible way the pitfalls, challenges, and opportunities of research or practice in that area. Suggestions for further reading are included with each chapter.

The Routledge Handbook of English for Academic Purposes is an essential reference for advanced undergraduate and postgraduate students of EAP within English, Applied Linguistics, and TESOL.

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Greg Myers, *Lancaster University, UK*

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1

INTRODUCTION

Ken Hyland and Philip Shaw

EAP: growth and significance

The term English for academic purposes (EAP) covers language research and instruction that focuses on the communicative needs and practices of individuals working in academic contexts. It therefore includes a range of activities from designing listening materials to describing the discourse of doctoral defences, and while often characterised as a practical affair, it goes beyond preparing learners for study in English to understanding the kinds of literacy found in the academy. EAP is, then, a branch of applied linguistics, consisting of a significant body of research into effective teaching and assessment, descriptions of the linguistic and discoursal structures of academic texts, and analysis of the textual practices of academics.

It is a field which has witnessed rapid expansion and development over the past thirty years. The term *EAP* seems to have been coined by Tim Johns in 1974 and made its first published appearance in a collection of papers edited by Cowie and Heaton in 1977 (Jordan, 2002). Driven by the growth of English as the leading language for the acquisition, dissemination and demonstration of academic knowledge, EAP has emerged from the fringes of the English for specific purposes (ESP) movement in the 1980s to become an important force in English language teaching and research. Drawing its strength from broad theoretical foundations, a commitment to research-based language education, and the subject-matter expertise of its students, EAP has sought to reveal some of the constraints of academic contexts on language use and to develop ways for learners to gain control over these. These learners, moreover, are now a diverse and heterogeneous group which includes not only the traditional EAP constituency of undergraduates studying in English as an additional language (EAL), but also secondary and primary students and academics writing for publication or presenting papers at conferences. All of these must, in some way, gain fluency in the conventions of English language academic discourses to understand their disciplines and to successfully navigate their learning or their careers.

EAP has also changed its character over the years. It may originally have been a purely practical affair concerned with local contexts and the needs of particular students, but as the interconnectedness of the contexts and our understanding of the needs have developed, EAP has become a much more theoretically grounded and research-informed enterprise. As the chapters in this volume illustrate, the communicative demands of the modern university involve far more than simply controlling linguistic error or polishing style. So while EAP continues to involve syllabus design, needs analysis and materials development, it has had to respond to the heightened, more complex and highly diversified nature of

such demands. Supported by an expanding range of publications and research journals, there is a growing awareness that students, including native English speakers, have to take on new roles and engage with knowledge in new ways when they enter university. They find that they need to write and read unfamiliar genres and participate in novel speech events.

The chapters in this book describe some of the diverse ways that EAP seeks to understand and engage learners in a critical understanding of the increasingly varied contexts and practices of academic communication. They also suggest something of the contribution which EAP has made to applied linguistics and language education. Assisted by a healthy receptiveness to the understandings of different perspectives, ESP has consistently provided grounded insights into the structures and meanings of texts, the demands placed by academic contexts on communicative behaviours, and the pedagogic practices by which these behaviours can be developed. As a result, EAP has consistently been at the front line of both theory development and innovative practice in teaching English. EAP is, in essence, research-based language education and the applied nature of the field has been its strength, tempering a possible overindulgence in theory with a practical utility.

But this practical orientation has also been a serious weakness, particularly in universities, where EAP comes to be seen as a low-status service activity. The assumption underlying this practice is that there is a single literacy which students have failed to acquire, probably because of gaps in school curricula or the insufficient application of learners themselves. Students are seen as coming to their university studies with a deficit of literacy skills which can be topped up in a few English classes. In this view, literacy can thus be taught to students as a set of discrete, value-free rules and technical skills usable in any situation. In fact, however, the English we encounter and are expected to produce in academic settings differs in cognitively significant ways – by genre, by stage of writing and by discipline – from that which we find outside of the academy. Facilitating the learning of this discourse requires time, resources, and the co-operation and respect of subject specialists.

The rapid expansion in the number of learners of English for Academic Purposes has led to a similar expansion in the number of EAP teachers. And this means that many – probably most – of the teachers of EAP around the world are not native speakers of English. The needs of these non-native teachers are different from those of native speakers, and this recognition has led to new developments in EAP materials and teacher training courses.

Some key features of EAP

As illustrated in Table 1.1, EAP rests on four main principles which reflect its origins in ESP and which distinguish it from other areas of TESOL.

Authenticity

Authenticity is one inheritance from ESP and a key concept in EAP. Originally it simply meant using texts in class where the vocabulary and grammar had not been simplified, but it now includes classroom uses of real examples of spoken, written, graphical and non-verbal communication. It requires us to distinguish between different types of written texts, and embed all this textual material in authentic tasks. This means teachers are encouraged not only to use real texts, but also to process them as their students would in the real world. However, although the mantra of authenticity encourages teachers to use authentic texts as genre models, where students need to see how cohesion, coherence and rhetorical

Table 1.1 Four main principles of EAP

<i>Concept</i>	<i>Gloss</i>
Authenticity	Classroom texts and tasks should be as close to the real academic world as possible.
Groundedness	A commitment to link pedagogy and research. A research base underlies materials and instructional practices.
Interdisciplinarity	EAP is not itself a theory or a methodology but employs an eclectic range of theories and methods.
Relevance	Linguistic and contextual relevance is ensured through needs analysis.

structure are maintained, authentic texts do not always fulfil these criteria, and teachers also have to be willing to tailor a text to improve its readability or to highlight a given feature. More broadly, recognising the value of authentic tasks and models for students has encouraged research into academic texts of a wide variety of types on a massive scale, both increasing our understanding of academic genres and improving methods for analysing them.

Groundedness

EAP has consistently provided grounded insights into the structures and meanings of texts, the demands placed by academic or workplace contexts on communicative behaviours, and the pedagogic practices by which these behaviours can be developed. EAP is founded not only on the analysis of texts but also, less often but increasingly frequently, the contexts in which these texts are found. But while the main contribution of EAP has been to offer a pedagogy for learners with identifiable academic communicative needs, the process of working towards this goal has seen important theoretical and methodological concepts sharpened and refined, most notably those of *genre*, *discipline*, *community* and *needs*. Importantly, the groundedness of EAP has also meant that teachers, and many students too, do not just read the research, but are actively involved in creating it. *Teachers* have become *practitioners* as they consider the discourses of the students they are teaching, and of the disciplines and genres that their students are studying. By understanding the genres we teach and the students we work with, our research feeds back into the design of curricula, courses, materials and tasks.

Interdisciplinarity

EAP is not a theory or a method but an area of study. As we have suggested, this does not mean that EAP lacks a theory, but it is an application of several theories and methods to specific registers. EAP draws its strength from a broad and eclectic range of different ideas, and its effectiveness lies in employing the ideas that offer the most for understanding communication and for classroom practice. Among these, we can include: systemic linguistics, discourse analysis, pragmatics, critical theory, social constructionism, communicative language teaching, contrastive rhetoric, socio-cognitive theory and the sociology of scientific knowledge.

Relevance

Finally, EAP tries to be relevant to students. It relies on needs analysis to systematically identify the specific skills, texts and communicative practices that a particular group of learners will use. Research and needs assessments are fundamental to EAP approaches to course design. Thus, in some circumstances, this may mean identifying a number of general skills for a heterogeneous group of students from different fields or for freshman or pre-university students who need to bridge the English they are familiar with at school to that which is expected in the disciplines. Here, various skills related to lecture comprehension and participating in seminars may be needed together with key writing practices such as using sources, impersonality and nominalization. If a needs analysis indicates that the study situation is more specific, then it is likely that instruction will focus on the genres required in the discipline and the preferred patterns of communication which students need to succeed.

The idea of *needs* therefore provides a link between perception and practice, and underlines research, authenticity and interdisciplinarity. While at one time relevance involved simply making sure we were teaching useful lexis and grammar, today it acknowledges wider contexts. EAP teachers have increasingly recognised that texts and tasks are enmeshed in other texts and in the situations in which they are used. For research, this means understanding how texts work in particular disciplines, seeing genres, for instance, as repeated kinds of social activity designed to be both recognizable and convincing to specialist readers rather than just arrangements of forms. For teaching, it means preparing students for a range of activities focusing on communication rather than just specific aspects of language. The concept of needs, however, has been criticized as privileging institutional interpretations of student needs and so creating courses which accommodate student learning to the demands of powerful institutional values and practices. We turn to this issue now.

Caveats, limitations, and cautions

While these characteristics underpin the strengths of EAP, they also contribute to its limitations, in particular: a tendency to work *for* rather than *with* subject specialists, a vulnerability to claims that it ignores students' cultures, and a reluctance to critically engage with the values of institutional goals and practices.

The first issue arises from the practical orientation of EAP, which tends to push it down the pecking order of university subjects, so that it is seen as subservient to the more prestigious theoretical disciplines rather than developing its own independent subject knowledge and skills. This leads to what Raimes (1991) calls 'the butler's stance' on the part of EAP, which acts to de-professionalize teachers and allows universities to marginalize EAP units. EAP comes to be regarded as a 'service activity', shunted off into special units, and marginalized as a remedial exercise designed to fix-up students' problems.

As we noted above, this conceptualization makes it impossible to address the real issues. EAP has generally not responded robustly to this misconception and too often accepted the underlying assumption that there is a single literacy which students have failed to acquire. Literacy can thus be taught to students as a set of discrete, value-free rules and technical skills usable in any situation. However, the idea of professional communities, each with its own particular practices, genres, and communicative conventions, leads us towards a more specific role for EAP at the same time as a growing body of literature into how knowledge is socially constructed through disciplinary discourses, strengthens the theoretical underpinnings of this view.

Bourdieu famously observed that academic discourse is no one's mother tongue, but the children of middle-class families with a mastery of the standard language find it considerably easier (Bourdieu & Passeron, 1965). It is more difficult for learners to acquire academic English if their own set of discourses or 'culture' is less congruent with those of the academy, whether or not some kind of English is their first language. EAP has validly been charged with failing to engage with students' cultures and it is only in the last decade or so that EAP has begun to take issues of culture and background seriously. This is partly because notions of culture often essentialize learner groups: they lump individuals together, ignore differences and devalue their practices. This neglect is also due to the influence of Western, and particularly American, conceptions of individualism which are highly suspicious of the idea of culture. But contrastive rhetoric, and its more recent incarnation as intercultural rhetoric, has offered insights for teachers into how students' culturally preferred ways of writing might impact on the ways they write in English. Problems remain, however, so that discussions of 'culture' can be ethnocentric, for example, and it is not always possible to distinguish the impact of first language or limited proficiency on writing difficulties. Furthermore, academic writing in a given discipline is an expression of the culture of the discipline, which is by no means that of any particular state or region, or even class.

Nevertheless, there is growing evidence that different groups tend to use language in different ways: employing different organisational patterns, making different persuasive appeals, using different ways of incorporating material, and relying on different linguistic features. The process of acquiring the norms of academic English or the English of a discipline must be different for these different starting points.

Understandings of culture, moreover, remind us that we are members of several cultures simultaneously – ethnic, age, disciplinary, etc. – and raises the possibility of conflicts students may experience in these multiple memberships. As our reference above to different kinds of English suggests, there are potential clashes between, for example, the ways that academic and ethnic cultures use English, which raises the issue of non-standard forms and the question of whose norms will be used to judge the conventions student writers use. Many post-colonial countries have developed thriving indigenous varieties of English which are widely used and accepted locally but which diverge from international standards. EAP teachers now take the issue of appropriate models for EAP seriously, exploring how far the professions, corporations and disciplines in which they work tolerate differences in rhetorical styles.

Finally, the expansion of EAP as a force in language education has been accompanied by a growing sense of disquiet concerning the socio-political implications of both the dominance of English at the expense of other academic languages, and the additional burden which such demands place on students and scholars alike. The advantage of a near-universal academic lingua franca must be seen against the loss of linguistic diversity and the difficulties for students and academics required to study and publish in a foreign language. Whether or not this dominance is the result of a conspiracy orchestrated by political and economic interests or the legacy of US and British colonialism, it has real effects on the lives of students, academics and universities across the globe who must read, write and often publish in a language that is not their own.

This raises the issue of EAP's response to these issues and whether it is a pragmatic or a critical discipline. Do we see our role as developing students' academic literacy skills to facilitate their effective participation in academic communities? Or do we have a responsibility to provide learners with ways of examining the academic socio-political status quo to critique these cultural and linguistic resources? But things are seldom as starkly polarized in the real world and it is a rare EAP teacher who consciously sets out with the

intention to replicate existing power relations by teaching prestigious forms of discourse. While criticized for taking an ‘accommodationist’ view of language learning, designed to fit students into the cogs of the institutional machine (e.g. Benesch, 2001), the EAP agenda has always been to help learners gain access to ways of communicating that have accrued cultural capital in particular communities, demystifying academic discourses to provide learners with control over the resources that might enhance their career opportunities. In the natural sciences, at least, it has to be recognized that the discourse to be acquired has emerged over the centuries and has the prestige to be expected from the stunning achievements of the disciplines. Nonetheless, teachers trying to do their best for students generally recognise that developing an understanding of the connections between genres and power makes these structures more amenable to analysis and more readily challenged where this is desirable.

There is, then, a growing sense that a social-theoretical stance is needed to fully understand what happens in institutions to make discourses the way they are. Increasingly, studies have turned to examining the ideological impact of expert discourses, the social distribution of valued literacies, the access non-native and novice members have to prestigious genres, and the way control of specialised discourses is related to status and credibility (Hyland, 2004). Clearly EAP must engage with issues of power and help learners develop a critical awareness of how language works to support institutional inequalities (Pennycook, 1997; Benesch, 2001), but it has yet to seriously confront them. While there is greater awareness of the relationships between language and power and of the inequalities which support the prestigious literacy practices we teach, effective classroom responses are often constrained by the institutional contexts in which teachers work. EAP teachers are frequently employed as vulnerable, short-term instructors in marginalized ‘service units’ and ways of facilitating change in such environments remain to be explored.

Conceptions of EAP

The chapters in this volume provide a rich commentary on these issues as well as a conspectus of what is going on in the expanding world of EAP teaching and research. They are ordered from the most general and ideological issues to the most particular and operational, but of course ideology affects practice and in an applied field the demands of practice restrict the applicability of ideology.

Hyland starts off with a discussion of the tension between a general EAP addressing a generalized academic discourse and dedicated disciplinary-discourse instruction. The research and teaching sides of EAP often pull in different directions here. Research into needs suggests splitting, in that rather specific discursual practices are found in each discipline, while the demands of teaching tend to encourage lumping into broader groupings for practical reasons.

A more urgent version of a similar tension appears in Lillis and Tuck’s account of the academic-literacy tradition. Literacy is not a generalized skill but grounded in individual contexts. Students come from diverse discursual backgrounds, and in a democratic society it is not a teacher’s duty to devalue the expressions or the insights of one group in favour of those of another. Ways must be found for the academy to welcome incomers. But once again, as Lillis and Tuck point out, traditional academic discourse and the structures it represents are strong, and discourse-analytical or EAP voices are weak. In their teaching practice, teachers will often find themselves doing something very like assimilating the outsiders to the dominant discourse, because that is where success lies for the individual.

However, Mauranen, Hynninen and Ranta identify one area in which traditional discrimination against outsiders is breaking down. Globalization means that more and more leading teachers and researchers do not have English as their first language, and the academic world is responding to this by erasing the privilege that is ascribed to L1 English. It is hard enough to be highly proficient in a second language, but the rise of attitudes defining English as a language with no special ties to one culture or state means that the proficient user no longer needs to be branded forever as non-native. EAP teachers need to ensure that their work reflects this shift of attitudes.

EAP has focused (not necessarily rightly) on easing the entry of second-language users into their disciplinary environments, but in North America it has grown up alongside a tradition aimed at inducting university entrants into a new general university culture. Tardy and Jwa describe the relation between US composition studies and EAP, which is a complex one that highlights differences in values that bear careful consideration. Composition studies has seen as its task to help students acquire an effective voice of their own, and beyond that a particular critical or humane stance which may stand in deliberate opposition to some demands of the university. Once again, there is tension between EAP's somewhat instrumental stance and wider educational aims which can rarely be adopted in EAP for practical reasons.

Contexts for EAP

The second section of the volume examines some of the contexts in which EAP teaching and research take place, showing how the strands described above appear differently in different contexts.

Airey examines the situation in Europe, in which most countries have academic institutions at all levels operating primarily in the national language, but often using English-language reading material. A rapidly increasing trend here is fully English-medium instruction, with the dual aims of improving the English of local students and recruiting from outside the country. These aims are not wholly congruent because the first should involve conscious attention to developing disciplinary biliteracy, mastery of the disciplinary discourses in both languages, while the second calls for monolingual use of English as a (neutral) *lingua franca*.

In post-colonial environments, English is often the predominant language of secondary and tertiary education. Parkinson shows that the system in South Africa throws up many students with very diverse cultural and class backgrounds and correspondingly diverse discourses and proficiencies. Universities employ EAP teachers to deal with the situation but the risk is that they apply a deficit interpretation and alienate these learners. She argues that ways have to be found, within the academic-literacies tradition, to make use of their resources and suit the university to them rather than the other way round, but this has to be done without the universities losing contact with transnational disciplinary 'communities'.

Like Europe, China has a well-established national-language infrastructure in higher education, alongside which there is a trend or fashion for English-medium instruction with somewhat mixed goals. Cheng shows, however, that a major difference from Europe is the existence of a well-established (though low-status) tradition of general English teaching at university, tightly linked to high-stakes English tests, and (like US composition studies) with general liberal-education aims. In this context, Cheng does not see rapid growth of a needs-oriented EAP approach.

By contrast, EAP has a long and respected tradition in Latin America. The ambitious survey by Salager-Mayer, Llopis de Segura and Guerra Ramos shows that the needs across

the continent are still chiefly for reading and writing in English in a context in which instruction is entirely in the national language. The survey confirms the status of Brazilian EAP as a powerful research-based activity, and the more precarious position of the field in other countries. The well-defined range of skills taught is a strength as well as a limitation.

EAP and language skills

The third section focuses in a more detailed way on a selection of the skills likely to be required in academic work in English. Perhaps the most characteristic academic skill is to read material and recreate it in writing, and each half of this activity requires both language proficiency and more intangible local or disciplinary literacy. Hirvella points out that intertextuality is a key issue in the academic discourse that is ‘no one’s first language’, and shows that proficiency and lexical knowledge are not the key issues in summary-writing, but that nevertheless second-language writers are less likely to attempt more involved forms of paraphrasing. More generally, new entrants to the university are inclined to rely on the general ‘web culture’ for both their sources and their intertextuality practices, and these practices situated outside the academy are likely not to be valued in the new environment.

A basic skill for EAP learners is of course language proficiency. Manchón addresses the issues in respect of ‘writing to learn language’. It is more laborious to write in a language with which one is less familiar, even if the product is of a high standard. But multilingualism has affordances not available to monolingual writers and EAP needs to develop techniques for making use of them, particularly as this would reduce the risk of treating the multilingual writer as deficient.

The lower fluency that may be experienced in a language that one does not fully master is also an acute issue in oral dialogic interaction. Basturkmen shows that although one may get by without oral participation, the demand for it is very stressful and failure to participate may result in the assignment of an undesirable student identity. Furthermore, it is in dialogic interaction that students may be scaffolded into use of disciplinary terminology and discourse, so targeted practice is of great importance.

Lack of automaticity in processing makes bottom-up listening difficult in a second language. Rodgers and Webb discuss listening to lectures, emphasizing both the importance of a language-proficiency factor – vocabulary size – and the potential benefits but also risks of the increasing role of visual support in lecturing.

Even more than in listening to lectures, adequate vocabulary is a prerequisite for learning from written texts. Coxhead reports research showing that the threshold for vocabulary knowledge is quite high but the range of vocabulary required for academic reading is limited, in the sense that words from colloquial, literary or everyday (such as cooking) registers are not required. What are required are the disciplinary terms that it is the job of the subject specialist to teach, and the tricky general academic terms which appear across a range of disciplines and will be presupposed by subject specialists. Coxhead’s conclusion is that it is the EAP teacher’s role to identify and focus on these words to facilitate reading.

Research perspectives

The next section of the handbook discusses a variety of ways of conceptualizing and investigating the complexities of EAP which have transformed our understanding and are transforming our practice.

The best-developed theoretical perspective on language and language practices relevant to EAP is, as Hood shows, systemic-functional linguistics (SFL). By identifying functional units at all levels, SFL makes it possible to characterize exactly how the differing cognition and purposes of texts in the various disciplines have differing textual exponents, and thus to design appropriate tasks at the relevant linguistic level of students.

The data available for linguistic and textual analysis have been transformed by corpus analysis within the lifetime of EAP as a field. Nesi's chapter describes the many corpora now available, which make it genuinely possible for practising teachers and their students to investigate the register and organization of academic writing in various disciplines.

Beyond the necessary grasp of text and register patterns, a deep and well-grounded understanding of learning environments is increasingly a requirement of effective EAP. The methodology for this derives from ethnography and, as Paltridge and Starfield show, it is attention to the specifics of the situations in which texts are used and produced that make it possible for EAP studies to be grounded in the experience and necessary practices of learners.

It is the essence of academic writing that it builds on the work of others and therefore both manifest and constitutive intertextuality are key features, as Hirvella noted and Pecorari reminds us. Manifest intertextuality shows the sources of ideas or even wordings and conventions in academic writing differ from those in the on-line world in which many learners are at home. When EAP teachers encounter student failures in this area, called plagiarism, they find themselves in an area in which feelings run high and careful thought and action is needed.

Constitutive intertextuality helps shape texts into conformity with the structure of previous texts; that is how writers reproduce and recreate genres. This has been a very rich angle of approach in EAP. Here, Shaw, taking up the theme of groundedness, discusses in particular the network of syntagmatic, paradigmatic and diachronic links in which a text is situated.

A further perspective which is central to EAP in most situations is discussed by O'Halloran, Tan and Smith, who give an account of the increasingly multimodal nature of EAP communication. In particular, they point out not only that academic discourses are increasingly encoded in a variety of media, but also that making multimodal (electronic) resources available to learners may make academic discourse practices more accessible to students who now come from environments where multimodality is more familiar than monomodal texts.

As we noted above, the familiar observation that different educational systems or cultures favour different writing styles or move choices has been contested and was difficult to operationalize until the notion of genre was available. Reflecting a more social-theoretically sophisticated view than earlier writers, Connor, Ene and Traversa refer to a 'complex notion of the interactions of different cultural forces'. These forces operate at many levels from the nation to the discourse community, and they form the texts produced by an individual (or collective) within a particular genre. The individual text has to be seen as the product of active agents who are members of overlapping communities, rather than of a particular unitary culture.

Beyond deeper and broader understanding of academic text production, a key insight of the last quarter-century is that the aim of EAP teachers and researchers to facilitate the entry of their students into the cultures of their target 'discourse communities' can lead to complicity in power inequalities. But given the power relation in classrooms, attempts to overcome this can result in forcing students to be liberated. The solution, according to Macallister, is 'an engagement with the local positions of students', making sure that classroom practices give space for students' own political understanding and development.

Pedagogic genres

Part V deals with some important pedagogic genres. Some genres in the academy are very well researched, others are discussed here almost for the first time. These differences reflect discrepancies in the accessibility of data. Texts that are spoken and/or occluded are more difficult to collect than those which are written and public. The age of the media carrying the genre, its importance in the eyes of the discipline, and its value for EAP teaching are all also significant factors in determining the volume of research carried out.

The key genres for undergraduates to produce are written and monologic. Graves and White show that, like seminars, these genres are varied and grounded in local educational traditions and values. Very different traditions of support also exist. Graves and White raise an issue that is latent in much discussion of EAP – the need for greater awareness on the part of instructors of the genres they expect, so that students can start from a position of equality. Occluded requirements favour the already favoured.

Crawford Camiciottoli and Querol Julián discuss an ancient and still dominant genre which represents a challenge to all new entrants to the university but especially to L2 users because of its requirement of automaticity at a variety of levels. By highlighting the multimodal nature of lectures, they point out two of the challenges always facing EAP studies: to adapt teaching to developing genres, and to extend our understanding from texts to whole communicative or instructional events.

Like the lectures, textbooks, discussed here by Bondi, belong to a central instructional genre aimed at a large receptive audience. While lectures could be said to exemplify the thought processes of the discipline without its written register, textbooks almost do the opposite. They are problematic for EAP because their rhetorical organization is based on pedagogical principles rather than disciplinary norms. Therefore, they provide models for the disciplinary register (and facilitate learning) but do not model the research discourse that students may be expected to produce.

Spoken academic genres which require student production are challenging for other reasons, including their rather varied nature. This is particularly true of seminar presentations and contributions: as Aguilar shows, it is difficult to know what is expected in another system and difficult to marshal the wide range of skills required to take part. A frequent result is reinforcement of the powerful position of those already privileged by dint of language, nationality or gender. Somehow, marginal participants have to be helped to find ways to position themselves as experts.

The PhD supervision, student production at a higher level and in different circumstances, has hitherto had very little attention. Data are doubly difficult to obtain, in that oral interaction must be painstakingly recorded and transcribed, and in that the genre is not public as interactions may be quite sensitive. Nonetheless, in the environments Björkman was able to record, the interaction was remarkably egalitarian and the power inequalities which obviously present are managed fairly.

The last genre discussed in the section is another oral dialogic interaction, and it could be said to be the last pedagogic genre in a student's career: the dissertation defence. Unlike supervisions, it is often a public event. Mežek and Swales show that the discourse in two rather different contexts is quite similar, with a collegial atmosphere and frequent laughter alleviating the high-stakes nature of the encounter. Power issues seem more naked lower down the student hierarchy.

Research genres

In this section, the genres used in the research process are discussed. A key issue here is that raised by Lillis and Tuck, and also Mauranen, Hynninen and Ranta in Part I, that publication in English and conference participation in English have become necessities for most professional academics. Another is that technological change transforms the possibilities of genres.

On the cusp between research and pedagogic genres, dissertations and theses also count as research genres but they are less dialogic and usually less multimodal. Following an important theme in recent EAP studies, Paul Thompson presents a genre analysis of this high-stakes form and argues that its main contribution is that it provides learners with a conceptual apparatus that is appropriate for understanding their task. That is, rather than subjecting learners to prescriptions, it empowers them to choose appropriately.

Even before they submit their theses, research students will probably have had to produce a text in a less well-described genre: the conference poster. D'Angelo discusses posters and the difficulties they present as a genre which is written but requires or hopes for dialogue. She draws attention to the prospects offered by Digital Interactive Poster Presentations and other adaptations of the genre to the affordances of on-line digital communication. This is another area in which technological changes are changing the possibilities of familiar genres.

The most prestigious research genre in many disciplines is the research article. It is now of great importance not only for established academics but also for doctoral students. Samraj's chapter deals with the large number of investigations of the move structures of articles in various fields, and with our now quite deep understanding of the devices available for evaluation and expressing identity. She suggests that more study is now needed of the acquisition of these devices.

A challenging research genre for both the analyst and the EAL user is the conference presentation. A complex interplay of spoken language, gesture, displayed text and, often, handouts make presentations highly multimodal, and the presence of a live audience makes them crucially dialogic. Forey and Feng's chapter shows how SFL theory and the affordances of digital recording and display can produce a model that does justice to this complexity

Kuteeva's chapter takes up this theme of EAP genres as moving targets which the teacher must keep an eye on to facilitate students' entry into their target community. She shows how in many disciplines blogs, tweets and wikis have become essential media within the community, and therefore need to be taken into account in EAP course and task design, particularly since (another repeated theme) some knowledge of related genres will be brought into the academy from everyday experience.

Pedagogic contexts

EAP settings differ from one another not only because politics differ, but also because they are placed in different parts of the educational system. The success of a functional, genre-based view of language use has meant that approaches related to EAP are used quite widely in secondary and tertiary education.

In the middle years of secondary school, children begin to acquire academic discourse in a variety of subjects. Humphrey argues that EAP might contribute to more equal access to education if it could make clearer what is entailed by this and demystify academic language. She shows that steps have been taken towards this goal using the insights of SFL, particularly in Australia, but also that controversy is unavoidable around the extent to which teaching the rules of the game merely strengthens an unfair game.

In US schools, there has been a very large-scale attempt to catalogue the cognitive skills that should be learnt across the curriculum at each level, called the Common Core. Johns' chapter shows that the intellectual basis of this is of course the skills approach, without particular social grounding or critical ambitions, and unlike in Australia, it has not been based on sophisticated theory. Nevertheless, these standards provide a framework of terms and concepts that allows discussion about literacy within and outside schools

At undergraduate level, Storch, Morton and Celia Thompson show that there are similar tensions within EAP, although the tyranny of testing is absent. Their case studies exemplify both the limitations of an 'accommodationist' skills-based approach and the pitfalls involved in trying to get students to think critically. At the same time, the studies suggest how practical solutions can be found. They also bring up the linkage between our conceptualization of EAP and the extent to which it is marginalized institutionally and forced into the 'butler's stance'.

EAP may be most well developed at the level of research students, partly because at this level English has become a necessity across the globe, and because there are very large communities of prestigious EAL users at Anglophone universities. Needs are clear and present but steadily changing and, as Feak shows, genre-based courses have been developed which tackle new issues such as interdisciplinary discourse practices and the increasing need to communicate with non-experts.

Professional academics are a privileged group within their own communities, but, as Belcher, Barron Serrano and Yang point out, EAL users often feel at a disadvantage on a world stage, and in fact often suffer disadvantage comparable in nature if not in scale to minority students at undergraduate level. Their discourse practices may be devalued and they may be excluded from social networks. A broad approach to EAL scholars' needs is essential, alongside efforts to redress the power differentials in academia.

Managing learning

The final section of the volume examines the practical issues surrounding the delivery of EAP courses. There is a deep linkage between theoretical stances and the practical demands of managing learning, but empirical research is thin on the ground in several areas. A number of these chapters are pioneering surveys of the issues, among which quality control and codes of practice are central.

The units within universities that provide EAP courses or academic writing support differ markedly between states. Gustafsson and Ganobcsik-Williams describe the long-standing traditions that underlie different types of units in the US, and the more recent developments that have led to the institution of writing centres (often bilingual or multilingual) in Europe.

EAP units typically operate under considerable financial and institutional pressure. Gillett's chapter summarizes the limited research and the experience-based recommendations that are available to guide managers of such units in their practical tasks. The standard recommendations of BALEAP (British Association of Lecturers in English for Academic Purposes) play a prominent part, as the association has been among those in the forefront of EAP quality assurance.

EAP teachers have tended to learn by experience and their reading of the research literature. Ding and Champion's chapter describes criteria and research which could form the basis for more formalized training, and discusses some sample courses. But this is in the context of universities which are increasingly commercial in their outlook, and in which the need for theoretical depth and breadth in EAP teachers is increasingly ignored. There is a risk that cheap quick-fixes erode the progress reported in earlier chapters of this volume.

Effective courses must be based on thorough needs analysis which is informed by an understanding of the discourse practices and ideological perspectives discussed in previous chapters. Bocanegra-Valle's chapter summarizes this relatively well-researched area and makes a link from needs analysis to quality assurance. Quality teaching is only assured if it is related to effective needs analysis

The materials and tasks that instantiate EAP in the classroom are clearly what actually leads to success or failure. Stoller's chapter reviews principles and guidelines for task and material design, discussing how far these items can be authentic and how they can foster fluent use of language to achieve longer-term aims.

Materials and tasks today are of course more often than not computer-based. Yim and Warschauer set digital tools already mentioned, like concordancing and computer-mediated collaboration, in the context of computer-assisted language learning in general. Most strikingly, they emphasize the potential of computer adaptation of text to scaffold skills learning and thus to further learner autonomy.

Because university-level EAP is often seen as remediation and not credit-bearing, it is often not subject to high-stakes assessment. But if it is to be treated with the respect it claims then it must assess its success through student achievement. Weigle and Malone's chapter concludes the volume by addressing this crucial issue. They discuss the major tests of academic English that already exist, showing the trend towards increasing integration of skills that makes the tests more valid in context, and draw out general features that would be of use to practising teachers designing tests of their own students.

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PART I

Conceptions of EAP

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2

GENERAL AND SPECIFIC EAP

Ken Hyland

Specificity and EAP

What sets English for academic purposes (EAP) apart from general language study is its focus on specific, purposeful uses of language. Cummins (1982) refers to specific purposes texts as using ‘context-reduced’ language which tends to be abstract, and seems to rely less heavily for its coherence on an immediate context than the language of everyday interaction. EAP students are studying English for a particular practical need which means curriculum designers study target language features in specific academic contexts, and teachers focus on these features in their classrooms. The idea of specificity, then, has come to influence the kinds of data researchers collect, the ways they collect it, and the theories they use to understand it. Equally importantly, a focus on specificity has shaped the field’s heavy dependence on a strong research orientation, and led to the development and sharpening of key concepts such as *genre*, *authenticity*, *discourse community*, *communicative purpose*, and *audience*. But while the notion of specificity is at the heart of most definitions of EAP, debates continue over just how specific its purposes should be.

This debate goes back to Hutchinson and Waters’ (1980) article ‘ESP at the Crossroads’, and arises partly as a result of different perceptions of how academic language is used and learnt, and partly because of the constraints of different instructional contexts. Essentially, the issue resolves into a single question: are there skills and features of language that are transferable across different disciplines or should we focus on what is needed by particular learners? Some teachers have sought to tailor instruction to students’ disciplinary subject matter needs, while others have tried to identify common ground among students and teach what Hutchinson and Waters (1980) referred to as a ‘general linguistic competence’. This second view informs EAP textbooks and has found its way into many EAP programmes, particularly in pre-sessional and preparatory courses for international students seeking to get the International English Language Testing System (IELTS) grade they need to study in English. The issue of specificity therefore challenges EAP teachers to take a stance on how they view language and learning, and to examine their courses in the light of this stance.

While initially there was a polarized debate between opposing camps, a better understanding of both the complexities of instructional contexts and the characteristics of academic language has led practitioners to see the two positions as ends of a continuum rather than a dichotomy: a dilemma rather than a conflict. This chapter lays out the arguments for both positions to

raise some key issues of EAP practice and theory while sketching a view of specificity as is supplied by the student as well as the teacher. The chapter concludes with a brief case study of both general and specific courses in Hong Kong.

English for general academic purposes (EGAP)

Following an EGAP approach, teachers attempt to isolate the skills, language forms, and study activities thought to be common to all disciplines. The claim is that once students have learnt these generic features then they can use them in a variety of contexts and for a range of needs. Dudley-Evans and St John (1998: 41), for instance, include among these: listening to lectures, participating in tutorials, reading textbooks and articles, and writing essays, examination answers, and reports. There are several reasons advanced for taking a general approach (Hyland, 2002).

First, some authorities have expressed doubts about the possibility of discipline outsiders identifying, and adequately teaching, specific varieties at all. Thus, Spack (1988) famously argued that language teachers lack the expertise and the confidence to teach subject-specific conventions and so these should be left to subject specialists as they know them best. Instead, EAP teachers ought to focus on general principles of inquiry and rhetoric. Second, there is the idea that EAP is simply too hard for students at lower levels of English proficiency who need to acquire a 'general English' suitable for all contexts before they can study the complexities of academic discourse. This sees language learning as an incremental process of acquisition involving a mastery of core forms before others.

Third, a focus on subject-specific skills relegates EAP to a low-status service role of simply supporting academic departments rather than developing its own independent subject knowledge and skills. This leads to what Raimes (1991) called 'the butler's stance' on the part of EAP, which de-professionalizes teachers and marginalizes EAP units. Widdowson (1983) argues that developing skills and familiarity with specific rhetorical schemata actually amounts to a *training* exercise. He sees this as a more restricted and mundane activity than *education*, which involves assisting learners to understand and cope with a wider range of needs. Krashen (2011) similarly regards specific EAP as skill-building: simply describing academic language then teaching it directly. Huckin (2003), in fact, suggests that specific EAP can easily lead to a teacher-centred prescriptivism and an overly rigid focus on certain genres, forms, and tasks at the expense of others. This straitjackets creativity and encourages a dull conformity to convention and a static, decontextualized pedagogy, particularly if teachers fail to acknowledge genre variation. Such an approach may produce unimaginative and formulaic essays, and fail to prepare students for the unpredictable new forms of communication that await them in their professional careers.

He argues:

In general, a teacher centered approach, no matter how specific, is unlikely to have the pedagogical effectiveness of a student-centered approach, especially in heterogeneous classes.

(Huckin, 2003: 3)

Raimes (1991), in fact, argues that academic writing at university should be part of a liberal arts curriculum which elevates the status of EAP by supporting a humanities aspect of students' experiences.

Fourth, and most centrally, is the idea that there are generic forms and skills that are transferable across contexts and purposes. Skills such as skimming and scanning texts for information, paraphrasing and summarizing arguments, taking notes from lectures, and giving oral presentations are often cited as universally useful to all students (e.g. Bruce, 2005; McCarter & Jakes, 2009). More centrally, some commentators argue that EAP should focus on register-level features rather than disciplinary-specific ones. Hutchison and Waters (1987: 165), for example, claim that there are insufficient variations in the grammar, functions, or discourse structures of different disciplines to justify a subject-specific approach. This is based on what Bloor and Bloor (1986) call the *common core hypothesis* or the idea that many features of English are found in nearly all varieties. This idea underlies most EAP textbooks as a means of making the materials as relevant, and therefore saleable, to as many students as possible.

Certainly there are register-level features which characterize a great deal of academic discourse, particularly writing. Students are often encouraged to employ features such as nominalization, impersonalization, and lexical density, foregrounding disciplinary arguments and subject matter to suppress their personal interests and identities. They are asked to sacrifice concreteness and empathy and to disguise the dynamic processes of change. Instead, academic conventions require them to discuss abstract concepts and relations, and to categorize, quantify, and evaluate according to the perspectives of their discipline (Halliday & Martin, 1993). Some efforts have also been made to identify what a core of academic competencies might consist of. Johns (1997: 58–64), for example, draws on the work of various writing theorists to create a list of features of ‘general expository academic prose’. This includes explicitness, intertextuality, objectivity, emotional neutrality, hedging, correct social relations, appropriate genre requirements, use of metadiscourse and signalling, and the display of a ‘disciplinary vision’.

The case for specificity

In many situations, however, EAP is most successful when it is tailored to meet the needs of the specific circumstances of students (e.g. Hyland, 2002; Sloane & Porter, 2010).

Many EAP teachers dispute the view that specialist discourse should be left to subject lecturers. It seems evident, for example, that subject teachers generally lack both the expertise and desire to teach literacy skills so that even giving feedback on written work can be cursory or non-existent (Hyland, 2013). Subject specialists often believe that academic discourse conventions are self-evident and are content to simply assign grades to products without concerning themselves with the process of arriving at the product. Nor is it entirely clear what comprises the underlying core or ‘general principles of inquiry and rhetoric’ (Spack, 1988) which teachers are advised to address. Even faculty members often disagree on commonalities; for example, Krause (2014) found in interviews with 50 academics that views about what generic skills should be in the university curriculum differed by discipline.

A second argument for specific EAP asserts that students do not necessarily learn best by studying general features before more specialized ones. Second language acquisition research shows that students do not learn in this step-by-step fashion according to an external sequence imposed by a teacher but acquire features of the language as they need them (Ellis, 1994). Students may need to attend more to sentence-level features at lower proficiencies, and perhaps require remedial attention in some areas, but there is no need to ignore either discourse or discipline at any stage. In fact, we now know a great deal about how disciplines use language, from the frequency and meanings of self-referring pronouns (Hyland, 2012a) to the genres on which students are assessed (Nesi & Gardner, 2012). It would, therefore,

seem almost perverse not to employ the considerable knowledge we have of disciplinary variation in the service of teaching.

There are, in fact, serious problems with identifying a ‘common core’ of language items. Focusing on a finite formal system ignores the fact that any form has many possible meanings depending on its context of use. If we incorporate meaning into the common core, however, we are led to the notion of specific varieties of academic discourse, and to the consequence that learning should take place within these varieties. As Bhatia (2002: 27) observes:

students interacting with different disciplines need to develop communication skills that may not be an extension of general literacy to handle academic discourse, but a range of literacies to handle disciplinary variation in academic discourse.

Taking a ‘narrow angle’ approach focusing on the genres, skills, and language features most applicable to students’ specialisms is also likely to be more motivating for them, making the relevance of study more obvious while activating their often considerable subject-specific knowledge. It also ensures that students are not studying aspects of the language they do not need or that may be used differently in their own specific fields of study. Even the so-called universal ‘semi-technical’ items in the Academic Word List (AWL), for example, can have very different frequencies and meanings in different disciplines so that teaching items as if they were generally useful and semantically equivalent may seriously mislead students (Hyland & Tse, 2007).

The wide-angle view which underpins EGAP sees academic literacy as a single, overarching practice; this not only disguises variability, but also suggests to both students and faculty that the language needed in academic contexts is merely an extension of everyday English. Students are seen as struggling with the conventions of their disciplines because of their imperfect acquisition of English at school or because they are using these conventions in a second language. In other words, students arrive at university with a deficit of literacy skills which can be topped up through some intensive EAP classes. The language centre is therefore a kind of remedial safe-house staffed by demoralized and inexperienced staff where EAP is relegated to a minor support role.

On the other hand, English for *specific* academic purposes (ESAP) may be more professionally challenging for teachers who have to familiarise themselves with the rhetorical and linguistic demands of particular contexts. It requires the jack-of-all-trades EAP practitioner to become a specialist in the ways that particular disciplines see the world and communicate how they understand it. At the same time, however, it elevates the importance of literacy specialists and the centres they work in, gaining the respect of faculty who generally appreciate the investment in time and commitment that teachers make in researching the specialist language of their discipline. This additional professionalism obviously costs institutions more in attracting qualified teachers, and ensuring professional development opportunities for them so they are able to research the needs of students and the demands made of them by their studies. The additional cost of this, however, is likely to be offset by more efficient, targeted, and motivating instruction, so that cost-effectiveness should be determined not just on the basis of cost but on the basis of effectiveness.

Foundation and features of specificity

The principle of specificity receives strong theoretical endorsement from social constructionism which stresses that disciplines are largely created and maintained through

the distinctive ways in which members jointly construct a view of the world through their discourses (e.g. Bruffee, 1986; Hyland, 2012b). Each discipline draws on different lexical, grammatical, and rhetorical resources to create specialized knowledge. Wignell, Martin and Eggins (1993), for instance, characterize the sciences as reworking experience technically by establishing a range of specialist terms which are ordered to explain how things happen or exist. This technicality is then used to create further technicality through defining, classifying, and explaining. The humanities, like history and philosophy on the other hand, employ abstraction rather than technicality, moving from instances to generalizations by gradually shifting away from particular contexts to build ever-more abstract interpretations of events. In other words, literacies are not just tools we pick up and put down as we need them, but are central to community epistemologies and personal identities. This means that students have to deploy a repertoire of literacy practices appropriate to different settings, and handle the social meanings and identities that each evokes.

It is, in other words, difficult to separate completely the teaching of specific skills and rhetoric from the teaching of a subject itself because what counts as convincing argument, appropriate tone, persuasive interaction, and so on, is managed for a particular audience. Students do not learn in a cultural vacuum but are judged on their use of discourses that insiders are likely to find effective and persuasive (e.g. Anderson, Evans & Harshorn, 2014). Ballard and Clanchy's (1991: 17) point from twenty-five years ago is worth repeating:

Just as modes of analysis vary with disciplines and with the groups that practise them (physicists, psychologists, and literary critics), so too does language. For the student new to a discipline, the task of learning the distinctive mode of analysis... is indivisible from the task of learning the language of the discipline... One area of development cannot proceed without the other.

This view of discipline-specific variation is supported by a large, and very diverse, body of research.

Most obviously, there is a high degree of specificity in the kinds of writing that students are asked to do in different disciplines. The ability to construct disciplinary arguments is at the heart of conceptual understanding of a field, and learners are required to think their way into their disciplines by learning to craft their writing in community-specific ways. Written genres themselves become the tools by which knowledge and learning are articulated for students. Because of this, writing has come to be seen as a social practice rather than a skill (Lillis, 2001), and specific genres are recognized as having a powerful influence on how students understand and engage with their disciplines. Even in cognate fields, such as nursing and midwifery, students are asked to produce very different writing assignments (Gimenez, 2009), and this diversity can present considerable challenges to students. A large-scale corpus study, in fact, has distinguished thirteen 'genre families', ranging from case studies through empathy writing to research reports, which differ in social purpose, generic stages, and the networks they form with other genres (Nesi & Gardner, 2012).

Even genre names can be misleading as the structure of common formats such as the experimental lab report can differ considerably across different engineering disciplines, for example (Braine, 1995). Terms like *lectures* or *essays* imply neither homogeneity nor permanence and it is easy to believe there is greater similarity in the communicative practices of different communities than is actually the case. Ethnographic studies of individual students and courses reinforce this picture of marked diversities of tasks and texts in different fields (e.g. Prior, 1998).

Interviews with faculty and students together with analysis of course assignments at Hong Kong University, for example, revealed that students in the Speech and Hearing Sciences write reflective journals, journalism students write narratives, and pharmacy students produce drug profiles (Hyland, 2015). Nesi and Gardner (2012), in fact, identified three main functions of undergraduate assignments: to demonstrate disciplinary knowledge, to produce new knowledge, and to prepare for professional practice following graduation. These broad social purposes are clearly subject-related and are reflected in the expectations and feedback comments of tutors (Hyland, 2013). Language, or rather specific varieties of language, therefore has a powerful influence on how students understand and engage with their disciplines. Language is tied to disciplines because it is inseparable from how we understand the world. This famous quote from Bartholomae captures this perfectly:

Every time a student sits down to write for us, he has to invent the university for the occasion – invent the university, that is, or a branch of it, like history, anthropology or economics or English. He has to learn to speak our language, to speak as we do, to try on the peculiar ways of knowing, selecting, evaluating, reporting, concluding, and arguing that define the discourse of our community.

(Bartholomae, 1986:4)

These ‘ways of knowing’ are not learned by repetition or memorization, but by writing, and learning a subject needs to be closely linked with learning to write in a subject.

This view of multiple literacies in universities is reinforced by text analysis research. While academic genres are often identified by their conventional surface features, they are actually forms of social action designed to accomplish disciplinary recognized purposes with some hope of success. We are more likely to achieve these purposes if we frame our messages in ways which appeal to appropriate culturally and institutionally legitimated relationships. So, in analysing the extent to which student writing across disciplines draws on generic or specialized vocabulary, Durrant (2014) found substantial variation between disciplines, while most disciplines were relatively internally homogeneous. Hyland’s work on undergraduate writing also found considerable specificity in both the frequency and functions of features. Students’ uses of hedges (Hyland, 2000), self-mention (Hyland, 2012a) and engagement features such as reader pronouns and directives (Hyland, 2006) all differ across disciplines. One major reason for this is that writers draw on what they know as a result of their reading and writing of other texts. This not only offers the individual writer a way of managing the complexities of disciplinary writing, but also contributes to the stabilization of reproduction of disciplines.

In sum, this research shows that scholarly discourse is not uniform and monolithic but an outcome of different practices and strategies, where argument and engagement are crafted within specific disciplines that have different ideas about what is worth communicating and how this should be done. The fact that subject teachers are generally unwilling, for various reasons, to teach these practices encourages EAP teachers to bring their courses as close as they can to their students’ reasons for learning English. This is likely to make teaching more effective as students will be able to make use of it in their subject classes (e.g. James, 2014). Equally importantly, as I noted earlier, students are likely to be more motivated if they can see that their English course is directly related to their main subject course. Studies by Malcolm (2013), Kember, Ho and Hong (2008) and Woodrow (2013) have all found that students were motivated by courses which they saw were relevant to their wider studies. All these reasons point to the desirability of taking a *specific* approach as the most effective mean of equipping students with the communicative skills they need to participate in their studies.

Commonalities: contexts, continua, and consciousness-raising

While the idea of professional communities, each with its own particular practices, genres, and conventions, leads us towards a specific role for EAP, there are contexts where identifying these kinds of specific needs is problematic. Many students are enrolled in EAP programmes before they have selected a disciplinary major, such as in the numerous pre-session courses offered to international students, or in 'common core' first year programmes where students take a range of courses before deciding on a major. Students around the world are also attending classes which prepare them for university admissions tests, such as IELTS, Test of English as a Foreign Language (TOEFL), and the Pearson Test of Academic English. These global language exams can only be reliable if they reduce the complexities of academic communication to something that can be administered and consistently measured for large numbers of candidates. This led, in fact, IELTS to abandon subject-specific exam modules in favour of generic tests (Davies, 2008).

It is also the case that in the modern university, students cross boundaries. The proliferation of double majors, joint degrees, and free electives means they inhabit complex academic and social worlds, moving outside their disciplines to discuss problems and write assignments with peers from other departments, and engage with lecturers and advisors in a disparate range of spoken and written genres. Such epistemological, social, and discursive border-crossings pose enormous challenges for students and teachers alike. Similarly, it is not difficult to imagine how rhetorically complicated life can become for students in interdisciplinary studies such as business studies, for example, where a student may have to produce texts in fields as diverse as accountancy and corporate planning. This means that it is often difficult for teachers to find sufficient commonalities to develop specific courses where students have varying target needs and little experience of academic discourse.

It is, however, difficult for teachers to identify generic features, so while intertextuality, objectivity, and hedging may be common, each is further refined and developed differently within each discipline. Some fields, such as literature or cultural studies for example, may actually subscribe to very few of them. We might, then, prefer to see skills and features as located on a continuum with some more generic and others more discipline-specific, varying by degrees along a scale. Thus, 'objectivity' is obviously most apparent in physical sciences such as physics and chemistry where arguments rest on impartial observation, experimental demonstration, and replication, while research in the humanities tends to be more explicitly interpretative and less abstract, with less 'exact' data collection procedures. Further towards the 'generic' end of the cline we might place referencing skills. All students need to know how to reference the sources they use and, in part, this is a mechanical exercise involving citation conventions, whether Harvard, APA, etc., and partly knowing how to successfully paraphrase ideas. These things might be seen and taught as generic skills which can be transferred across contexts, but not all disciplines use and evaluate references in the same way. There are, for example, considerable differences in the frequency of citation and in the preference for particular reporting verbs (Hyland, 2004).

In other words, contexts influence the extent to which teachers are able to implement specificity, and this should encourage flexibility in course design and sensitivity to the circumstances of particular students. The strong evidence of linguistic diversity across disciplines and for the motivational and learning benefits of English for Specific Academic Purposes materials and courses often has to be tempered by contextual exigencies. Ultimately, EAP is a means of empowering students with the knowledge and skills they need to succeed in their studies and professional careers, and we have to recognize that there are various

ways of doing this. Specificity must therefore, in part, be supplied by the student and not exclusively by the teacher's analysis of target texts and behaviours. A key driver for specificity in the classroom is the students who make up those classes, and for this reason teachers have sought to draw on the knowledge learners bring to the class, particularly their analytic skills.

One common solution to heterogeneous classes is to exploit these analytic skills and encourage students to contrast their disciplinary experiences through the rhetorical analysis of disciplinary texts (cf. Swales & Feak, 2012). *Rhetorical consciousness-raising* seeks to avoid simplistic and formulaic approaches to texts and the prescriptive teaching of target genres. Essentially, the approach emphasizes an exploratory and research-informed understanding of texts which promotes both learner awareness and learner autonomy. Teachers provide learners with the analytical concepts and tools to analyze, compare, and manipulate representative samples of discourse to experience for themselves the effect that grammatical choices have on creating meanings. Consciousness-raising always involves a focus on texts, usually through mini-analyses of the genres students have to write or of their own writing. One example is to ask students to identify and highlight where the writer of a text has chosen to use or avoid *I* and then determine possible reasons for this, finally writing a report to present their findings. Tasks such as this take a potentially generic feature of academic language and lead students towards the specificity of disciplinary texts. Text analyses, particularly those involving comparison with the analyses of peers, helps students become aware of rhetorical practices and the multi-literate nature of the academy.

Teachers can thus make a virtue of heterogeneity, while at the same time helping to satisfy students' demands for personal relevance. Consciousness-raising tasks develop sensitivity to the language used in different academic genres, and insights into the expectations of their target communities. Becoming literate in one's discipline means developing an awareness of the functions of texts and how these functions are conventionally accomplished. By making contact with those outside their field, students come to see that communication does not entail adherence to a set of universal rules but involves making rational choices based on the ways texts work in specific contexts.

Specific and general courses: Hong Kong cases

Both types of course present their own challenges, as we found in undertaking a major reform of the EAP curriculum at Hong Kong University in 2012. The reform accompanied a major restructuring of education in Hong Kong which reduced secondary education by one year and added it to the university curriculum. This move away from a highly specialized British-oriented model to align with four-year undergraduate degrees in mainland China and the US aimed to give students greater exposure to disciplines outside their major and opportunities for exchanges with international students. Charged with developing courses to embed relevant English literacy skills instruction into the new curriculum, the Centre for Applied English Studies (CAES) chose to provide a general EAP course to all 3,000 first year students, called 'Core University English' (CUE), and more specific 'English in the Discipline' courses in later years. Together these would form the basis of students' English learning experience and the cornerstone of academic English support for all undergraduates at HKU (Hyland, 2015).

CUE was designed to enhance students' proficiency in academic English, and so bridge the gap between the English they had learnt at secondary school and the language expected of them when entering disciplinary studies in their second year. We decided that classes would be composed of students from a range of faculties and that they would largely focus on

speaking and writing. The materials (Legg et al., 2014) are organized around five main themes of the Common Core curriculum: health, global issues, ethics, values, and Asia, and seek to move students from recognizing and using basic features of academic discourse, through identifying and evaluating sources, to note taking and paraphrasing, expressing a critical stance, synthesizing ideas, and finally structuring a complete academic text. Throughout the course, students are encouraged to express a viewpoint on topical, often controversial, issues, and to support that viewpoint with sources. In tutorials, they learn how to use language to collaborate in reaching deeper levels of understanding rather than winning debates.

The course constantly guides students in understanding the connections and contrasts between academic speaking and writing, and makes considerable use of models of different genre stages. Supported by tutorials and 90 hours of compulsory out-of-class learning materials on the electronic platform Moodle, learners are provided with a metalanguage to explicitly discuss strategies and features and to critically evaluate arguments and stances while reflecting on both texts and their own performances. Course materials contain many student texts which are marked up to show how stance, metadiscourse, citations, and quotes are used and how arguments are structured effectively. The fact that student texts are used as models for reading and writing, and that students are required to draw on content material from their first year common core courses in completing tasks, brings student-centred specificity into the course and helps to ensure relevance and involvement in learning.

After a general first year, students select their majors and begin their disciplinary studies which include a more specific English in the Discipline course. These courses were prepared following extensive research into the literacy demands of courses in different faculties, working in close collaboration with individual departments to ensure that the English courses aligned with the work students would do in their content courses. This kind of cooperation, however, was not always smooth, and teachers encountered a range of attitudes from enthusiastic cooperation to cold indifference. In some cases, faculty members actively tried to position language teachers as servants, expecting them to simply offer the support that they thought best. In writing of an earlier attempt at collaboration at HKU, for example, Barron (2002) argued that the ontological superiority that science teachers give to scientific facts can make them rigid when negotiating learning tasks and assignments. The divergent philosophies of functionalism in EAP and realism in science, in other words, can undermine cooperation and lead to the subordination of EAP to subject content. Needless to say, these attempts to hijack our courses were rigorously resisted.

The most positive working relationships were when our course preparations made least demands on subject teachers, and where there was mutual respect and acceptance of each other's specialist expertise. We tried to ensure that our voice was heard in the planning of literacy education and that our courses were not subordinated to the disciplinary course. In some cases, faculty members see writing as simply something to get right, but overall the experience of curriculum reform has been positive. It has provided opportunities to explain the nature of our work to faculties and to promote the value of our role in the university, giving us a greater presence and a platform to show the centrality of academic literacy to teaching and learning in the university.

This research into faculty practices has produced some interesting courses. English for Clinical Pharmacy, for example, is a second year course designed to develop students' abilities to meet the communicative demands of drug information delivery by focusing on common oral and written genres in drug information. Parts of the course involve teaching specific words and strategies for learning, and applying new terms so that students are able to select vocabulary and rhetorical devices appropriate to drug information genres, and to synthesize

and cite information and evidence from multiple sources to provide drug recommendations. Students also learn how to write clinical correspondence such as a drug reclassification letter and a drug incident report. Both are key elements of their medical course.

The learning activities for this purpose are contextualized in a drug information project jointly devised and co-assessed with the Department of Pharmacology and Pharmacy. Drug evaluation is a fundamental part of a clinical pharmacist's career, as many of the documents prepared by clinical pharmacists have to be based on some form of drug evaluation. This project is the main assessment task and requires students, working in pairs, to evaluate and recommend two drugs that can be used to treat the same medical condition. To ensure the comparison is meaningful, the drugs assigned to the students are selected by the Pharmacy department which, after some initial trepidation, came to see the value of discipline-specific work and that we were not encroaching into professional content areas. The Pharmacy department also advised on the kind of writing task which would be appropriate, eventually settling on an article in a hospital bulletin, a common site for clinical pharmacists to publish their writing, including drug evaluations, addressed to an audience of healthcare professionals who are working in a hospital.

The Drug Evaluation Project therefore provides an early opportunity for learners to develop and practise necessary, and highly discipline-specific, writing skills. It requires them to search for and select relevant drug information from reliable sources, to compare drugs for the purpose of evaluation, and to write a comparative drug evaluation article for publication in an online pharmacy bulletin using appropriate citation and referencing styles. Each student pair writes a first draft of the article and receives feedback before writing a final draft. Teacher feedback on drafts plays an important role in scaffolding cognitive development, alerting students to their strengths and weaknesses, and contributing to their acquisition of disciplinary subject matter and writing conventions. The students certainly find the project challenging. At the beginning of the course, some complained that the second year was too early for them to write in this way as they did not feel capable of judging sources nor had the knowledge to give drug evaluations. Including a lecture by the medical librarian on finding reliable drug sources, together with the support of the Pharmacy department, helped enormously in the successful development of the programme and enabling students to see its possibilities.

A second example of an English in the Discipline course is the second year English for business studies course. It is based around three main writing assessments using genres which student focus groups revealed were particularly problematic. The main one is an academic paper where students must argue why 'corporate social responsibility' is beneficial to a company's performance. Students are also expected to synthesize a case analysis, another assessment procedure distinctive to the business faculty, and to compile a small writing portfolio from samples of writing they have done, either in or out of the English class. This mixed-genre portfolio is accompanied by a letter integrating the entries, reflecting on their features and structures and pointing out the similarities and differences between them. There is, then, a demand that students produce several pieces of extensive writing, both collaboratively and individually, to demonstrate their understanding of features of key business genres, and the ability to comprehend and make inferences about the use of common language in business journals and reports.

Another aspect of the course was the decision to 'flip the classroom' so that input, readings, and course notes are accessed out of class, and class time is spent on discussion, collaborative writing, and peer and self-assessment tasks. This not only represents a transfer of responsibility of learning to students, but allows teachers and students to have more face-to-face time, and students to master material at their own pace. By freeing up more time for

discovery in class, we hope greater opportunities for specificity are available than by teaching the disciplinary conventions in class.

Our involvement in ESAP, therefore, involves a commitment to research-based language instruction. It means determining what the community's relevant conventions are so they can be made relevant and 'demystified' for students.

Conclusions

The take-home message here is that the discourses of the academy do not form an undifferentiated, unitary mass but a variety of subject-specific literacies. Disciplines have different views of knowledge, different research practices, and different ways of seeing the world, and as a result, investigating the practices of those disciplines will take us to greater specificity. We also, however, need to recognize that not all contexts are the same and that circumstances often require teachers to identify more register-level skills. It is always important, moreover, to recognize how students understand specificity. They usually come with some, and often considerable, subject-specific knowledge, and we need to hand over control of subject content to them, providing them with the tools to explore texts in their subject contexts.

For students, the acquisition of disciplinary knowledge involves an encounter with a new and dominant literacy, and because academic ability is frequently evaluated in terms of competence in this literacy, they often find their own literacy practices to be regarded as failed attempts to approximate these conventions. By detaching academic literacy from its social consequences, it is easy to see communication difficulties as learners' own weaknesses, and for ESP to become an exercise in language repair. The only way to counter this is to bring these practices back to earth by targeting specific contexts and drawing on the experiences of our learners. Specificity, thus, provides learners with a way of understanding the diversity they encounter at university and shows them how they might best achieve their academic goals.

Further reading

Hyland (2004); Hyland (2012b); Johns (1997); Nesi & Gardner (2012)

Related chapters

- 11 Language and L2 writing: learning to write and writing to learn in academic contexts
- 16 Corpus studies in EAP
- 19 Genre analysis
- 43 EAP materials and tasks

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3

ACADEMIC LITERACIES

A critical lens on writing and reading in the academy

Theresa Lillis and Jackie Tuck

Introduction

‘Academic literacies’ is a relatively new empirical and theoretical field¹ setting out to explore reading and writing in academia as social practice, using ethnographically-oriented methodologies and drawing on a range of critical theories. The pluralisation of ‘literacies’ signals an interest in academic reading and writing not only as diverse and situated in specific disciplinary contexts, but also as ideologically shaped, reflecting institutional structures and relations of power. This ideological concern gives rise to a transformative agenda encompassing individual writers, the conventions and practices of the academy, and the wider social relations in which all are embedded.

Academic literacies combines an empirical interest in the relationship between linguistic/rhetorical conventions and knowledge-making practices in academia as currently configured, with a critically driven vision of how these could be different and (though this will always be contested) more richly varied and more equitable. In many ways, academic literacies remains on the margins of academic writing theory and pedagogy, but has contributed dynamism to a number of research domains concerned with academic writing, including English for academic purposes (EAP).

This chapter aims to provide a broad overview of the field, pointing to key empirical and theoretical landmarks. The chapter also focuses specifically on the interface between academic literacies and EAP, in keeping with the particular concerns of this volume. A key aim is to explore connections and divergences with particular traditions within EAP, and in particular to articulate some of the fruitful connections between academic literacies (henceforward ‘Ac Lits’) and work in the domain known as ‘critical EAP’.

We begin by offering a historical account of the emergence and development of this field, followed by a consideration of some of the key themes raised by scholars in foundational, as well as in more recent, contributions. We then briefly review a key area of current debate: the relationship of Ac Lits-informed ‘critique’ to practice. The following section focuses on research methodology in Ac Lits, outlining its overarching ethnographic orientation. The final two sections explicitly focus on key divergences and connections between Ac Lits and work within EAP, pointing to the generative questions raised by both. We conclude

by calling for greater dialogue between Ac Lits and critical EAP in order to develop rich understandings of what it means to ‘do’ academic knowledge-making in the contemporary world.

Historical perspectives

Ac Lits emerged in the 1990s in the UK and in South Africa, in national contexts where the higher education systems were undergoing profound change. In the UK, the policy context was one of higher education (HE) expansion, ‘Widening Participation’² and increasing diversity of the student population.

The initial concern was not primarily international students or multilingualism, a key focus of attention in EAP, but ‘local’ students (whether monolingual or multilingual) whose increasing presence in higher education threw into relief taken-for-granted academic literacy practices, and problematised the idea that academic literacy in a particular language (assumed to be English) was relatively straightforward to teach and learn and, once learned, was transferable from one context to another (Ivanič and Lea, 2006; Lea and Street, 1998; Lillis, 2001, 2014).

In South Africa, interest in the writing and reading practised at university emerged in the national context of post-Apartheid expansion of higher education where concerns with access, diversity, power and equality were central to a political agenda of social transformation (Angelil-Carter, 1998; Thesen and Cooper, 2014; Thesen and van Pletzen, 2006). In both these national contexts, researchers began to focus on academic *writing*, principally because of the high stakes of writing for assessment, but also as a response to deficit discourses in wide circulation (in national media, as well as educational circles) which focused on students’ ‘inability’ to write (in English) (for discussions of ‘deficit’, see for example, Lea, 1994; Lillis and Turner, 2001; Thesen and van Pletzen, 2006). Ac Lits research was driven to a large extent by the concerns of practitioners – those with a role in teaching, learning and language development in higher education – who recognised the inadequacy of such deficit approaches. It was also becoming clear that ‘default’ teaching and learning practices (such as lecture-monologues or the ubiquitous essay) were no longer fit for purpose in relation to a diverse student body whose acculturation into academic literacies could not be assumed on entry to university, and that ‘business as usual’ would in any case be ideologically unacceptable in an expanded HE sector premised upon openness and diversity as explicit political goals (for overviews of these debates, see Lillis, 2001; Mann, 2008).

A key strand of this questioning of familiar HE pedagogies was a challenge to individualised, psychologised approaches to learning and to normative assumptions about academic writing, both of which, it was argued, fostered unhelpful deficit perceptions of students and – of particular concern to academic literacies researchers – their language and literacy practices (Haggis, 2003; Lea and Street, 1998), echoing arguments made by adult educators (e.g. Gardener, 1992). Drawing on anthropologically-based New Literacy Studies (NLS) (Barton et al., 2000; Baynham and Prinsloo, 2001; Gee, 1996), Ac Lits researchers reframed the student writing ‘problem’, turning the gaze on academic institutions (universities, disciplines) focalised through the experiences and perspectives of student writers (Ivanič, 1998; Lea, 1994; Lea and Street, 1998; Lillis, 2001).

Street’s (1984) notion of ‘autonomous’ versus ‘ideological’ models of literacy was (and is) key to the Ac Lits conceptual apparatus. Autonomous framings of literacy conceptualise it as separate/separable from context, as a fixed set of skills or competencies which can be

possessed – or lacked – leading to destructive binary perceptions of learners as literate/illiterate and to remedial, bolt-on writing pedagogies. Street, Lea and others recognised that the ‘essayist literacy’ which dominated (and still dominates) the academy was just such an autonomous model (see Lillis, 2001; Lillis and Turner, 2001). The theorisation of reading and writing in the academy as no less contingent and contested than any other set of literacy practices, in spite of ideological denial, led to the development of Lea and Street’s (1998) now widely disseminated three-part heuristic or ‘three models’ of academic writing, framed as:

- 1 decontextualised *skills*
- 2 more or less implicit *academic socialisation* into given genres and practices
- 3 situated, shifting and contested *literacies*.

An important aspect of this tripartite model (not always taken up in subsequent debates) is that each tier ‘successively encapsulates the other’ (Lea and Street, 1998: 158–9). In research terms, this means that attention to academic writing as literacies does not exclude questions generated by the other two conceptual levels, but seeks a ‘more encompassing understanding of the nature of student writing within institutional practices, power relations and identities’ (*ibid.*). At around the same time as Lea and Street’s work, Ivanič (1998) was using NLS-derived methodologies to generate insights into students’ experiences of academic writing, particularly in relation to issues of identity. Ivanič’s 1998 study combined textual analysis drawing on critical discourse analysis (CDA) (e.g. Fairclough, 1995) with insider accounts of text production, demonstrating how ethnographic data could enrich understandings of what it means to ‘do’ academic writing.

Viewing academic writing through a social practice/student writer lens exposed a damaging gap in understanding between tutors and students (Ivanič, 1998; Lea and Street, 1998; Lillis, 2001), and threw light on students’ struggles as they tried to negotiate a pathway through the maze of tacit and sometimes contradictory expectations. The use of CDA enabled a critical analysis of institutional language; for example, Lea and Street discussing the language of feedback, noted tutors’ use of ‘categorical modality, using imperatives and assertions, with little mitigation or qualification’. They argue that such feedback comments enact tutors’ ‘right to criticise’, and as such are a marker of their power and authority over students (1998: 169). This aspect of the work made an important contribution to scholarship in the field of HE assessment and feedback (see also Ivanič et al., 2000). Links were also made with the much longer tradition of writing pedagogy/research in the United States, including Composition Studies (e.g. in Ivanič, 1998), which had begun to tackle questions of academic literacy and higher education access several decades earlier. By drawing on these different traditions – pedagogical, anthropological and critical linguistic – Ac Lits researchers were able to explore the rewards, risks and losses for academic writers, not only in terms of academic success but also of meaning and identity (e.g. Angelil-Carter, 1998; Lillis, 2001). Insights derived from ethnographic studies were sharpened through a parallel emerging interest in the epistemological complexity of academic discourse, and through work subjecting dominant academic rhetorical traditions to critical scrutiny (Candlin and Hyland, 1999; Jones, Turner and Street, 1999), again influenced in part by work in the US-based fields of writing in the disciplines (e.g. Bazerman, 1988) and writing across the curriculum (e.g. Russell, 1991).

Key themes in academic literacies research

A number of overlapping themes emerged from Ac Lits research activity which have continued to be developed:

- *Students often experience the demands placed on them as writers as opaque and obscure.* This critique is captured by Lillis' concept of 'the institutional practice of mystery' (2001: 58) (a notion found useful by some EAP researchers and practitioners, e.g. Harwood and Hadley, 2004), developed in the context of her longitudinal ethnographic study of ten undergraduate writers from 'non-traditional' backgrounds. Ac Lits research provides an empirical basis for recasting difficulties in academic writing as an institutional issue rather than one of individual failure, and has included work on trainee HE teachers (Stierer, 2008), undergraduates at prestigious institutions (Boz, 2009) and of academics themselves (Gourlay, 2011; Lea and Stierer, 2011; Lillis and Curry, 2010). Ac Lits work has been taken up more widely in critical approaches to higher education pedagogy, e.g. Haggis (2003), Mann (2008).
- *Disciplinary discourses are historically situated and contested(able).* The challenges for students studying within more than one discipline are well documented by Lea and Street (1998, 1999), showing that demands vary within the discipline, even from one tutor to another, a finding supported in other studies (Baynham, 2000; Ivanič, 1998; Read et al., 2001). Other research throws light on new 'hybrid' academic writing genres, associated in particular with vocational degree courses, and the confusion (amongst students and tutors) which often surrounds discourses and genres (Baynham, 2000; Creme, 2000; Lea, 2012; Lillis and Rai, 2011; Stierer, 2008). These empirical findings challenge unitary notions of academic writing, exploding the myths of 'transferability' – that writing is a discrete, portable package of competencies – and of 'transience' – that the student writing 'problem' is caused by a temporary influx of 'underprepared' or 'disadvantaged' students, and can be bracketed for remedial action, until such students get up to speed, or things return to 'normal' (Thesen and van Pletzen, 2006).
- *Identity is a significant dimension in academic writing.* Work by Ivanič (1998), Lea (1998), Lillis (2001) and Thesen (2001), among others, highlights the identity-related consequences for students and scholars who bring 'other' experiences and discourses – those less valued in the academy as currently configured – with them to their studies. Drawing on critical and post-structuralist work on discourse and subjectivity, such work makes explicit the ways in which language is closely bound up with not only possibilities for meaning-making, but possibilities for 'being' in the world. These and later studies (e.g. Boz, 2009) see identity/ies not only as a function of individual biography and circumstance, but as a political question closely connected with the distribution of cultural capital and the differential value attributed to different meaning-making resources, in terms of discourses, languages and language varieties (e.g. Thesen and Cooper, 2014; Thesen and van Pletzen, 2006).
- *There is a need to open up the academy to a broader range of semiotic/linguistic practices as valid 'funds of knowledge'* (Moll et al., 1992). Despite the *de facto* diversity and hybridity of academic discourse referred to above, Ac Lits researchers have argued that the entrenched privileging of essayist literacy perpetuates inequalities in the academy, closing down diversity in knowledge-making, working against policy goals of widening access. Some studies throw light on the role of evaluation and assessment by gatekeepers in maintaining these conventions, and regulating access to particular academic 'inner

circles' (e.g. Lillis and Curry, 2010). Others focus on students' out-of-college literacies as a basis for exploring ways in which gaps between home and college literacies can be bridged through changed institutional practices and pedagogies (Ivanič et al., 2009; Lea and Jones, 2010; Paxton, 2007). Ac Lits, thus, specifically addresses diversification of the kinds of semiotic resources that could be used for academic meaning-making, exploring ways in which the academy can open up to new genres and practices (e.g. Archer, 2006; Creme, 2000; Curry, 2007; English, 2011; Lillis, 2011; Thesen, 2001) as a means towards institutional equity but also towards the enrichment of academic knowledge-making. The 'internationalisation' of the academy has meant that Ac Lits research has increasingly followed the South African example in turning its attention to the importance of adopting multilingual approaches to academic knowledge production, with some researchers focusing on more 'advanced' academic writers such as research students, and scholars writing for publication (Lillis and Curry, 2010).

- *There is a need to analyse practices in contemporary academia and the professions more generally.* In keeping with its stance of openness to diversity and change, increasingly researchers in Ac Lits have extended their research foci. One key logical extension has been in terms of writers – broadening beyond a focus on 'learners' to include everyday professional literacy practices, e.g. social workers (Lillis and Rai, 2011) and academics (Lea and Stierer, 2011), as well as academics seeking publication (Lillis and Curry, 2010). Another key extension has been the increasing attention paid by academic literacies-informed researchers to new and proliferating text production practices in a digital age of academia (Coleman, 2010; Goodfellow and Lea, 2007, 2013; Lea and Jones, 2010; McKenna and MacAvinia, 2011) as part of rethinking what is meant by writing and reading in contemporary society (Lillis, 2013).

An issue of ongoing concern: the relationship between 'critique' and practice

The critical orientation of Ac Lits, as in the case of critical EAP (discussed below), has caused questions to be raised about its usefulness for teachers working in 'mainstream' contexts (e.g. Wingate and Tribble, 2012). Ac Lits researchers have always acknowledged the need for a multilayered approach which incorporates attention to issues more closely aligned with models 1 and 2 of Lea and Street's heuristic (1998, see above), such as the need to raise students' awareness of valued academic genres, and to support them to present 'polished' work which does not draw attention to itself through 'errors'. The need to find ways of drawing on academic literacies critique to build pedagogy is emphasised in Lillis (2003, 2011) where, drawing on Bakhtin, she proposes and illustrates a writing pedagogy aimed at dialogic rather than dialectic meaning-making. Lea (2004) and Paxton and Frith (2014) focus on the implications of Ac Lits critique for curriculum design.

What Ac Lits seeks to explicitly avoid is the idea that students first need to learn 'the basics' and only then can be exposed to a pedagogy which leaves space for questioning and change. Questioning, for students and teachers, can be seen as a distraction from getting down to the real business of learning to master academic discourses, with the danger that questioning is infinitely postponed, or reserved only for those already admitted to academic 'inner circles' – and that the identities, knowledges and semiotic resources which student writers bring from outside the academy are gradually left behind, to the detriment of all. Thus, criticality is key to any pragmatism centred on writers' desires for meaning-making as well as on academic success. Nevertheless, it is important to acknowledge that it may be easier to implement

dialogic and critical pedagogies in higher education spaces where the constraints are not so huge, for example at postgraduate level or in particularly privileged institutional contexts (Tuck, 2013).

The question of what Ac Lits scholarship has to offer with regard to developing transformative practice is one taken seriously as illustrated in work by Lea (2004), Lillis (2003, 2011), Street and Leung (2009) and Street (<http://teachingeap.wordpress.com/2013/04/24/blogpost-by-brian-street-academic-literacies>). A recent example of the explicit attempt to define and illustrate what it means to adopt or 'work with' Ac Lits for pedagogy or course design is the *Working with Academic Literacies* collection, where teacher-researchers provide case studies of pedagogic interventions at undergraduate and postgraduate levels and across disciplinary contexts (Lillis et al., 2015). Case studies from across disciplinary boundaries in ten different countries illustrate how teacher-researchers are seeking to transform pedagogies of academic writing and reading, to transform the kinds of resources, genres and semiotic practices that are used/able in academia, and to transform the ways in which institutions conceptualise what it means to engage successfully in academic literacy practices and to develop provision which meets their policy goals of inclusivity and diversity.

Main research methods

A social practice perspective entails a view of writing as inseparable from context, hence the need for ethnographic methodologies which facilitate analysis of texts as part of contexts. Thus, as well as analysing samples of academic writing, in draft and as 'finished' products, Ac Lits researchers may, for example:

- elicit writer views, and/or literacy histories, often through interviews centred around particular texts;
- gather textual, field-note, photographic and interview data which throw light on institutional contexts and/or writers' interests;
- conduct participant observation of literacy events as a lens onto practice.

One core generative tension of ethnography is the dynamic between insider (emic) perspectives (usually of writers themselves) and the outsider (etic) perspective of the researcher-analyst. The desire to move beyond text, to seek understandings of writing which cannot be derived solely from the expert or etic analysis of text, was a key driver in the work of some early researchers in the field who were conscious of the limitations of formal linguistic analysis alone (Ivanič, 1998; Lillis, 2001).

Given its concern with the production and evaluation of academic texts, Ac Lits research necessarily incorporates an interest in texts as part of broader, open-ended data generation. However, the ways in which texts are analysed in any given study varies considerably. An indication of the range is provided by the work of Ivanič, whose 1998 study of eight student writers involved extensive textual analysis, using CDA, systemic functional linguistics (SFL) and frames from Goffman (e.g. 1969), alongside other data such as interviews with students and tutors and institutional documentation. A later study, in contrast, focused primarily on tracing UK further education students' vernacular literacy practices, employing a range of creative data-gathering instruments, such as annotated floor plans and photo-ethnographies (Mannion, Ivanič and Literacies For Learning in Further Education Research Group, 2007), but with relatively little close attention to the characteristics of the texts students were producing in college (but see Ivanič, 2006). Others have focused on the multimodal

affordances and constraints of vernacular and official forms of academic text-making for knowledge production (e.g. Thesen, 2001; Archer, 2006; English, 2011). Some studies have focused on the dynamic processes of text production, using notions such as ‘text histories’ and ‘text trajectories’ to track entextualisation and recontextualisation practices. In such studies (e.g. Lillis and Curry, 2010), analytic attention is placed on identifying key features of academic texts, as well as tracking how and when such features come into being in the process of text production.

It’s possible to see a continuum of research focus within Ac Lits where the role of textual data varies depending on the particular empirical focus and on researcher orientations and backgrounds. The question of the role of text analysis within the overarching ethnographic framework, and the relationship between texts and practices, is still a richly problematic and contested one. Lillis (2008), drawing on linguistic ethnography (e.g. Rampton, 2007), has argued for more context-sensitive categories for analysing texts, more consistent with an ethnographic epistemology, for example using notions such as ‘indexicality’ and ‘orientation’.

Academic literacies and EAP

This brief account of the key concerns of Ac Lits points to a number of shared motivations with the field of EAP writ large but also to a number of differences. It’s important to consider the similarities and differences, identifying in particular the intellectual space in which Ac Lits and a specific tradition within EAP, critical EAP, converge. Needless to say, this is an ongoing debate and what we offer is one perspective here.

Both fields have arisen out of practitioner-led concerns and an interest in bringing theory and empirical research to bear to help students – and increasingly academics – to succeed as writers and communicators in the increasingly globalised, English-dominant academy. They share an interest in foregrounding the often tacit nature of academic conventions and in making these visible; researchers in both fields have also emphasised the importance of investigating academic literacy as a highly situated practice. EAP has been interested in investigating the detailed discursual requirements of different disciplines which is echoed in the attention to academic literacy as social practice in Ac Lits work. As a corollary, in both EAP and Ac Lits research, the ‘target’ or valued rhetorical practices of any particular context have been the object of empirical enquiry, rather than assumed. Indeed, a shared overarching goal in EAP (evidenced by chapters in this volume) and Ac Lits has been to foreground the constitutive role of language in the academy, challenging its often marginal positioning in academic work (Turner, 2011b).

Nevertheless, there are key differences between EAP and Ac Lits in the stances towards the phenomena being explored:

- The key object or phenomenon under exploration in EAP tends to be the text, whereas in Ac Lits it tends to be the producer or meaning-maker. In an attempt to make visible academic conventions, there is a tendency in EAP to reify such conventions and, in so-doing, construe them as relatively fixed. Ac Lits sees such conventions as always contested/able.
- The explicit language of focus in EAP is ‘English’, with the target linguistic medium, English, construed in a very specific way (albeit often implicitly): that is, as a stable linguistic resource, as ‘standard (academic) English’ and as used by assumed ‘native’ speakers’. In contrast, in Ac Lits, the specific nature and status of ‘English’ has been explicitly challenged, not least because the focus on ‘non-traditional’ students and

their desires for ‘vernacular’ English(es) necessarily problematises common sense assumptions about there being one kind of ‘native’ speaker or one kind of acceptable ‘native (academic) English’.

- In EAP, the overriding metaphor adopted to describe students’ participation has been that of novice–expert trajectory. Whilst this metaphor is also used in Ac Lits, the emphasis tends to be on the diversity of life experiences and knowledges brought by students into the academy, which challenges any simple dichotomies between novice and expert.
- The ideological orientation towards pedagogy differs in emphasis in EAP and Ac Lits. EAP research (whether in EAP or disciplinary-specific spaces) usually operates from the standpoint that once target conventions, genres and discourses are identified, students can and should be inducted into these. Flexibility is valued but primarily in terms of the students’ ability to manage existing conventions: thus, students are encouraged to be agile adaptors, ‘navigating’ the expectations of different audiences (e.g. see Belcher, 2009). In Ac Lits, on the other hand, shift and change are seen as inherent in academic discourse itself, and agility and responsiveness as the responsibility of academic communities and gatekeepers as well as of students. The EAP orientation to pedagogy has been described as ‘normative’ (Lillis and Scott, 2007), in contrast to the ‘transformative’ orientation in Ac Lits. What is meant by transformative and how this connects with the orientation of a key strand of EAP, ‘critical EAP’, is discussed below.

Of course, in pointing to differences, here we are foregrounding what we see as ‘mainstream EAP’, some aspects of which have been strongly challenged from within EAP itself, notably ‘critical EAP’ (e.g. Benesch, 2001; Turner, 2004, 2012). In the final section below we summarise what we see as key convergences between Ac Lits and critical EAP.

Future directions: a converging space – critical EAP and Ac Lits

Rather than assume the two fields can straightforwardly be combined or their differences collapsed (as in Wingate and Tribble, 2012), it’s important to be aware of where convergences between EAP and Ac Lits lie. The key convergence is in ideological orientation, signalled by the use of ‘critical’ in critical EAP and ‘literacies’ in Ac Lits. We highlight what we see as key convergences and future directions for research into academic literacy practices in academia.

Rethinking the producer

As Hyland points out (2014), critical EAP involves a shift from a rationalistic approach to ‘needs’ analysis’, towards a language pedagogy built on ‘rights’ analysis as set out by Benesch:

Critical EAP allows ESL teachers and students to examine externally imposed demands and negotiate their responses to them, by addressing the following questions: Who formulated these requirements and why? Should they be fulfilled? Should they be modified? What are the consequences of trying to change current conditions? What is gained by obeying, and what is lost?

(2001, p. 53)

This opening-up of such questions is strongly echoed in Ac Lits work in ongoing debates about how to involve producers in choices around academic meaning-making.

Rethinking the linguistic and semiotic resources for academic meaning-making

Challenges to monolingualist assumptions for academic meaning-making have long been voiced in Ac Lits and EAP work, particularly from multilingual contexts such as South Africa, often engaging directly with work in the fields of contrastive rhetoric and second language writing (Angelil-Carter, 1998). Key questions being asked in critical EAP and Ac Lits include the following: whose English(es) are/should be valued and why? Where and how can/should vernacular language and literacy practices – including code meshing – be used in academic knowledge-making? To what extent can and should a broader range of linguistic and modal resources be used in academic knowledge-making? (English, 2011; Horner et al., 2011; Lillis and Curry, 2010; Pennycook, 1997). Whilst there is some work teasing out these questions, there is considerably more to be done.

Rethinking trajectories

Once the academic space is construed as contested in terms of whose voices and knowledges get to be heard, relying on a default metaphor of apprenticeship – from novice to expert – becomes questionable. Work focusing on both the student-writer (e.g. Angelil-Carter, 1998) and professional academic writers (e.g. Canagarajah, 2002; Flowerdew and Li, 2009; Lillis and Curry, 2010) problematises any straightforward positioning of writers and reader-evaluators within the academy as novices or experts, pointing instead to a diverse range of expertise and trajectories. Work on the academic practices of scholars, rather than students, in particular foregrounds the ways in which presumed trajectories (and therefore assumptions about the writer and reader) are mediated by stratification between the global centre and peripheries (see Canagarajah, 2002; Lillis and Curry, 2010).

Rethinking research methodologies

Whilst there has been important ethnographically-oriented work in EAP (notably Swales, 1998; also Flowerdew and Li, 2009; Johns, 1997), the overriding focus has been on texts in EAP and on practices in Ac Lits. There is considerable convergence in recent calls for the need for methodologies which enable holistic accounts of texts and practices (Hyland, 2014; Lillis, 2008) as well as for dialogic and collaborative methodologies (e.g. Lillis and Rai, 2011; Thesen and Cooper, 2014). The challenge of developing a methodology which takes account of text and practice and engages at micro, meso and macro levels of analysis is ongoing.

Rethinking writing as a networked activity

Empirical approaches to writing as social practice taken up in Ac Lits and critical EAP problematise the predominant focus on the individual writer, foregrounding the many participants in text production. For example, Lillis and Curry's longitudinal study of scholars publishing in English and other languages throws light on the key role of literacy brokers, on writing for publication as a networked activity, and the nature of English as a networked resource. A very different study by Tuck (2012, 2013) focuses on the role of tutors and assessors – rather than students – in shaping undergraduate writing on its way towards the final assessed product. Harwood et al. (2012) and Turner (2011a) have foregrounded the role

of proofreading in text production. Work focusing on digital literacies highlights the need to reconceptualise what it means to produce academic texts, challenging distinctions between ‘writing’ and ‘reading’ (e.g. Lea and Jones, 2010).

Rethinking pedagogy as transformation

Both Ac Lits and critical EAP emphasise the need for transformation in pedagogy and orientations to language and academic production (see, for example, Special Issue of *Journal of English for Academic Purposes*, 8 (2), 2009, and Lillis et al., 2015). What ‘transformation’ means in specific contexts of production is necessarily a point of debate but key principles can be summarised as follows:

- negotiation and dialogue should be central to the teaching learning, production and evaluation of what counts as ‘academic’ writing;
- orientations to what count as ‘appropriate’ linguistic and semiotic resources that producers bring to meaning-making in the academy need to be expanded to include multimodality, multi- and translingualism, vernacular and official practices;
- in general, core conceptual categories such as ‘English’ and ‘Academic’ need to be explored rather than taken as given, given the multiple patterns of mobility in an increasingly transnational academia and the complex nature of recognising ‘diversity’ in academic production (Horner with Lillis, 2015).

Rethinking ‘risk’ in the academy

Implicit in the drive to open up the academy is the need to rethink ‘risk’ – most obviously what is risked, and by whom – by questioning existing conventions. A recent collection of papers by South African researchers tackles this challenge head-on, seeking to theorise risk in the context of postgraduate research writing. Thesen and Cooper argue against a reductive framing of risk, exemplified by the sector’s increasing attention to plagiarism and to research ethics approval, which they argue highlights what is acceptable rather than what is possible. Authors offer a productive concept of risk as a ‘tilting point between self and other... between the production and reception of the written word’ (2014: 15), a notion explored in different ways through a series of chapters based around empirical and pedagogic work with postgraduate student writers.

Whilst we identify convergences here, we also recognise that such convergences are often not signalled by writers, with some exceptions, including Harwood, Leung and Street, Turner and writers whose work focuses on writing for publication (e.g. Canagarajah, Lillis and Curry). There is a danger that researchers/pedagogues stay separate – on the basis of whether English is considered to be (by researchers) the first or primary language or second, additional or foreign language – categorisations which both Ac Lits and Critical EAP researchers have actively interrogated. In researching what it means to ‘do’ academic writing and reading in a globalised academy, it will be important that researchers with shared interests and ideological concerns engage with each other’s work, both in order to avoid working within conceptual boundaries they seek to disrupt, and as a means to develop richer understandings of knowledge-making in the contemporary world.

Further reading

Benesch (2001); Lea and Street (1998); Lillis and Scott (2007); Thesen and Cooper (2014)

Related chapters

- 2 General and specific EAP
- 17 Ethnographic perspectives on English for academic purposes research
- 22 Critical perspectives

Notes

- 1 The term's origin as a descriptor for the field derives in part from the use of 'literacies' to denote a social practice perspective in New Literacy Studies, but it was in circulation from the late 1980s onwards in a range of contexts. For discussion, see Lillis and Scott (2007).
- 2 Widening Participation is the umbrella term used for a raft of 'progressive' policies set in motion in the 1990s in the UK, increasing the undergraduate population and opening up university admissions for students from underrepresented social groups.

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4

ENGLISH AS THE ACADEMIC LINGUA FRANCA

Anna Mauranen, Niina Hynninen and Elina Ranta

Introduction

There is no doubt at all about the current status of English as *the* lingua franca of the academic world. However, what is harder to find agreement on is what this implies. Does English as an academic lingua franca increase opportunities for sharing research activities and findings around the world, or does it rather create a relative or absolute disadvantage to authors to whom English is not the first language? And further, is English a threat to other languages as means of academic communication?

Perhaps the picture need not be this black and white. In the globalised academia, most authors use English not as their first but as their additional language. Thus, to understand academic discourse in today's world, we need to understand the roles of one major lingua franca relative to other languages and the consequences of multilingualism, changing and mixing of genres and changing sources of norms. We also need to pay attention to the ongoing linguistic changes in English that ensue – its new linguistic shapes, the discourse processes and regulatory practices that act towards moulding the language and allowing it to take shape. Recent developments have meant that the norms of use in English have become more tractable and responsive to the needs of the majority of its users.

This finding is also the point of departure for the present chapter, where the main focus is on the linguistic and discourse developments that English is undergoing as a result of its unprecedented spread as a global academic language. Yet, the use of one major lingua franca in academia raises a vast array of reactions in those who study or work at universities. These participant attitudes and language ideologies relative to the kind of language that is appropriate to academic contexts is the focus of another strain of research into academic English as a lingua franca (ELF) (see e.g. Jenkins 2014), which will also be touched upon briefly at the end of the chapter.

Academic ELF and EAP

When comparing academic ELF research to English for academic purposes (EAP) research, at least two major differences are immediately obvious. First, EAP has a strong tradition of

focusing on written language, whereas academic ELF research started from analysing spoken discourse. The evidence we have on EAP research (Hewings 2002) from a major journal in the field suggests that the share of speech-oriented papers published in the *English for Specific Purposes* between 1997 and 2001 actually went down towards the end of this period. Academic ELF research, again, started out from studying speech and has only recently begun to expand its exploration to written genres. Why speaking was so prominent in ELF research derived from the early interests in how speakers manage communication when everyone speaks a foreign or second language (for instance Firth 1996; Meierkord 1998; Jenkins 2000). Moreover, language change is first detected in spoken interaction, and university contexts in non-English-speaking countries provided excellent data for observing sophisticated language in demanding situations where most speakers used English as a foreign language (Mauranen 2003).

Second, in EAP the emphasis has traditionally been on English as used by its native speakers. While contrastive analyses have been a common enough research topic, native speakers have been set up as the gold standard against which non-English authors' texts have been measured. By contrast, research into academic ELF has maintained its focus on international settings where most speakers use English as an additional language. In this way, ELF research has widened the scope of EAP. As it happens, one of the future trends envisioned by Hewings (2002) was the growing importance of English as an international language, its impact on teaching programmes and the consequent need for research into academic English to underpin those programmes. The importance of ELF research stems on the one hand from the practical needs outlined by Hewings and the central status of English as the current lingua franca of academia, but on the other hand from the inherent nature of the language of science and scholarship, which has been thrown into sharp relief by the intense globalisation of universities: academic language is a form of specialised discourse that does not have native speakers (Mauranen 2006a). All users of academic language need to learn its norms and conventions through secondary socialisation in educational systems. Since the norms of academic language are partly generic and partly rhetorical (Mauranen 1993), with only the latter closely connected to a given national or cultural basis, we may expect ELF use to change linguistic shapes of academic English along with its discourse processes and regulatory practices. These changes are also likely to spread outwards from academia: academic language exerts strong influence on standard varieties as those educated in universities spread academic conventions to the wider society.

Central aims in the research field of academic ELF, then, are:

- 1 to understand the impact of English as an unprecedented global lingua franca in the rest of the world. What consequences does it have to other languages as means of communication in research and higher education; that is, what does it mean for academic multilingualism? What consequences can it have on changing sources of norms and conventions, including genres, and the sites and practices of norm regulation?
- 2 to understand, conversely, the impact on English of the enormous variety of language contact, cultural contact, and new centres of power and influence.

The origins of linguistic research on academic ELF date back to the turn of the millennium. Early work includes studies on the pragmatics of ELF (notably House 1999), and the compilation of the 'English as a Lingua Franca in Academic Settings' (ELFA) corpus (see below). As already noted, the bulk of the research is concerned with speaking. ELFA

is the largest and most widely studied corpus in the field, but smaller corpora have also been compiled for individual researchers' own use (e.g. Björkman 2013). In 2015, a written database of academic ELF was also completed (the WrELFA corpus, see below). Major methodological approaches have, consequently, been corpus-based (e.g. Mauranen 2012; Ranta 2013; Björkman 2013) but also discourse analytical (e.g. Hynninen 2013; Mauranen 2010, 2013a; Mortensen 2010, 2014). In what follows, we will first take a look at the findings on spoken academic ELF both from the corpus and the discourse analytical perspectives, and then move on to considerations of written ELF. Finally, studies into attitudes towards English as an academic lingua franca will be briefly introduced.

ELFA corpus: repeated patterns in academic ELF

The ELFA corpus (www.helsinki.fi/elfa/elfacorpora; see Mauranen 2003; Mauranen, Hynninen & Ranta 2010) is a 1-million-word database of spoken academic ELF, which has grown to be the largest and most widely studied in the field. The speakers come from over 50 different, typologically varied L1 backgrounds, and represent a wide spectrum of research fields from the humanities and social sciences to business administration, and from natural sciences and engineering to medicine. The speech events include, for instance, doctoral defences, seminar and panel discussions, conference presentations and discussions, and lectures – with a clear emphasis on dialogic and polylogic events. Studies drawing on the ELFA corpus have, quite naturally, often applied corpus methodology to investigate linguistic features of ELF. Key insights that can be drawn from these studies relate to the repeated occurrence and patterning of non-standard features (e.g. Mauranen 2012; Ranta 2013) and the scarcity of misunderstandings in academic ELF speech (e.g. Mauranen 2006b).

Mauranen's studies on the ELFA corpus shed light on various aspects of academic ELF and academic speech more generally. A continuing strand of her research on the corpus covers studies dealing with metadiscourse or discourse reflexivity (e.g. Mauranen 2010, forthcoming). In all, the studies show that discourse reflexivity is central to academic discourse, and particularly relevant for academic ELF, where it can help increase clarity and explicitness among speakers from different linguistic and cultural backgrounds. Importantly, the studies illustrate how discourse reflexivity in ELF has similar functions, form and distributions across different L1 speakers – although when compared to L1 English, we can see differences as well. For instance, forms are often approximate rather than entirely accurate, such as *I mention few words about him; we now give you a chance to say something back; I would like to finalise my talk by showing you...* The approximate forms are sufficient for meaning recognition, and their rhetorical functions therefore work effectively just like more standard equivalents would.

ELF work (Mauranen 2009, 2012; Carey 2013; Vetchinnikova 2014) on phraseology shows similar trends for approximate forms. This research is particularly important in showing that while phraseological expressions in the ELFA corpus may take different forms from those typically used by L1 speakers of English (e.g. *as the matter of fact* in ELFA vs. *as a matter of fact* in the native speaker corpus MICASE), similar unconventional forms are used by different speakers in different contexts. This observation suggests holistic processing of the units, and it illustrates how corpus methodology can be fruitfully used to investigate L2 processing (see also Vetchinnikova's 2014 study discussed further below).

Other studies on linguistic features in the ELFA corpus include Ranta's (2013, see also 2006) work on possible spoken language universals in ELF. Ranta's (2013) findings show qualitative similarity in certain non-standard uses of verb-syntactic constructions in spoken ELF and in L1 English. Yet in quantitative terms, the non-standard variants of constructions

studied (progressives, embedded inversions, existential *there* constructions and hypothetical *if*-clauses) were more common in ELF speech than in L1 speech (except for the present tense existential *there's* + PL construction, which was more common in L1 speech). On the one hand, this points to L2 speakers' more fluctuating or variable grammars, which, as Ranta (2013) argues, may be caused by the different kinds of exposure to English L1 and L2 speakers typically have, and because of the different kinds of exposure, linguistic constructions are 'less well entrenched' (Mauranen 2012) in L2 speakers' repertoires. On the other hand, the study further shows that the non-standard features in ELF speech are not random, but rather seem to have the same direction of non-standardness irrespective of the speaker's L1, and also the same direction as in L1 speech. Thus, it appears that the features that both L1 and ELF speakers use may be explained by 'real-time' speech processing and production, and thus contribute to communicative fluency in spoken interaction (Ranta 2013).

Other features typical of spoken language have also been looked into in the ELFA corpus and have been compared to a corresponding native speaker corpus, MICASE (the Michigan Corpus of Academic Spoken English, <http://quod.lib.umich.edu/m/micase>). Metsä-Ketelä's (2012) studies on vague expressions and Riekkinen's (2010) study on hedging have illustrated repeated patterns in academic ELF use that differ from those preferred by L1 speakers but do not cause communicative turbulence. Fernández-Polo (2014) shows that in the ELFA conference presentations data, the uses of *I mean* were varied and multifunctional, and largely, if not always, rhetorically effective. In all, then, research on the ELFA corpus, so far, has shown repeated patterns in ELF use across different L1 speakers, which suggests that academic English is taking new forms in the hands of ELF speakers.

Pragmatics of academic ELF and discourse analytic approaches

In addition to the ELFA corpus, smaller databases have been compiled for researchers' individual use. Studies based on these have often focused on the morphosyntax and pragmatics of multiparty ELF interaction, as well as lecturers' English. For instance, Björkman (2013) focused on the morphosyntax and pragmatics of ELF as used by students and lecturers at a technological university. Her findings suggest that morphosyntactic deviations from L1 English (such as not marking the plural on the noun and non-standard word order) do not typically cause misunderstandings, and that several pragmatic strategies are used to prevent misunderstandings. That ELF speakers do interactional work to prevent misunderstandings has also been attested in Mauranen (2006a) and Kaur (2009).

Pragmatic aspects of academic ELF have been the focus of such studies as House (1999), Mortensen (2010), Knapp (2011) and Hynninen (2011), each of which shed light on different aspects of ELF pragmatics. Lecturers' English, then again, has been investigated by Costa (2012), whose findings show how subject-matter lecturers paid attention to linguistic form despite declaring that they were interested in teaching only content (cf. Airey 2012). Suviniitty (2012) studied ELF lectures and lecturers' English, together with students' assessment of the level of English and the accessibility of the lectures. Her work illustrates the importance of interactive elements in lectures: irrespective of the lecturers' perceived English skills, those lectures students perceived to be accessible contained more interactional features – rephrasing, questions, directives – than the ones students found challenging (cf. also Mulligan & Kirkpatrick 2000). In all, pragmatic studies on academic ELF have illustrated the importance of interactional co-operation in ensuring efficient communication.

Approaches of a more ethnographic kind to academic ELF include Smit (2010), who carried out a longitudinal study of a higher education setting in Austria with focus on repairs,

directives and interactive explaining in lectures. Hynninen (2012, 2013) reports on language regulation in study events at a Finnish university, and Kalocsai (2013) deals with exchange students (studying in Hungary) as a community of practice. The SELF (Studying in English as a Lingua Franca) project at Helsinki (www.helsinki.fi/elfa/self) also oriented ethnographically to the grassroots level of studying in an English-medium instruction environment where the local society and the most part of the university functioned in a language other than English. What is common to these studies is the ethnographically informed approach, which enables a focus on local practices of ELF use. Interestingly, all the studies point to alternative sources for norm construction in ELF settings other than reliance on L1 speaker norms. In particular, Hynninen's (2012, 2013; see also Smit 2010: Chapter 7) work on language regulation in ELF shows how L2 users of English take on and are assigned the role of language experts in ELF interaction (e.g. they are the ones who comment on language), and in the process take on the authority role typically assigned to L1 speakers of a language. The findings further suggest that while ELF speakers mainly draw on (their notions of) English native language norms for correctness, for instance, scientific contexts emerged as an alternative source for norm construction.

From a more corpus-based angle, Mauranen (2013a) also concluded that academic expertise overrides specifically linguistic expertise in a university context: academically senior people would make comments and instigate corrections on points of language, without consulting native English speakers even if present. This, then, points to changing sources of norms in academic ELF contexts, and raises important questions about who gets to decide what 'good' academic language is like – a topic now raised also for written academic ELF.

Written academic ELF

As ELF research began from spoken language, only a handful of studies so far have addressed written ELF. Among the few studies are Owen (2011), Mur-Dueñas (2013), Carey (2013), Mauranen (2013b) and Vetchinnikova (2014). Owen's (2011) study on the ways in which reviewers and editors treat English-language research writing by non-native speakers of English shows that many of the corrections suggested by the reviewers and editors concerned perfectly comprehensible English in the original versions. Based on his findings, Owen (2011) calls for 'language consciousness-raising' to ensure a publishing scenario that better serves the majority of present-day academics who use English as an additional language. Mur-Dueñas (2013) came to similar conclusions based on her study of literacy brokers' treatment of Spanish scholars' research articles in English: following strict Standard English rules is an unnecessary burden on Spanish academics, who can write fluent English despite certain features typical of Spanish users of English.

Carey (2013) explored a few phraseological approximations (cf. Mauranen 2012) in the ELFA corpus and the preliminary version of the written ELF, WtELFA corpus, and found that the rate of approximations in functionally equivalent expressions (e.g. *on my point of view*, *to my view*) were highly similar in speech and writing, and also clearly specific to ELF. At the same time, perfectly conventional expressions were clearly in the majority. In addition, many of the frequent, conventional chunks that were identical to the native speaker corpus (MICASE) were proportionally more frequent in ELF than they were in native speech. This supports Mauranen's (2012) findings showing that the most frequent items tend to be even more frequent in ELF. Thus, there does not seem to be an enormous difference between ELF and native English forms or their use in academic discourse. Moreover, although the findings must still be seen as tentative as the first written ELF corpus is under compilation

and more results will take a while, there does not appear to be a great discrepancy between the spoken and written ELF modes.

Vetchinnikova's study (2014) was an in-depth investigation of second-language users' processing in an ELF environment where they had to produce a Master's thesis in English. She showed convincingly that multi-word units of meaning are at the centre of L2 users' repertoire, and that their processing in this respect cannot be radically different from L1 users' processing, despite the received wisdom about this in the literature.

While all in all very little research has been carried out on written ELF, the first corpus of written academic ELF (WrELFA, 'Written English as a Lingua Franca in Academic Settings', www.helsinki.fi/elfa/wrelfa) was recently completed at the University of Helsinki. Like ELFA, WrELFA will be made available to scholars around the world. It consists of 1.5 million words of written ELF, and has three parts:

- 1 PhD examiners' reports (~400k words)
- 2 research blogs and their comment threads (~400k words), and
- 3 academic research articles (~750k words).

The last part is an international collaboration, the SciELF corpus, which can also be used on its own, and in the first instance will be used by the partners in the collaboration.

Now, despite the as-yet scant attention to written ELF, there is an enormous body of research on academic writing in English by non-native speakers. This research tradition is largely based on ideas from contrastive rhetoric (for a good overview of the thinking, see Connor 1996) where academic texts, mostly research articles or abstracts, written by academics from a non-English L1 background are contrasted to comparable texts written by native speakers of English. Differences will inevitably emerge, as happens with contrastive research. The question is, then, how to interpret these differences. The prime motive for carrying out contrastive research is its potential for pedagogical usefulness; pedagogical implications of the studies typically state that the features where other than Anglo-American writers differ from Anglo-American writers should be taken on board in courses of academic writing. In this way, L2 academic writing research presupposes a deficiency model of L2 use: what native speakers do is held as the ideal target, and L2 users should be trained to overcome their deviant, therefore problematic, writing habits. This is in line with the normal assumptions of second-language acquisition (SLA) research and, until very recently, it has been accepted as an unquestioned basis of L2 teaching.

However, there are two major problems with this approach. One is that there is no hard evidence to support the notion that greater correctness actually equals greater intelligibility. This is assumed, not shown, in the descriptors of major tests such as the Common European Framework of Reference (CEFR) (e.g. Pitzl 2015). Instead, there is evidence that several features of non-standard grammar work well for academic ELF (Ranta 2013) in spoken discourse and, as we saw above, high-stakes written ELF discourse such as PhD examiners' reports seem to manifest very similar morphosyntactic features to ELF speech (Carey 2013). The second problem lies in the major changes in the world of academic publication in the last couple of decades. The vast majority of both writers and readers of the texts are likely not to be native speakers of English. The countries that publish most scientific texts in English are currently, in this order, the US, China, the UK, Germany, France and Japan (Royal Society 2011). Moreover, it is clear that a notable proportion of scientists working in the US and the UK do not have English as their first language. Those two countries have been the most avid recruiters of international researchers over several decades now. Native-English standards of

educated language are therefore not as relevant to academic research writing as they once were in more nationally oriented contexts of research publication.

Compared to the world of academic publishing just a few decades ago, right after the Second World War, the research writing landscape looks dramatically altered. German was the primary language for international research publication, with French and English as important rivals. Since then, English has taken over (with an estimated proportion of about 75 per cent to over 90 per cent of journal articles; see Lillis & Curry 2006), and the scale of international research collaborations has grown at the same time. In a world where the international research community depends very largely on the use of one shared language, it is clear that the demands on that language and its relevant norms are under pressure to change and in need of rethinking. Writing for academic publishing in English is in effect now writing in English as a *lingua franca*. What this implies is that we are facing a language form that arises out of cross-cultural collaborations, and, as is the wont of language, it adapts, in lexis and structure, to the circumstances it is used in. Local and global contexts of use intermingle, supported and enhanced by the dominance of digital communication. It is clear that the global cannot be reduced to any particular locality, or even a set of them, like the inner circle countries.

The changed landscape of publishing in English has been noticed by researchers: Flowerdew (2013), for instance, suggests that the native versus non-native distinction is getting blurred, and successful academic publishing is more dependent on the level of professional expertise and academic seniority than the native-likeness of the text. Similarly, Connor (2011) advocates a more complex view of interactions between native and non-native speakers of English, where expectations are both culturally and situationally embedded, than the traditional contrastive rhetoric model suggests.

However, another challenge that the field of English for academic purposes needs to address is the variability of the field, along at least two crucial dimensions: one is local variation. Among others, Canagarajah (2002) and Lillis and Curry (2010) have drawn attention to the differences in the circumstances in which academics write, particularly contrasting the Anglo-American ‘centre’ to the ‘periphery’ of academic publishing. While change has been fast in our perceptions of centres and peripheries, with China and South Korea having risen to the centre in the last decade or so, ELF is obviously a more relevant question to the emerging centres than to the traditional bastions of academic publishing in English.

The other vital dimension of variability is disciplinary: recent research has shown how differently disciplines are positioned with regard to using English (Kuteeva & Airey 2014), and the relevance of native norms in those disciplines. Gnutzmann and Rabe (2014) show that in some disciplinary cultures, notably mechanical engineering and to some extent biology, non-native writers and editors constitute the majority in the field. This makes a renegotiation of language norms within the discipline relevant, with non-natives occupying a central position. Language regulation by non-native speakers seems a likely scenario in disciplines that are internationally highly integrated, and where researchers from other than the inner circle countries are in the majority or otherwise in a strong position in the research area. In the case of disciplines such as history, where native speakers of the target cultures of the research at hand tend to be models of writing, the situation is different (but see McGrath 2014), also in terms of the position of English being less dominant.

In spoken language, the ‘communicative’ ideology has probably prepared the ground for some leniency towards variation from the native target, as can be seen in CEFR norms, especially at lower levels (see Hynninen 2014; Pitzl 2015), together with recent research

evidence showing that ELF features do not hamper intelligibility. However, discussion where the *written* mode is concerned seems to lag behind. English tends to be associated with native-speaker writing, and this includes many critical voices against English dominance, which start from this assumption. A number of studies have argued that non-native scholars and scientists have an uneven playing ground compared to native speakers, as they must publish in English whether they like it or not, and their work is judged on the grounds of their inadequate language skills instead of solely academic merit (e.g. Ammon 2007; Lillis & Curry 2010; Pérez-Llantada, Plo & Ferguson 2011). However, as many studies show, the picture is more complex than that; for instance, several papers in Kuteeva and Mauranen (2014) show that most writers in most contexts move skilfully between languages, and make choices based on their assessment of the situation. Their choices reflect perceptions of their own field, their own career needs or simply their individual preferences. We are moving towards blurred distinctions in cultural, linguistic and academic identities, and the acceptance of more complex and varied forms of English, as suggested by, among others, Flowerdew (2013) and Connor (2011).

Clearly, we need much more empirical research into written ELF and the contexts of writing as well as publishing in different disciplines, locations and in different media. We need linguistic description of what might be emerging tendencies in the written mode, but we also need research into new environments of academic publishing. What requires radical re-conceptualisation is our perception of the fast-changing situation of research reporting in the globalised, digitalised and increasingly competitive world. Rising research powers may be undermining Anglo-American dominance, but they are hardly likely to give up English any time soon.

Attitudes and ideologies

In addition to research into linguistic aspects of ELF discussed above, another major strain of academic ELF research addresses student and staff attitudes and language ideologies relative to the kind of language that is appropriate to academic contexts (e.g. Airey 2012; Jenkins 2014). For instance, results from Jenkins' (2014: 158) questionnaire that she distributed across university staff members around the world reveal an assumption that English, as the current academic lingua franca, is the most appropriate language to serve as a common medium of instruction in international study programmes. Then again, the findings further point to an orientation to 'standard' North American or British English as the most acceptable kind of English, as well as a tendency to view non-native students' English and intercultural skills as problems, rather than expect home staff and students to meet half-way. This said, Jenkins (2014: 202) also reports of a certain amount of receptivity both in her staff and student informants to incorporating what she calls 'a genuine international perspective', where both the incoming and home students and staff would adapt their language use.

Other studies that have focused on lecturers' or students' views reveal, for instance, concerns about the kind of professional image a lecturer conveys with his or her English, particularly when it differs from Standard English which is often considered the norm (e.g. Jensen et al. 2013). Then again, it seems that speakers' language ideologies vary depending on who one compares oneself with (e.g. Pilkinton-Pihko 2013), which suggests that Standard English is not always a relevant norm in academic settings. Pilkinton-Pihko's (2013) subjects shifted between repertoires as they moved from one point of comparison to another: when they compared their English to that of native speakers, they assessed their language skills

as wanting, but when comparing themselves to other L2 speakers or the demands of the situation, their self-assessment was considerably more positive. In all, we can thus say that the attitude and language ideology studies have implications for developing appropriate English-language requirements for university students and staff who are increasingly faced with international ELF settings.

There are also a number of studies that explore the practices and policies at universities that seek to be recognised as ‘international’. Many of these studies have considered English in relation to other languages, often from a language policy perspective (e.g. Mortensen 2014; Kuteeva & Airey 2014; see also Jenkins 2014). These studies show that English is typically given a special position in university language policies, often alongside one or more national languages, but that practices of language use vary. The findings illustrate the complex relationship of English used as a lingua franca and multilingualism in different local contexts, and as such provide valuable viewpoints to ELF research.

Conclusions

For understanding how English functions in global academia, research into and findings from ELF are going to play an increasingly significant role. Higher education across the world is being permeated by English, but a very small share falls onto its native speakers. The overwhelming majority of the world’s students are speakers of other languages, but ever larger proportions among them will carry out some or all their university studies in English. If we think of those who read textbooks, listen to lectures, present in seminars, pass examinations and write their theses and dissertations in English, it may seem natural to perceive them as learners of English while they are also learners of academic skills. But if we turn to those who participate in conferences, lecture at universities, review papers, examine doctorates, review promotions and appoint professors, it becomes much harder to assign the role of permanent language learners to them.

When people manage highly demanding roles in academia, which is heavily dependent on linguistic performance, it verges on the absurd to fault them for their non-native lexicogrammar or non-Anglo-American rhetoric. Yet some of those dated attitudes still linger on, as Owen’s (2011) research showed. Academic English has no native speakers, and scientific enquiry is international by nature. Neither is there evidence in support of the idea that, for instance, non-standard grammatical features would hamper communication (Ranta 2013). Clearly, we only have evidence of a limited number of features so far, but two things are emerging from the research: one is that as far as academic English is concerned, the differences between Standard English and ELF are very small in quantitative terms, and the other is that all early findings from the written mode point to similar ELF-specific features in speaking and writing. We can therefore expect the alterations in English that ELF brings about to be gradual, just as language change usually is, and, perhaps more interestingly, we can draw on the findings on speech to predict what the harmless deviations from the current standards might be in written text.

Hitherto, research into spoken academic ELF has shown that many linguistic processes that one might expect in language contact, such as regularisation, new coinages and new phraseological preferences can be seen across speakers of different L1s. Discourse strategies have been observed to adapt to the fundamentally multilingual and complex context that ELF communication is (see, for instance, Jenkins 2000; Mauranen 2012; Seidlhofer 2011). This suggests that English is taking new forms in the hands of ELF speakers. We have also seen that user perspectives, as well as ELF use itself, point to increased awareness and readiness of

L2 users of English to take on the role of language regulators, and that alternative sources for norms may emerge in the process (Hynnenen 2013).

There is still much to be discovered about academic ELF. While successful speech has been charted in terms of its main characteristics and apparent success strategies, a wealth of questions remain unanswered. What are the best indicators and predictors of communicative success, when native-likeness is ruled out? How do we best assess and predict prospective students' ability to perform in English, given foreseeable developments in learning environments which rely more and more on collaborative effort, multimodality and crossing national and linguistic borders?

Most academic publications are written in English, but by others than native speakers. The same is true of reading academic texts. Standards of the best-known native varieties are still required by most academic journals, but there are signs that in some fields, norms of written scientific English have already become more responsive to the needs of the majority of its users (see Gnutzmann & Rabe 2014). Written academic ELF is almost entirely uncharted territory waiting for researchers to take it on. When this is combined with the rapid developments in digital forms of publishing and publicising research, even more overtaken by English as a lingua franca than traditional publishing, traditional conceptualisations of academic English are called seriously into question.

Further reading

Jenkins (2014); Mauranen (2012); Seidlhofer (2011)

Related chapters

- 2 General and specific EAP
- 3 Academic literacies
- 18 Intertextuality and plagiarism
- 22 Critical perspectives

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5

COMPOSITION STUDIES AND EAP

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Introduction

In the United States, the field known as composition studies, or rhetoric and composition, has historically been linked to concerns of undergraduate writing instruction. Despite its shared interests with English for academic purposes (EAP) in language and literacy development and support, however, conceptions of academic English and how it should be taught are not identical across the two fields of study, influenced by distinct historical origins, disciplinary alignments, and pedagogical contexts. Over the past few decades, numerous theoretical concepts and empirical insights from composition scholarship have been influential in EAP research and practice, but because the contexts on which the two fields focus differ in important ways—with EAP being tied to transnational, multilingual contexts of language instruction and composition studies being linked to US contexts of writing instructions—interests, values, and pedagogical approaches often vary across these two fields of study.

This chapter provides a state-of-the-art review of conceptions of academic English within composition studies, with particular attention given to the most prominent and influential strands of cross-disciplinary¹ conversations. After an historical overview of composition studies, we address several critical topics of academic English as they have been developed in composition studies, also exploring how these have influenced or been integrated into EAP. We end by considering potential future directions of the scholarly interaction between these two disciplinary areas, in light of recent trends in composition studies.

Historical overview

The field of composition studies is tied in somewhat unique ways to a course requirement that is common in a vast majority of US universities and colleges. First year writing (FYW)—also referred to as first year composition (FYC), freshman English, or English composition—was first taught at Harvard University in the late nineteenth century and quickly spread to other universities. Today, FYW continues to be a required course for nearly all students enrolled in US higher education. Crowley (1998) estimated that in the 1994–1995 academic year, there would have been at least four million students enrolled in FYW. Because the course originated in English departments, and is still most commonly administered within these units, it has a long, though uneasy, relationship with literary studies. FYW is considered by many literature faculty members to be a less than desirable course to teach, due to its tenuous

connections to their own research interests (Crowley, 1998). To meet the high demand for staffing an often large number of sections of the course, then, FYW was commonly taught by probationary or contingent faculty; today, it is taught primarily by graduate students at research universities and by contingent lecturers (hired often part-time on semester or yearly contracts) at institutions that do not have a pool of graduate student instructors to draw from.

Although FYW courses traditionally emphasized belletristic writing, interest in a focus on social utility and civic participation grew in the twentieth century. Indeed, Crowley (1998) summarizes chronologically an array of shifting goals and rationales for the FYW requirement:

to develop taste, to improve their grasp of formal and mechanical correctness, to become liberally educated, to prepare for jobs or professions, to develop their personalities, to become able citizens of a democracy, to become skilled communicators, to develop skill in textual analysis, to become critical thinkers, to establish their personal voices, to master the composing process, to master the composition of discourses used within academic disciplines, and to become oppositional critics of their culture.

(p.6)

These latter goals coincide with the increasing professionalization of composition studies as a field of inquiry, beginning with the establishment of the National Council for Teachers of English (NCTE) in 1911, followed by the creation of the Conference on College Composition and Communication (CCCC) in 1949 and the journal *College Composition and Communication* in 1950 (Silva & Leki, 2004). Importantly, though, FYW, as well as the field of composition studies, has never been tied exclusively to a goal of developing literacy skills in academic English. With a heavy focus on writing instruction in the first year of US postsecondary education, before students are studying in their chosen discipline, composition studies has always differed in important ways from ESP/EAP. As Johns (2009) writes, within this first-year context, “identifying *specific* needs and focusing on *analyzable target situations*, and then *completing discourse analyses*, are all difficult, if not impossible, to carry out” (p.43, original emphasis).

Over time, composition studies has expanded rather considerably beyond the purview of FYW, with numerous subfields having emerged in the past few decades. Areas of interest listed in the 2015 CCCC proposal guidelines, for example, included basic writing; advanced writing; community, civic, and public writing; creative writing; history; e-learning; media studies; writing program administration; workplace studies; globalization of English; professional and technical writing; digital rhetoric; adult literacy; service learning or outreach; and rhetorical theory. Most relevant to EAP are the subfields of writing across the disciplines (WAC) and writing in the disciplines (WID), areas we discuss in more detail in the next section.

In addition to having distinct disciplinary and historical origins, composition studies and EAP tend to serve different (though often overlapping) student populations, with EAP generally focused on the support of students studying in English as an additional language, and composition studies often presuming to teach primarily monolingual English users.² Matsuda (1998, 1999) has studied the division between composition studies and second language studies in some detail, with respect to the exclusion of second language writing interests within composition studies. According to Matsuda (1999), it was not until the late 1950s that CCCC began addressing second language issues at the annual conference. There was, as he describes it, a great deal of interest in supporting ESL students between 1955

and 1966, though Silva and Leki (2004) characterize composition studies as having “never addressed L2 writing issues and concerns, in the distant or recent past, at more than a rather minimal level” (p.8).

However, as the numbers of international students increased at many US universities, there was a growing recognition that these students would be best served by teachers with specialist knowledge—at the time considered to be a background in structural linguistics (Matsuda, 1999). Intensive English programs (IEPs) or English language institutes, modeled after the University of Michigan’s ELI, were often created to serve this population, in essence removing international ESL students from the responsibility of composition programs. As Matsuda also notes, at institutions with smaller numbers of ESL students, remedial sections of writing for ESL students were offered instead. These institutional structures, in which L2 students were streamed into programs and courses taught by applied linguists—or, in some cases, structural linguists—was the origin of what Matsuda (1999) has termed the “disciplinary division of labor,” a division that was also bolstered by the concomitant professionalization of English language teaching (ELT) through the creation of the Teaching English to Speakers of Other Languages (TESOL) organization in 1966.

This disciplinary division is also perpetuated at least in part by some of the substantial differences in epistemology and ideology between composition studies and applied linguistics. Silva and Leki (2004), for example, demonstrate how the roots of applied linguistics (and its “parent” discipline of linguistics) are grounded in a positivist inquiry paradigm and empirical methodologies, while the roots of composition studies (and its “parent” discipline of rhetoric) are grounded in a relativist paradigm and hermeneutic or dialectic methodologies. Focusing specifically on cross-disciplinary interaction in relation to L2 writing, they note that:

(a) L2 writing within applied linguistics may be found within other such subfields as corpus linguistics or discourse analysis, however, subfields in composition studies such as computers and writing and cultural studies are rarely based in L2 contexts; (b) North American L2 writing researchers often draw, at least partially on composition studies research; however, few in composition studies adopt an applied linguistics perspective on writing; (c) applied linguistics is influenced by Australian genre scholars, British English for Specific Purposes (ESP) scholars, and others worldwide (most recently, Japan and China), where composition studies is still primarily influenced and shaped by North American scholars and often important theorists from other disciplines, for example, Foucault, Zizek, and Derrida.

(Silva & Leki, 2004, p.8)

These very different disciplinary alignments are reflected not only in the fields’ scholarship but also in their dominant pedagogical approaches. In a revealing ethnographic study of an EAP program and a FYW program at one US university, Atkinson and Ramanathan (1995) demonstrate how distinct disciplinary affiliations revealed themselves in the programs’ ways of conceptualizing and teaching academic writing. In their study, the EAP program presumed that students were not familiar with US culture, emphasized the teaching of writing strategies, and valued and taught “workpersonlike prose,” characterized by rigid, deductive, fact-based communication. In contrast, the FYW program presumed students to share US cultural knowledge, and valued and taught sophisticated thinking skills and rhetorically effective writing. The role of standardized structures, such as “the five-paragraph essay,” in these two programs further reflects the distinct disciplinary cultures. In the FYW program, this structure

“acts almost as a symbol of bad student writing” (pp.560–561), whereas in the EAP program the same form is considered “an extremely serviceable template” for students and teachers who desire a tool that can quickly and easily be applied to immediate writing needs.

Critical issues and topics

To those less familiar with composition studies, it may be surprising that composition scholarship has not focused exclusively or even predominantly on academic writing. As the field came into its own in the 1960s, scholarly interest centered on applications of classical rhetoric, studies of writing processes, and an interest in writer voice and individual expression (Silva & Leki, 2004). It was not until the 1970s and 1980s that a body of scholarly work developed in relation to teaching students to write in academic disciplines. Nevertheless, there are several concepts related to academic writing and EAP that have forged important cross-disciplinary conversations between the fields of composition studies and EAP. In this section, we discuss some of the issues and topics that have been prominent within both composition studies and EAP. The first three of these are characterized by often very productive cross-disciplinary dialogue and application, while the last two have remained largely as parallel but distinct conversations.

Audience, discourse community, and academic discourse

Composition studies has had close disciplinary ties to rhetoric since the early 1960s. Corbett (1987) notes that it was at the 1963 CCCC convention that rhetoric began appearing more seriously on the composition scene and was offered as a rationale for the teaching of composition. The coupling of rhetoric and composition has had many important influences on the teaching of writing in the US, and the attention to audience both within the classroom and the field is a prime example. In the late 1970s, Ede (1979) argued for an increased emphasis on audience in writing instruction, drawing on classical rhetoric as well as contemporary cognitive psychology. She outlined practical applications for giving audience a central role in the classroom, for example, providing students with questions to guide their writing: “Why are you writing? Who is your audience? What is the occasion? What is your purpose?” (Ede, 1979, p.294).

A half-decade later, Ede and Lunsford (1984) further developed the concept of audience. They use the term “audience addressed” to refer to a view of audience that assumes a writer can and should anticipate and write to an audience’s attitudes, beliefs, and expectations. In contrast, “audience invoked” was used to describe the belief that audience is always a fiction constructed by the writer. In this latter view, it is not the writer’s role to analyze the target audience and modify a text accordingly, but rather the writer “uses the semantic and syntactic resources of language to provide cues for the reader—cues which help to define the role or roles the writer wishes the reader to adopt in responding to the text” (Ede & Lunsford, 1984, p.160). Ede and Lunsford argued that a fully elaborated conception of audience must take into account audience as both addressed and invoked, and acknowledge the dynamic nature of the roles of writers and readers.

Audience has also been central to EAP, though the term itself has not been heavily theorized or complicated. More common in EAP is discourse community, a concept that has been developed in conversation with rhetoric and composition scholars. Early work on discourse community in rhetoric and composition by Herzberg (1986) and Porter (1988), for example, was foundational in Swales’ (1990) extended discussion of the concept. In particular, Swales

drew on Herzberg's description of discourse community as reflecting a "cluster of ideas," including that language is social behavior, that discourse is a way of maintaining and extending community membership, and that discourse is constitutive of community knowledge—the final point being a principle that Swales saw as "a matter of investigation rather than assumption" (p.31). Herzberg also emphasized the importance of discourse community to the teaching of academic writing, a linking that is clearly shared in Swales' early work and still today in EAP.

Though discourse community remains a fairly prominent term in EAP, community of practice is now often preferred within composition studies. Community of practice, as it has been theoretically defined and used, backgrounds the role of shared goals or discourse and foregrounds community participation in events and practices as well as the contestation and dynamic relationships within a community (Lave & Wenger, 1991). The different preferences for terminology here may be explained at least in part by the tendency for composition studies to focus more heavily on context and (more recently) activity than on text, in comparison with EAP.

In close relation to discourse community are conceptions of academic discourse and academic writing. Though published pieces on academic discourse are first found in the journal *College Composition and Communication* in the late 1970s, one of the most extensive—and most cited—discussions is David Bartholomae's (1986) essay, "Inventing the University." Bartholomae's main argument, now taken as a basic assumption by both compositionists and EAP scholars, was that university-level academic writing and discourse is largely foreign to new students. They have to learn "to speak our language, to speak as we do, to try on the peculiar ways of knowing, selecting, evaluating, reporting, concluding, and arguing that define the discourse of our community" (p.4). Bartholomae stressed, too, that it is not just a single discourse that students must learn, but rather multiple ones, as they traverse through a liberal arts education that engages them in disciplines as diverse as philosophy, experimental psychology, economics, and literature. An important precursor to Bartholomae's ideas was the work of Patricia Bizzell (1982a, 1982b), a point emphasized by Bartholomae when he writes in a footnote that "My debt to Bizzell's work should be evident everywhere in this essay" (1986 p.21). Today, Bartholomae's work is still cited in EAP because of its commonsense way of describing the variation that exists across disciplinary ways of writing, doing, and knowing, a basic assumption on which EAP rests.

Disciplinarity, writing across the curriculum, and writing in the disciplines

More detailed theoretical discussions and empirical studies of academic writing brought with them increased attention to disciplinarity as a complex set of practices, beliefs, epistemologies, and discourses. Crucial here has been the work of Charles Bazerman, whose extensive study of the scientific experimental article illuminated the highly situated and social nature of disciplinary writing. To understand this single genre, Bazerman (1988) demonstrated how one must look far beyond textual features to "how the page places itself with respect to social, psychological, textual, and natural worlds" (p.16). In turning attention to the rhetorical and social worlds that give rise to texts—the "contexts" of texts, but in a very rich and multi-layered conceptualization of this term—Bazerman's early work challenged writing instructors to understand texts in new ways. This work was seminal in composition studies and has also been influential in EAP, perhaps most notably in work by John Swales, including his 1990 book *Genre Analysis*, and Ken Hyland's (2000) *Disciplinary Discourses*.

While Bazerman's work has tended to draw heavily on historical research methods, Paul Prior's adds an ethnographic lens to the study of disciplines and disciplinary literate activity. In *Writing/Disciplinarity*, Prior (1998) offers several case studies of graduate students in different disciplines, forging an understanding of a mix of personal, academic, and sociocultural influences at play on individualized paths toward disciplinary literacy. As illustrated in his research, literate activity is mediated by sociohistoric networks, not simply by transmission of disciplinary knowledge. Prior draws on these cases to develop a theoretical orientation of disciplines as evoking ongoing and heterogeneous processes, as opposed to a fixed set of specialized practices, artifacts, persons, and communities. Such a sociohistoric view of disciplinary community guides research in EAP, giving insights into a social formation of disciplinary genre, identity, context, and even student learning, evidenced for example in Tardy's (2009) research into learning academic genres.

Work by Bazerman and Prior has contributed much to understandings of discipline and disciplinarity as enacted by graduate students and publishing researchers, but these practices around writing often seem far afield from the writing practices and expectations found in the undergraduate classrooms that compositionists are most concerned with. Several empirical studies by composition scholars, however, have illuminated the nature and processes of disciplinary writing for the undergraduate student. In one early study, Faigley and Hansen (1985) looked closely at the writing of several undergraduates in upper-level courses in the social sciences. Comparing the grading and reactions to the papers from English teachers and from disciplinary experts, we see how the two diverge in how they read and assess field-specific writing. Adopting more ethnographic perspectives into disciplinary writing in context, scholars like Herrington (1985) and Haas (1994) looked at the characteristics of academic literacy, its functions, and its practices within undergraduate disciplinary courses. Their studies reveal the tangible ways in which learning to write within a discipline involves much more than learning particular forms or vocabularies but rather relates to learning socially preferred ways of knowing and acting.

In all, composition research of disciplines and disciplinary writing paints a clear picture of writing as context-bound, so that it becomes difficult to imagine a one-size-fits-all course like FYW effectively preparing students for the writing they will do not just in their majors but also in the many other disciplines within which they will take courses (a practice that is more characteristic of the US approach to higher education than of other countries). Much of this work has been cited heavily in the EAP literature, particularly by US scholars like Leki (2007), Johns (1997), and Spack (1997), who have also studied undergraduate writing, albeit focusing on multilingual students.

Composition studies research of student writers in the disciplines can be understood as part of the first wave of research in the movement known as writing across the curriculum (WAC)/writing in the disciplines (WID), a subfield of interest within composition studies. WAC commonly refers to curricular support for or incorporation of writing in university courses apart from FYW, while WID refers both to research of disciplinary writing and to the instruction of disciplinary writing within a designated program (Bazerman et al., 2005). Cox and Zawacki (2014) outline the three principles that they understand to be key foundations to WAC/WID work: (1) writing processes and teaching approaches should vary in line with writers' and teachers' goals for writing; (2) the situated nature of writing (within disciplines, professions, and activity systems) should be taught and respected; and (3) WAC programs have the potential to transform campus cultures around writing, teaching, and learning. Though WAC/WID programs take a multitude of forms in relation to institutional cultures, needs, and resources, they tend to focus on either writing-to-learn (that is, the incorporation

of writing as a mode of bringing enhanced meaning to subject-matter material) or writing-to-communicate (the research and teaching of writing in disciplinary discourses and genres).

Johns (2005) describes ESP as “a WAC-related movement for the linguistically-diverse student,” but despite the obvious parallels between the two areas, there has been surprisingly little collaboration. Zawacki and Cox (2011) lament this lack of cross-disciplinary conversation as well as the paucity of work in WAC/WID that explicitly addresses L2 writers. Indeed, given the shared theoretical assumptions between WAC/WID and EAP regarding disciplinary writing and its instructions, the lack of engaged dialogue is surprising, but is likely related to the different histories, disciplinary alignments, professional organizations, institutional contexts, and student populations.

Genre

Perhaps the most lively and productive cross-disciplinary conversation between composition and EAP scholars has occurred in the area of genre studies. Early discussions of genre in the EAP literature, for example by Swales (1990) and Johns (1997), draw on Carolyn Miller’s (1984) now-canonical discussion of genre as social action. In general, the major contributions of rhetoric and composition scholarship on genre to EAP have been theoretical. In addition to Miller’s work, which challenges the notion that genres can be categorized by their textual form (it is their rhetorical purpose, Miller argues, that is at the heart of genre), EAP has been influenced by Charles Bazerman’s (1988) rich accounts of genres’ roles in disciplinary knowledge production, Carol Berkenkotter and Thomas Huckin’s (1995) research into the learning of advanced disciplinary genres, and Amy Devitt’s (2004) merging of language and rhetoric in theorizing genre, to name just a few. Now often referred to as rhetorical genre studies (RGS), this orientation to genre emphasizes the dynamic and social nature of genre, as well as the ways in which genres shape and are shaped by rhetorical context, communities of practice, activity, materiality, and intertextuality.

While theoretical developments within RGS have often been drawn upon in EAP scholarship, pedagogical conversations between the two fields have been somewhat more constrained. Certainly, EAP genre-based pedagogy has been influenced by the cautions within RGS against teaching genre as static formulas (a concern most boldly voiced in Freedman (1993) but also found in Bawarshi (2002) and Devitt (2004)). Yet the pedagogical practices outlined within RGS are less commonly embraced by EAP. These practices tend to focus heavily on understanding contexts of writing and attend less explicitly to analysis of text form, for example through the practice of identifying linguistic and rhetorical patterns within a genre. One exception is found in Ann Johns’ work, which has, notably, also focused on undergraduate writing (especially FYW) within the US.

Differing aims and activities may be one reason for limited cross-disciplinary collaboration in genre-based pedagogy. EAP typically emphasizes awareness-raising of discourse patterns and their relationship to a community’s social values and practices, while RGS tends to focus on awareness of writing and genres as social action. In an EAP genre-based classroom, students will likely analyze specifically targeted genres, while in an RGS genre-based classroom, they are just as likely to select their own genres for analysis—the goal is to understand the socially situated nature of writing *in general* rather than to apply analytic strategies to specific, privileged genres *per se*. Costino and Hyon (2011) explore these distinctions in some detail, describing genre as a “scare word,” or a term that signifies differently across the two disciplines. They describe its productive function in bridging their own disciplinary discussions and approaches to teaching writing, while highlighting the need

to unpack the different values, ideologies, and assumptions that the two disciplines bring to the term genre and approaches to genre in the writing classroom (see also Johns et al., 2006). Important reasons behind these differences relate perhaps as much to the contexts of teaching (including student populations) as they do to disciplinary histories, values, and modes of inquiry.

More recently, an even more distinct approach to pedagogy has also developed out of RGS, referred to as “Writing About Writing” (WAW) (Downs & Wardle, 2007). Drawing on the belief that the goal of FYW—teaching students to write at the university—is unrealistic, WAW aims to teach students *about* writing. Wardle (2009) describes such an approach as addressing topics like the following: “how people use writing, how people learn to write, how genres mediate work in society, how ‘discourse communities’ affect language use, how writing changes across disciplines, and so on” (p.784). Though not yet wholly embraced in the field of composition studies, WAW represents one of the first significant departures from the assumption that FYW can and should prepare students for the writing they encounter in their later courses. Given its fairly broad aim, this approach seems unlikely to gain traction in EAP despite shared underlying theoretical orientations.

Transfer of learning

The topic of learning transfer has developed in largely separate conversations across composition studies and EAP, but it is an area in which there is great potential for productive dialogue. In composition studies, the research of academic writing in the disciplines described earlier in this chapter served largely as a precursor to scholarship adopting a more explicit focus on the questions of whether and how learning of academic writing transfer from one teaching context to another. The topic, however, is recently garnering considerable interest within composition studies, perhaps also prompted by the recent rise in larger-scale longitudinal research (e.g., Fishman et al., 2005; Sommers, 2002). Specific concerns have been related to the extent to which students can take knowledge gained in a general writing course in the first year of university and adapt or appropriate it to the various tasks and audiences they will later encounter in their studies. Studies have tended to be largely qualitative in nature, often extending beyond two years of longitudinal data collection and drawing heavily on student perspectives (Moore, 2012). Research findings have generally pointed to the limitations in learning transfer, with students seeing their later disciplinary courses as distinct from FYW.

Although research on transfer of learning in EAP has differed in its methodology and sometimes learning contexts, findings have similarly suggested that the knowledge learned in a writing or language classroom is not easily applied to other environment. Within EAP, James’ (2008, 2009, 2010) work is most notable for its very explicit focus on the issue of transfer, drawing—like much research in composition studies—on Perkins and Salomon’s (1988) concepts of near transfer and far transfer. Similarly to the research in composition studies, James has found that perceptions of task similarity influence transfer (James, 2008) and that actual transfer seems to be both inconsistent and rare (James, 2010). Despite conflicting research results, a prevalent view of transfer underlying many EAP studies sees writing as composed of general writing skills and cognitive processes that are transferable across contexts. A key assumption is that transfer is the consistent use of a set of writing skills when writers move from one context to another.

Recently, an attempt to connect to composition studies has been made in EAP, notably in DePalma and Ringer’s (2011) work. Adopting a framework of transfer in education and

educational psychology, yet tailoring it to incorporate a particular rhetorical orientation in composition studies, DePalma and Ringer expand transfer to refer to the process of reshaping writing skills to fit a new context rather than the ability to reuse them. Their concept of “adaptive transfer” has been formed in alignment with the concepts and arguments in education and composition studies that challenge the notion of transfer as the reuse of knowledge (e.g., McCarthy, 1987; Wardle, 2007). Although interest in learning transfer has grown in both EAP and composition studies, these conversations have, so far, had limited interaction beyond drawing on some similar broad frameworks. DePalma and Ringer’s work, however, suggests potential for increased dialogue and more empirical study of learning transfer among L2 writers in different contexts.

Critical approaches to teaching academic writing

In their comparative exploration of the disciplinary values in composition studies and applied linguistics, Silva and Leki (2004) characterize the former as “left to far left in its politics” and the latter as “center left” (p.7). One way in which this political orientation manifests itself is pedagogical practice. Critical pedagogy, for example, has played a visible role in composition studies since at least the 1980s. Early advocates often framed their work as a social-epistemic rhetoric, which “offers an explicit critique of economic, political, and social arrangements” (Berlin, 1988, p.490). Ira Shor (1980) provided numerous examples of how such a rhetoric is implemented in the classroom, asking students to examine their positioning within larger social structures, and to imagine their own agency in effecting social change. The sociopolitical orientation of composition studies has also been evident in the numerous position statements drafted by various CCCC committees, including a statement on Ebonics Training and Research, National Language Policy, and Students’ Right to their Own Language. With their emphasis on social variations of language and individual rights to such variations, these statements demonstrate the somewhat contested role that “academic English” plays in the field of composition and its classrooms.

While critical EAP has been advocated for by scholars such as Pennycook (1997), Benesch (2001), and Canagarajah (2002), it has remained somewhat peripheral to the field as a whole, where the goal of teaching a dominant target variety is often unquestioned. Nevertheless, in the past decade or so, scholarship from World Englishes (WE) has contributed to discussions of whether teaching native-speaker norms is always an appropriate aim for the EAP classroom. And while the basic concept of World Englishes has also enjoyed visibility in very recent composition studies scholarship, the primary conversations around WE differ in the two fields, with a stronger emphasis on language ideology (rather than linguistic variation) in composition studies. Additionally, EAP as a field has been less organized around official position statements or resolutions than composition studies, perhaps in part because of the lack of a single professional organization and the wide range of geopolitical contexts in which EAP is taught and studied.

Future directions

As our discussion in the previous section suggests, composition studies and EAP have shared several topics of interest over the years in relation to academic writing, with some areas enjoying a fair degree of cross-disciplinary conversation. We now turn to other areas in which we see the potential for these kinds of interactions to develop, though they have not fully done so as yet.

One very notable strand of work in composition studies that has not yet become prominent in EAP is multimodality in academic writing. With few exceptions (e.g., Rowley-Jolivet, 2004, 2012), EAP still tends to equate writing with verbal text. Composition studies, in contrast, has developed a fairly large body of scholarship and pedagogical practice in multimodality. Though the greater attention to language in EAP is unsurprising (as it surely relates to the linguistic concerns of L2 students), it also seems likely to us that attention to multimodality will increase in EAP in the coming years, with the growth in multimodal academic genres such as video abstracts or supplemental online data in journal publications.

So far in this chapter, we have provided numerous examples of scholarship in composition studies that has influenced EAP. More disappointing, however, is what we see as a relative imbalance in the direction of scholarly dialogue. With a few exceptions, there remain many examples of “parallel universes” between composition studies and EAP as well as a relative lack of instances of EAP scholarship influencing and being integrated into composition studies (see Zawacki and Cox, 2011). Despite this pattern, we would like to conclude on a more optimistic note, describing two recent developments that may indicate an encouraging change in this historical pattern. The first is the application of corpus-based research and pedagogy to first year writing, a development that directly counters the decline in focus on and interest in language within composition studies, as detailed most compellingly by MacDonald (2007). A series of studies by researchers at University of Michigan have applied genre analysis and corpus-based text analysis to student writing (Aull & Lancaster, 2014; Gere et al., 2013), merging research methods that are typical in EAP with pedagogical contexts and concerns that are common in composition studies. This work has strong potential to foster greater communication and collaboration across fields while also contributing to both fields’ understanding of academic writing. And finally, the past decade has heard increased calls within composition studies for the incorporation of more international perspectives into the study and teaching of academic writing (e.g., Donahue, 2009) and has seen the establishment, led by Charles Bazerman, first of the Writing Research Across Borders conference followed by the International Society for the Advancement of Writing Research professional organization, “devoted to the development of interdisciplinary research into the many dimensions in writing and learning of writing of people of all ages, languages, and other characteristics” (ISAWR, n.d.). Given the increased mobility of people and texts in today’s globalized world, perhaps the time is now ripe for further collaborations that extend beyond disciplinary and contextual boundaries.

Further reading

Bazerman & Russell (1995); Ritter & Matsuda (2012); Russell (2002)

Related chapters

- 2 General and specific EAP
- 6 EAP, EMI or CLIL?
- 19 Genre analysis
- 22 Critical perspectives
- 35 The common core in the United States
- 36 EAP pedagogy in undergraduate contexts

Notes

- 1 For stylistic ease we use both “discipline” and “field” when referring to EAP and composition studies. We acknowledge the complexity of these terms, but a full discussion of the extent to which either composition studies or EAP is a field, a discipline, or an alternative configuration is beyond the scope of this chapter.
- 2 It is important to note, here, that much has been written in the past decade on the need for composition studies to recognize the linguistic diversity of the student population and to develop scholarship and pedagogy in ways that are more inclusive of this diverse population (see, for example, Canagarajah, 2006; Matsuda, 2006).

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PART II

Contexts for EAP

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6

EAP, EMI OR CLIL?

John Airey

Introduction

In this chapter I discuss the European-inspired notion of content and language integrated learning (CLIL). What makes CLIL different from English-medium instruction (EMI) on the one hand and English for academic purposes (EAP) on the other? A cursory examination of the acronym itself raises a number of questions. The Ls in CLIL—language and learning—are straightforward enough, but what about the I and the C? The I in CLIL stands for integrated: this signals CLIL's dual emphasis on disciplinary learning outcomes along with language learning. Which brings us to the C in CLIL—content. More than anything else, it is this focus on the teaching of disciplinary content that makes CLIL unique. Can EAP professionals teach content? Can disciplinary experts teach language? Or does the CLIL approach necessarily imply collaboration between language and content teachers? These are some of the questions I address in this chapter.

Before I start my description of CLIL, I feel I should declare my background. Although I have worked for many years as a teacher and researcher in the EAP sector, I am also a trained physicist. In fact, I have two quite different affiliations—senior lecturer in English at Linnaeus University and reader in physics at Uppsala University. As such, I have a built-in bias towards the content teachers that EAP professionals often find themselves cooperating with. My interests in EAP are focused towards disciplinary teaching and learning and the role of language in these processes. It is perhaps unsurprising, then, that in the ensuing description of CLIL I often adopt the stance of a disciplinary insider, focusing on the often-neglected 'C' in CLIL.

I start my description by first examining the definition of CLIL. Thereafter I map out the relationship between CLIL, EMI and EAP and discuss the rise of EMI. Then, after summarizing research into the disciplinary learning outcomes of EMI, I focus on who should teach CLIL and the source of difficult relationships between content and language experts. The chapter finishes by suggesting the concept of disciplinary literacy as a way for content teachers to problematize CLIL, and to begin to view themselves as teachers of disciplinary discourse.

What is CLIL?

As the name suggests, content and language integrated learning (CLIL) is a term used to denote an educational approach where the learning of a non-language subject is combined with language learning. Coined in Europe, the term was first used in 1994 by David Marsh and Anne Maljers. Although in theory CLIL can refer to any language, in the majority of

cases the first 'L' stands for English (Dalton-Puffer and Smit, 2013). Thus, Graddol gives the following definition of CLIL:

CLIL is an approach to bilingual education in which both curriculum content—such as science or geography—and English are taught together. It differs from simple English-medium education in that the learner is not necessarily expected to have the English proficiency required to cope with the subject before beginning study.

(Graddol, 2006, p.86)

Although there are strong parallels between CLIL and both the Canadian immersion programmes (Genesee, 1987) and the North American term content-based second language instruction (cf. Met, 1998), the approach grew out of a European political integration agenda. As Marsh (2002, p.11) puts it, CLIL '[...] has emerged as a pragmatic European solution to a European need'. Rather than uniting Europe linguistically by promoting a *lingua franca*—which would be seen to unfairly favour English-speaking countries—the long-term European goal is that all citizens should be able to communicate in two languages other than their mother tongue: the so-called MT+2 objective.¹ In this respect, the European Commission contends that:

Content and Language Integrated Learning (CLIL), in which pupils learn a subject through the medium of a foreign language, has a major contribution to make to the Union's language learning goals. [...] It provides exposure to the language without requiring extra time in the curriculum [...]

(European Commission, 2003, p.8)

As we will see later, there is some doubt about whether the claim that CLIL does not require extra time for similar content results holds true at higher levels of education (high school and tertiary level).

The teaching of so-called *content courses* in English at university level has been variously termed: English-medium instruction (EMI), teaching in English (TIE), English-medium education in multilingual university settings (EMEMUS), content and language integrated learning (CLIL), integrating content and language in higher education (ICLHE), etc. Although potentially signalling different interests, these terms are far from mutually exclusive. Moreover, their interpretation changes depending on observer and setting. This proliferation of terms along with a lack of rigorous definitions has at times led to disagreement in the literature about the definitions of CLIL, EMI and immersion (see for example Lasagabaster and Sierra, 2010; Somers and Surmont, 2012).

In an attempt to resolve this debate, Hüttner and Smit (2014) suggest CLIL can best be conceptualized as a series of local responses to the global status of English. They return to Marsh's (2002, p.58) earlier description of CLIL as an 'umbrella term' for a range of diverse pedagogical activities. Drawing on this notion, they suggest that CLIL can best be conceptualized in terms of Wittgenstein's (1958) family resemblance. Here, the individual members of the CLIL family are unique but share some identifiable features with other members. Clearly then, in order to avoid potential confusion, it is important to be specific about the particular instance of CLIL that is being discussed. For the purposes of this chapter, I suggest that in higher education there is essentially a continuum of approaches to what is termed CLIL (Figure 6.1).

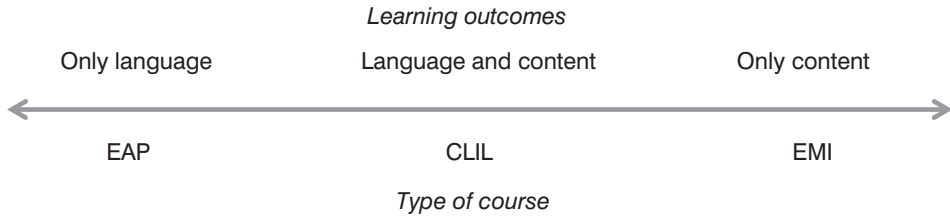


Figure 6.1 The language/content continuum

On the left of the diagram are courses with only language learning outcomes; on the right are courses with only content learning outcomes. CLIL courses are found somewhere between these two extremes, having both language and content learning outcomes.

At one end of the continuum, language is viewed as fairly unproblematic. Such courses have content-related learning outcomes in their syllabuses, but no explicit English language-related learning outcomes. Language is simply viewed as a tool for teaching that may be substituted by another tool as required—the choice of teaching language is pragmatic and not expected to affect the content taught to any great degree. In such situations, English (if referred to at all in the syllabus) is simply mentioned as the language in which the course is taught. For the purposes of this chapter, I have chosen to term this approach EMI.

At the other end of the continuum are courses with mainly language learning outcomes. The aim of such courses is to provide students with the academic reading and writing skills they need to complete their studies. Here, academic language may be viewed as a generic set of skills that can be acquired more or less independently of the content area where they will be used. EAP courses would be placed towards this end of the language/content continuum. Between these two extremes, we find courses with both language and content learning outcomes. In this chapter, I use the term CLIL to denote this type of course. Thus, whilst EAP is largely language focused and EMI is largely content focused, true CLIL would be firmly fixed in the middle, having specific learning outcomes for both content and language (see Coyle, Hood & Marsh, 2010).

This analytical division is purely artificial. In reality, it is a fallacy to think that content and language can be separated in this way—content and language are inextricably entwined. Thus, when describing the role of language in science learning, Halliday and Martin (1993, p.8) claim ‘[...] language is not passively reflecting some pre-existing conceptual structure, on the contrary, it is actively engaged in bringing such structures into being’. Since the other chapters in this handbook are dedicated to the unpacking of EAP in its various forms, I have chosen to focus my description in this chapter on the right-hand side of Figure 6.1—the CLIL/EMI continuum.

CLIL and higher education

Traditionally, the CLIL label has been less favoured in higher education. Here, the term integrating content and language in higher education (ICLHE) has been introduced in order to acknowledge differences in interest between compulsory education and tertiary settings (Smit & Dafouz, 2012). In practice, few courses in higher education meet strict CLIL/ICLHE criteria—that is, courses with *both* content and language learning outcomes. This is because, in contrast to the compulsory school sector, language learning is seldom part of the officially sanctioned content curriculum at university level. Thus, unlike Graddol's earlier definition of CLIL where language proficiency was not a prerequisite for participation, it is the norm

in university courses for students to be expected to have acquired the necessary language skills to complete the course prior to entry. This situation is particularly noticeable in the case of exchange students where courses specify entry requirements in terms of international English language testing system (IELTS) or test of English as a foreign language (TOEFL) scores. As such, disciplinary language learning at university level is often relegated in status to a remedial activity carried out in EAP courses outside the standard curriculum (essentially the left-hand side of Figure 6.1).

Clearly then, the role of CLIL is different in higher education. From a disciplinary perspective, we are interested in students developing a grasp of the ways in which language is used to warrant knowledge claims within the discipline. This is a crucial skill, particularly in L1. For this reason, I have argued that all content teachers should view themselves as CLIL teachers, even in L1 monolingual settings (Airey, 2012). However, the argument that students also need to be able to make disciplinary knowledge claims in English can only be made for certain disciplines and settings. This is borne out by research into attitudes to English across disciplines (Kuteeva and Airey, 2014).

In practice, then, there are often a number of more pressing pragmatic reasons that lie behind teaching a content course in English at university level—such as accommodation of overseas exchange students, or the lecturer not speaking the local language (see Airey, 2004, p.99). Such extrinsic factors have little to do with disciplinary language learning goals. Thus, the introduction of EMI has been shown to be relatively unproblematised with programme administrators simply suggesting ‘it will be a useful experience for students’ (Airey and Linder, 2008). In such cases, the decision to teach in English may well be reversed in the next iteration of the course if the extrinsic factors have changed. Thus, generally it is EMI rather than CLIL (or ICLHE) that is widespread in tertiary settings. As such, a brief description of the rise of EMI courses in higher education is warranted.

The growth of EMI

In 1999, European education ministers met in Bologna to discuss the free movement of students across national boundaries. The resulting Bologna Declaration led to a European framework whereby university degree courses could be credited between the different European countries. Following this initiative, a number of other regions took similar steps to align their higher education systems to allow student accreditation across their respective national boundaries (Huisman et al., 2012; see also Chapters 7–9 of this volume). The ratification of the Bologna Declaration in Europe and similar initiatives elsewhere led to an increase in mobility for lecturers and students alike. However, one major question that was left unanswered in the wake of this increased mobility was the language that should be used to teach these exchange students.

As mentioned earlier, one of the driving factors behind the EU push for mobility was the goal that students should learn other EU languages in order to fulfil the MT + 2 objective. It was, thus, probably envisaged that the teaching of exchange students would occur in the local language. However, in the majority of countries the default position for dealing with (and indeed encouraging) an influx of foreign students was to offer courses taught in English, this is particularly true at the second cycle (master) level. Thus, in Europe, the ratification of the Bologna Declaration led to a rapid increase in the number of courses offered in English across a range of disciplines. This expansion of EMI has been documented in successive surveys (Maiworm and Wächter, 2002; Wächter and Maiworm, 2008, 2014). Paradoxically, this increase in EMI can actually work against the European MT + 2 objective, with minority

languages marginalized as the majority language and English ‘fight it out’ for space within the curriculum (Lindström and Sylvén, 2014; Swales, 1997).

Thus far, the focus of this chapter has been on language learning. I now wish to turn my attention to content. Earlier I mentioned the often-repeated claim that research shows that CLIL does not impact negatively on the learning of content. In the next section, I describe the origins of this claim and examine its validity for higher education.

Research into EMI: lessons from bilingual education

Teaching academic subjects in an additional language—bilingual education as it is often termed—is carried out for a number of different practical and political reasons throughout the world. In post-colonial countries, for example, bilingual education has traditionally involved teaching the language of a minority ruling class, to a majority with one or more indigenous languages (see for example Tollefson and Tsui, 2003). In contrast, bilingual education in the USA involves teaching the majority language to immigrant minorities (Willig, 1985). In Europe, another aspect of bilingual education can be observed. Here, bilingual education has been implemented to support regional languages (see for example Fortanet-Gomez, 2013). Finally, yet another aspect of bilingual education can be found in the Canadian immersion programmes where English-speaking families have elected to have their children taught in the language of a minority (French). In each of these examples, there are quite different motivations, power relations and differences in status between languages, thus it is not surprising that what may be deemed a successful bilingual intervention is also very different from setting to setting.

On the whole, research is generally favourable to bilingual education. A large number of Canadian longitudinal studies since the late 1950s have shown that pupils with English L1 can achieve a high level of fluency in French, with no noticeable effect on performance in other subjects (see for example Swain and Lapkin, 1982; Genesee, 1987). These immersion pupils achieve similar results on French comprehension tests as native speakers, and their written and spoken language is also highly developed, with only a few lapses of grammar and collocation. Similarly, Willig (1985) carried out a meta-analysis of US bilingual programmes, concluding that participation consistently led to results in favour of bilingual education.

Research into EMI at high school and tertiary level

The majority of data on bilingual education relate to compulsory schooling where students are introduced to the target language at an early age. At this early stage of schooling, language will largely deal with concrete, everyday phenomena. In this respect, Met and Lorenz (1997) and Duff (1997) suggested that at higher levels of education limitations in L2 may inhibit students’ ability to explore abstract concepts in non-language subjects. As such, they warned against the unreflected generalization of the positive effects of bilingual education beyond the system in which the research was carried out. Thus, despite the well-documented and generally accepted positive effects of many bilingual education programmes, Marsh, Hau and Kong (2000, 2002) working in Hong Kong, found large *negative* effects of high school teaching in a second language on non-language subjects. They suggest that the focus of earlier bilingual studies has been on *achievement in languages* with ‘a remarkable disregard for achievement in non-language subjects’ (Marsh, Hau and Kong, 2000, p.339). As they point out, the majority of research that exists on bilingual immersion programmes deals with early immersion, where pupils are taught in the additional language from the start of formal schooling.

The effects of EMI at higher levels of education are less well-documented, particularly when it comes to learning outcomes in non-language subjects. These negative results for the Hong Kong setting were confirmed by Yip, Tsang and Cheung (2003) who found that English-medium students, despite having initially higher grades in science, performed more poorly on tests than their peers who were taught in Chinese (Mandarin). The EMI students were found to be particularly weak in problems that assessed understanding of abstract concepts, their ability to discriminate between scientific terms and their application of scientific knowledge in new situations. Similar results have been reported from a number of settings.

In New Zealand, researchers found negative correlations between EMI and performance in undergraduate mathematics, with students disadvantaged by 10 per cent when taught in English (Barton and Neville-Barton, 2003, 2004; Neville-Barton and Barton, 2005). In Sweden, Airey and Linder (2006) found that undergraduate physics students who took notes in EMI lectures focused more on the process of note-taking than understanding content. These students had to do more work outside timetabled lectures in order to make sense of their lecture notes. Many of the students in the study adapted to EMI by employing a number of strategies such as reading about a topic before a lecture and asking questions in L1 about content after lectures. Interaction in these EMI lectures was found to be much lower.

Also in Sweden, Hincks (2010) showed that students speak more slowly in English L2 presentations. In a follow-up study, Airey (2010) demonstrated that although speech rate in student disciplinary explanations was indeed much slower in English, the disciplinary accuracy of the explanations was roughly the same in English and in Swedish. Note that this latter finding says nothing about disciplinary learning in EMI, only that the students could give equally good (or bad) disciplinary descriptions of content in both English and Swedish.

In Norway, Hellekjær (2010) found the majority of students could cope with lectures though a considerable number had comprehension difficulties in EMI, and many reported problems with note-taking. Similarly, research in the Netherlands has also shown negative effects for Dutch engineering students' learning when they are taught in English (Vinke, 1995; Klaassen, 2001). In contrast to the other tertiary level studies, Klaassen's work suggests that the negative effects might be temporary and limited to the first year of study in a second language. However, it is unclear whether this finding is due to student adaptation or whether students who could not adapt simply dropped out. Thus, Bruton (2013) has raised the issue of whether certain groups might be disadvantaged by CLIL/EMI.

In summary, EMI at tertiary level clearly places greater demands on language as a constructor of knowledge and this seems to have undesirable effects on content learning in certain settings. However, based on the little research that has been carried out, most students appear to adapt, adopting strategies to cope with EMI, although it is very uncertain whether all students have this ability.

Teaching CLIL in higher education.

Having discussed research into student learning outcomes for CLIL/EMI, I now turn the question of how CLIL can be implemented. Essentially there are three basic options if language and content are to be integrated: language teachers could teach both content and language, content teachers could teach language along with their content, or language teachers and content teachers can cooperate and share teaching responsibilities. Thus, Hillyard concludes her review of CLIL and its relation to EAP with the observation that:

[w]hat is different is that the language teacher is also the subject teacher, or that the subject teacher is also able to exploit opportunities for developing language skills.
(*cited in Gustafsson et al., 2011*)

Commenting on this quote in their introduction to a selection of papers dealing with collaboration in ICLHE, Gustafsson et al. (2011) take issue with Hillyard's focus on a one-teacher model. For them, collaboration has many benefits for both content and language experts. However, it is not the lack of collaboration that strikes me, but rather the fact that the first part of this quote is just plain wrong with respect to higher education. A language teacher cannot be a content teacher at tertiary level. Disciplinary experts are just that—experts. The idea that language teachers could teach, say, quantum mechanics to future physicists is just as ridiculous as expecting physics lecturers to teach SFL to future linguists. So whilst language teachers might be able to teach certain types of content in the compulsory sector, this is clearly not the case in higher education. This is a good example of the dangers of unreflected transfer of CLIL findings between settings, and an argument for the family resemblance notion put forward by Hüttner and Smit (2014) described earlier in this chapter. Having ruled out the notion of language experts teaching content, then, the next question is whether content lecturers can teach language.

Here the story is quite different. Content teachers are not expected take on the role of language experts, but rather to explain the ways in which language is used to build and share knowledge within their discipline—something that they have first-hand experience of. This is not to say that this task is trivial—far from it. Being an expert user of disciplinary discourse is not the same as being able to explain to others how to use it—more often than not, such knowledge is tacit. As explained in the section on EMI, although the number of content lecturers teaching their subject matter in English is growing rapidly, few of their courses can be said to be CLIL courses since language learning outcomes are seldom specified in the syllabus. In general, it appears that for CLIL to occur in a higher education context, language specialists need to be involved in some way. Before addressing such collaboration, I will present a brief summary of what is known about content lecturers who change to EMI.

Content lecturers changing to EMI

Only a limited amount of work has been done on the effects on the quality of content lectures when the language is changed to English at tertiary level. In the Netherlands, Vinke, Snippe and Jochems (1998) reported reductions in redundancy, speech rate, expressiveness and accuracy of expression in EMI lectures, and similar findings were reported by Lehtonen and Lönnfors (2001). The EMI lecturers in this Finnish study also mentioned problems of pronunciation and suggested that they would feel uncomfortable correcting students' English. Similar findings have also been reported in Sweden by Airey (2011b). In Denmark, Thøgersen and Airey (2011) found the lecturer in their study spoke more slowly in EMI classes, taking 22 per cent more time to cover the same material.

Despite these findings, Klaassen (2001:176) suggests a threshold level of TOEFL 580, below which language training is necessary for content lecturer to participate in EMI. Above this level, Klaassen claims that pedagogical training is more useful than language training. Thus, Suviniitty (2010) finds that Finnish students graded lectures with interactive features as generally easier to understand, irrespective of the language competence of the lecturer.

Language training for content lecturers

A number of universities run in-house courses for content lecturers who need to teach in English. In this respect, few have gone as far as the University of Copenhagen. Here, the Centre for Internationalisation and Parallel Language Use (CIP) has developed the test of oral English proficiency for academic staff (TOEPAS) which is used for certification of lecturers for participation in EMI (Dimova and Kling, 2015; Kling and Stæhr, 2011, 2012).

Cooperation between language and content lecturers

Finally, I turn to collaboration. Here, once again, there are three approaches. The first (and most common) approach is to have EMI given by the content lecturer supported by EAP classes. However well lecturers communicate in such circumstances, this is clearly not CLIL. The second approach involves having content and language lecturers in the same classroom. There has been some research into this type of team teaching, but clearly for financial reasons this is never going to be a tenable position in the longer term. Rather, I suggest this type of teaching may be useful for a period of time with the goal of raising the awareness of language issues in content lecturers before moving on to the third option—content lecturers taking responsibility for the development of both content and language. In this respect, Jacobs (2007) claims that language lecturers can help content lecturers uncover the tacit rules that govern their disciplinary discourse by asking the type of questions a novice would. Special issues of *Across the Disciplines* (Gustafsson, 2011) and *The Journal of Academic Writing* (Gustafsson, 2013) deal particularly with this type of collaboration between content and language teachers.

Problems of collaboration

Although it is widely acknowledged that collaboration is needed between content and EAP teachers (Arnó-Macià and Mancho-Barés, 2015), such collaboration has the potential to cause serious problems when disciplinary differences in ideas about what counts as knowledge surface (see Chapter 2 of this handbook).

When the collaboration is being undertaken from disciplinary perspectives that are deemed to be quite different—for example between the so-called ‘hard’ and ‘soft’ or pure and applied sciences, such as was the case in our collaboration—the potential for the collaboration to establish a site of conflict is predictable.

(Jacobs, 2007)

If collaboration is to function effectively, both parties need to understand what the other can bring to the table. It is important that both content and language experts do not underestimate the difficulties of crossing disciplinary boundaries in this way. On the one hand, the content lecturer may initially view the language expert as a low-level technician dealing with issues of secondary importance who has been brought in to offer a ‘quick language fix’. On the other hand, it is easy for the language expert to fall into the trap of criticizing what may appear to be undeveloped or naïve approaches to disciplinary discourse on the part of the content lecturer. For example, the following statement—though perfectly reasonable from a linguistic perspective—may sound confrontational to a content lecturer:

But how far can [CLIL] collaborations go before coming up against a disciplinary politics that emphasizes hard positivist knowledge, rather than its shaping, construction and interpretation through language? This is an argument that has to be engaged with and won within institutions and also in broader policy arenas.

(Baynham, 2011)

And it is not just positivism in the natural sciences that can cause problems. Drawing on Bernstein (1999), Kuteeva and Airey (2014) showed that disciplines with more hierarchical knowledge structures such as natural sciences and medicine actually have strong preferences for English language use, whereas disciplines with more horizontal knowledge structures such as the humanities have strong preferences for local languages (see also Bennett, 2010).

As a linguist who has long worked across disciplinary boundaries, Cecilia Jacobs has the following advice for language experts attempting to work with content lecturers:

Finally, another premise that impacts our work in ICLHE is whether we see our approaches as normative or transformative. Lillis and Scott (2007) describe the normative approach as ‘identifying and inducting’ students into academic and disciplinary conventions, while they see transformative approaches as ‘situating and contesting’ academic and disciplinary conventions. Again, these different premises have huge implications for research and pedagogy. My own research (Jacobs, in press) has shown that much of ICLHE practice happens in that grey area between the normative and the transformative.

(Jacobs, 2015, p.17)

In an attempt to guide collaboration between content and language experts and to foster discussion of language learning goals within disciplines, I introduced the term disciplinary literacy. I claim that the goal of university education is the production of disciplinary literate graduates, where disciplinary literacy is defined as ‘the ability to appropriately participate in the communicative practices of the discipline’ (Airey, 2011a). This concept has proved to be a useful starting point for the discussion of disciplinary language learning goals in both L1 and English (see also Linder et al., 2014). Drawing on this work, Airey et al. (in press) recommend that programme and course syllabuses should detail language learning outcomes alongside more traditional learning outcomes.

We believe it is not enough to simply incorporate generalized references to the language of instruction of the form ‘in this course students will practice the use of disciplinary English’. Rather we suggest more specific references along the lines of ‘in this course the following skills will be developed in the following language(s)’. There are two consequences of including disciplinary literacy outcomes of this type in the syllabus: first, students will need to be taught these skills and second they must also be assessed.

(Airey et al., in press)

Future research

In his description of the origins of CLIL, Marsh (2002) explains that it was originally conceived in order to address perceived problems with second language teaching. Despite rhetoric to the contrary, this focus on language teaching remains to this day, even in higher education

settings. In her survey of ICLHE research, Jacobs (2015) reports that ‘the overwhelming majority of the published articles [...] were authored by language specialists’. Thus in their research agenda for CLIL, Dalton-Puffer and Smit (2013, p.556) suggest that we need more input from content specialists:

The applied linguistic weighting of CLIL research should be counterbalanced with more input from subject education specialists. That is, CLIL researchers from applied linguistics should actively seek collaboration with subject education specialists in order to encourage the transfer of insights and theoretical understandings (e.g. what are core genres, or what is regarded as student centredness within the traditions of a particular content subject and foreign language teaching).

More research also needs to be focused on the following areas:

- methods for including language learning goals into content syllabuses;
- methods for supporting content lecturers;
- the transferability of CLIL research findings across settings.

I conclude this chapter by quoting Dalton-Puffer and Smit:

For the moment, CLIL still has the flavour of being special, but will attitudes, practices and outcomes be the same once it has lost its aura of innovation and become ‘normal practice’?

(Dalton-Puffer and Smit, 2013, p.557)

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Further reading

Bruton (2013); Gustafsson (2011); Smit & Dafouz (2012); Wilkinson & Walsh (2015)

Related chapters

- 2 General and specific EAP
- 35 The common core in the United States
- 42 Needs analysis for curriculum design
- 43 EAP materials and tasks

Note

- 1 See http://ec.europa.eu/languages/policy/strategic-framework/index_en.htm.

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7

EAP IN MULTILINGUAL ENGLISH-DOMINANT CONTEXTS

Jean Parkinson

Introduction

In previously British colonies, such as South Africa, India, Kenya, and Nigeria, the end of colonialism did not end the dominance of English. Indeed, in many post-colonial contexts, although multilingualism is the norm, English, the first language of few, continues to dominate in 'official' settings such as government, education, and commerce. In such environments, English for academic purposes (EAP) can play an important role in providing meaningful access to tertiary study for students for whom English is a second language.

This chapter considers the example of South Africa, where the importance of EAP is bolstered by an historically underfunded secondary education system. In this context, school and university literacy practices may be divergent, with students entering university with little prior experience of academic reading and writing. The importance of students' L1 as a resource in their learning is also a factor to be taken into account, calling into question an 'English only' attitude in the EAP classroom. An approach that considers students' identities as members of their community in addition to being students is influential, suggesting the need to build on students' prior written and oral literacy practices, rather than viewing them as discontinuous with academic literacy. In South African EAP research, these factors have resulted in the dominance of an 'academic literacies' approach, which takes account of students' social, political, and cultural context. A second approach highlights the importance of genre and language features.

Overview of context and issues

A central aim of EAP is to prepare students for their discipline's linguistic demands. However, in their introductory editorial to the first volume of *JEAP*, Hyland and Hamp-Lyons (2002:2) suggest that in achieving this aim, EAP must take account of the students' social and cultural context. This is important in any situation, but is a particular focus in this chapter on South Africa, where the social and cultural context of learning in English is particularly salient. In this setting, the influence on EAP of an academic literacies approach, which emphasises the situated nature of literacy and its acquisition, has been prominent.

Of importance too in such contexts is that multilingualism is the norm. Most university students have experienced secondary education in English, which is a first language for a minority. In the same introductory volume of *JEAP*, Canagarajah (2002) criticises EAP as overly normative with regard to academic writing, and of taking too little account of the complexities of academic literacy acquisition under multilingual circumstances. As Archer (2007) notes, learning academic writing can have implications for identity, if that learning means a rejection of previous literacy practices and values. Canagarajah (2002) views as inadequate a focus on assisting students to acquire the discourse of their academic communities in order to enter these communities, and suggests the need to enable students to reflect on academic discourse, compare it to student's previous discourses, and critique the power invested in English at the expense of their L1. In the South African context, some researchers (e.g. Madiba 2013), while noting the contribution of EAP in South Africa to opening up access to higher education, caution against marginalising students' first languages in the EAP classroom.

South Africa: its social, political, and linguistic context

To place this chapter in context, in the following paragraph I briefly summarise South Africa's troubled recent history. Colonised in 1652 by the Dutch, and by the British in 1806, the country was at that time already populated by a number of San and Bantu-speaking indigenous groups. From 1860 onwards, speakers of Tamil and Hindi entered the country, many as indentured labourers. In 1948, Apartheid was instituted, with its notorious system of racial segregation and white minority rule. A period of 'separate development' followed, including separate schooling, universities, residential areas, and even, for the purpose of defining indigenous Africans as foreigners, different 'homeland states' for different groups. In 1994, the first elections in which suffrage was universal took place, since which time a start has been made on developing a more just and equal society.

However, despite gradual improvements, Apartheid's social and educational problems are likely to take some time to solve. During Apartheid, education for groups other than ethnic Europeans was underfunded; schools were overcrowded and under-resourced, teachers were often underqualified, and the medium of instruction was nominally either English or Afrikaans, increasing the learning burden on L1 speakers of other languages (see Table 7.1 for the languages reported by South Africans as their L1 (Census in brief 2012)).

Since 1994, most South Africans still attend relatively poorly resourced schools in which English is the medium of instruction after the first three years. In 1993, the South African constitution made official the languages in Table 7.1. In practice, however, English has grown in dominance in the last 20 years, becoming the main language of education, government, business, and media. This growth in the dominance of English has seen surprisingly little opposition, which a study by Greenfield (2010) put down firstly to a desire to create an egalitarian society which privileges no African language over others; Greenfield's second reason, endorsed in Thamaga-Chitja and Mbatha (2012), is a view that African languages are undeveloped for academic purposes. There is also the widespread view of schools, parents, and learners that English proficiency will benefit learners in relation to jobs and study, and consequently there is little will to oppose this growing hegemony of English.

Table 7.1 Languages reported by South Africans as their L1 in 2011

<i>Zulu</i>	<i>Xhosa</i>	<i>Afrikaans</i>	<i>English</i>	<i>N. Sotho</i>	<i>Tswana</i>	<i>Sotho</i>	<i>Tsonga</i>	<i>Swati</i>	<i>Venda</i>	<i>Ndebele</i>	<i>Other</i>
23%	16%	13%	10%	9%	8%	8%	4%	3%	2%	2%	2%

Thus, given the theoretical opportunity to choose the medium of instruction, most schools have chosen English. Yet the greater ease of teachers and students with the learners' L1 has resulted in the L1 being employed in many school classrooms for much spoken use (Probyn et al. 2002), while English is used in textbooks and student writing. The result is that the ability of spoken classroom interaction to support acquisition of written literacy is diminished. Little surprise then that, as Mwanike (2012:215) says, 'language continues to play the role of privileging access to higher education for some, while curtailing access to higher education for others'. Privileged by this situation are the English-speaking minority, as well as the new middle class, mother-tongue speakers of an African language who are able to attend the more costly, but well-resourced, truly English-medium schools that were reserved for the ethnically European population under Apartheid. Deprived are most South Africans: L1 speakers of an African language, who do not have the means to attend these privileged schools. It is this latter group who have been the focus of most EAP interventions at tertiary level.

Critical issues and topics

I begin this section by discussing the multilingual context of EAP in the South African context. I touch on a key issue in EAP/English for specific purposes (ESP), that of specific vs. generic EAP courses. I then discuss two important EAP traditions in South Africa: one that draws heavily on an academic literacies approach, and another that stresses linguistic features. Finally, I touch on South African work that has been done in testing of readiness to use English for academic purposes. Such testing is generally used to identify incoming students who require support.

Academic literacy in a multilingual context

South Africa is a multilingual country in which everyone knows (to varying degrees) at least two languages and most, particularly those from cities, know several. To illustrate, I include from Mesthrie (2002:13) a statement by a student who grew up in Johannesburg:

My father's home language was Swazi, and my mother's home language was Tswana. But as I grew up in a Zulu-speaking area we used mainly Zulu and Swazi at home. But from my mother's side, I also learnt Tswana well. In my high school I came into contact with lots of Sotho and Tswana students, so I can speak these two languages well. And of course, I know English and Afrikaans.

Despite this widespread multilingualism, in the 20 years since true democracy, many institutions, such as government and education, have become increasingly monolingual. As Makalela and McCabe (2013) note, of the 'historically white universities', Afrikaans-medium universities have made the most change towards multilingualism in South Africa by becoming, in line with government policy, dual-medium English-Afrikaans institutions. Historically white English-medium universities have remained monolingual English in practice, as have historically Black universities. Makalela and McCabe (2013) describe the situation at one such university, which is officially monolingual English, despite the students all being L1 speakers of African languages. In this context, EAP courses are widely offered because the English proficiency students have acquired at school and, more to the point, their prior experiences of literacy in general, are regarded as not having prepared them for study in English.

In this multilingual environment, South African universities have instituted language policies that propose a greater role for African languages. This does not mean that any university language policies propose instruction in an African language, but rather there is the recognition that students' L1s are an important resource for learning. Despite fairly moderate aims, university language policies have been difficult to implement (Masoke-Kadenge & Kadenge 2013; Makalela & McCabe 2013; Stroud & Kerfoot 2013). Evidence of implementation at some institutions include making a course in an African language mandatory for students (Ndimande-Hlongwa et al. 2010), limited simultaneous interpreting of lectures into an African language (van Rooy 2005), and limited provision of multilingual glossaries or dictionaries (Madiba 2013; Carstens 1998).

Madiba (2013) notes widespread codeswitching amongst ESL university students, and goes so far as to suggest that monolingual instruction in either L1 or English would make learning more difficult than drawing on both resources. In classroom discussion, codeswitching can involve use of English words for ideas and concepts, thus aiding discussion of these technical concepts. Greenfield (2010) calls for the deliberate use of more than one language in the classroom to increase understanding and student investment.

Indeed, there is some move in EAP classrooms to encourage use of discussion of concepts in students' L1 as a first step towards understanding of concepts and writing about them in English (Deyi 2010; Henning & van Rensburg 2002; Paxton 2009). Paxton describes encouraging her students to discuss concepts in their L1, and providing a tutor who shared their L1. During discussion, students uncovered misunderstandings, deepening their conceptual understanding. Paxton sees such discussion between students and mentors such as tutors as a possible resource for developing multilingual glossaries. In Deyi (2010), students were asked to identify the L1 equivalents for concepts and terms. Deyi's study indicated that students felt that their identities had been affirmed and that the process had been helpful for acquisition of academic and technical terms. Use of the L1 in the EAP classroom and beyond clearly needs further study.

Generic vs. specific interventions

In a thoughtful survey of published descriptions of EAP interventions in South Africa, Butler (2013) found that most published research on this topic described specific rather than generic approaches. He found that reasons for selecting a specific approach were authenticity, motivation, genre appropriateness, collaboration between EAP and discipline specialists, and grounding students' acquisition of disciplinary literacy in prior literacies. The generic model, considerably less frequent in published studies, was selected with claims of transferability.

Goodier and Parkinson (2005) describe a discipline-based course in business studies. The course simulated business settings to teach important pedagogical and workplace genres: case studies, research papers, and reports. Parkinson (2000) describes a genre-based science course which situates learning of a key genre, the laboratory report, in real experiences of measurement, data collection, and analysis. Parkinson et al. (2007) describes the teaching of language features of science genres embedded in a discipline-based course. Similarly, Carstens (2011) used a genre-based approach in a writing programme aimed at senior undergraduate history students.

One EAP model popular at universities of technology (polytechnics) suggests that the teaching of academic writing should be devolved even further into the disciplines so that it becomes the responsibility of disciplinary staff, as they have greater knowledge and insight into the norms, values, and forms of their discipline. In this model, the role of the EAP

professional becomes initial co-teaching with the discipline specialist, ‘making explicit the norms and conventions of disciplines’ (Jacobs 2013:133) that have become taken for granted for the discipline specialist. This trend coincides with the ideal of South African universities as undergoing transformation; in this view, the university must adapt to English as a Second Language (ESL) students (increasingly a majority) to meet them partway in adapting to the university.

I now move on to three EAP traditions in South Africa: literacy-focused, language-focused, and skills-focused. The first two strongly favour a disciplinary/specific approach, while a skills-focused approach favours a general EAP approach.

The socially situated nature of literacy: the academic literacies tradition

The dominant strand in published South African EAP research situates itself in the academic literacies tradition (Lillis and Tuck, this volume; Lillis & Scott, 2007). Drawing on the New Literacy Studies (Street 2003), this approach views literacy practices as embedded in social and cultural context, and students’ prior discourse practices as relevant to their acquisition of disciplinary writing. Lillis and Scott (2007:8) point out that, in the US and the UK, increasing presence at universities of groups who traditionally had little access to tertiary study encouraged debate about the nature of tertiary literacy practices. In South Africa, this change in student demographics has been rapid; it may be measured in the growth in numbers of degrees awarded annually to Black Africans in South Africa over the last 20 years: 8,514 in 1991 compared to 36,970 in 2008 (Dell 2011).

During this time, EAP researchers have come to view problems encountered by ESL tertiary students as related as much to literacy as to language. Indeed, many ESL students experience very different uses and values for literacy at school and at university. This difference is explored in a number of valuable studies. Relying on Gee’s (1990:xvii) view of the classroom as socialising learners not only into ‘ways of using language’ but also into ‘ways of acting and interacting and the display of certain values and attitudes’, Kapp (2004) provides insight into the school practices to which ESL learners are exposed. Although Kapp condemns stereotyping in the literature of schools as teacher dominated and as encouraging rote-learning, the classrooms she describes do not deviate markedly from the stereotype. She found that in English classrooms in such schools, oral communication predominated, first because Communicative Language Teaching (CLT) has been widely interpreted as an emphasis on the oral mode, and second because of the belief that writing functions merely to record information as a memory aid. She found that classroom discourse focused on what-questions and facts rather than critical judgement or inference.

This school-based attitude to writing results in student difficulty in moving from oral to written mode. Boughey (2000) describes how ESL writers, who based their written practice on oral communication, which needs less context, tended to provide little context for their ideas in writing. Boughey’s informants reported that writing at school was seldom read by teachers who viewed it merely as a means to record information or prove that learning had taken place. She quotes the following from an interview with a student about school writing practices (Boughey 2000:285):

Well, in fact, they used to give us a sort of homework. Maybe you find the teacher doesn’t pay much attention to how to write the homework. They just stand in front of you and ask for the answer to Question 1 and [...] he says ‘Mark it right’ or

‘Mark it wrong’ which means that they don’t have the time to look at your writing. They just want to know whether you answered it or you didn’t.

In this environment, no context need be provided because the information will be used in an oral lesson. Boughey (2000) attributes to this school-based literacy a conception of knowledge as a commodity to be learnt and reproduced, rather than developing a critical approach to knowledge. This idea of knowledge of accepted truth discourages recognition of the multiple voices in academic texts, including the writer’s own. Discussing implications for teaching referencing, Boughey (2000) notes that an idea of knowledge as accepted by all makes repeating that knowledge without attribution a reasonable practice.

Kapp’s (2004) study found too that the difficulty in becoming proficient enough in English for university study was increased by peer-stigmatisation of those who spoke English outside the classroom; paradoxically, those who did so were paid most attention by teachers and awarded good grades. Ironically, despite standing out from their peers because of good grades and English proficiency, once students got to university they were regarded as ‘disadvantaged’.

The suggested solutions to this disjunction between school and university literacy practices recognise students’ prior literacy practices, and choose rather to build on these to make school and university practices continuous rather than replace them. Using a case-study approach, Leibowitz (2004) investigated students’ prior literacies to see how they impact academic literacy acquisition. She describes how although few of her participants had access to print literacy before they went to school, her informants relied on a rich oral tradition including oral tales, narratives, and riddles, as well as radio programmes. Texts written by her students bore signs of the influence of church and community discourse. Similarly Paxton’s (2007a) undergraduate students drew on political/activist discourse and traditional Xhosa rhetorical styles. Leibowitz (2004) suggests that academics in the disciplines could build on these prior literacy practices to extend learners’ writing abilities in the direction of academic discourse.

Aligned to this approach, a valuable study by Archer (2008) sought to build on and extend students’ ‘discourses’ of engineering or ways of talking, writing about, and valuing engineering. Students, who viewed engineering as functioning to solve social ills through technological development, wrote proposals for development of a rural village, similar to the villages in which many students had grown up. Placing a high value on students’ knowledge of underdeveloped communities, Archer sought to enable her students to make links between their own experience and engineering discourse practices, which Archer characterises as prizing a problem-based approach in which solutions are judged against a set of stated criteria. Archer notes the difficulties experienced by students in negotiating authorial identity, stemming from the existence within their writing of the norms of impersonal academic writing side by side with a sense of themselves as active agents in their planned development. The students’ identities as engineers who will design solutions to problems of development coexisted with their identities as previous residents of a rural village. The assignment enabled students to make links between knowledge from sources and their own experience.

Issues of identity in academic writing have been of interest to scholars in this tradition. Starfield (2002) drew on multiple data sources including observation, interviews, and written documents to investigate the literacy practices and identity construction of students who succeeded or failed to succeed on a sociology course. She explores how one middle-class student succeeded in projecting an authoritative identity as a writer by drawing on prior knowledge of text and intertextuality to address the assignment question, write coherently,

and argue well, gaining a good grade despite a lack of references. In contrast, another student, constructed by himself and the institution as a 'disadvantaged second language speaker', did not have the same knowledge and prior experience of academic writing; he failed to recognise intertextual references in the assignment question, and misinterpreted it. He also failed to develop an authoritative 'voice' in his writing, employing patchwriting and avoided expressing his own opinion. Starfield's study makes it clear that this student's problems are more closely related to prior knowledge of literacy practices than to knowledge of language.

As Starfield (2002) implies, labels such as 'disadvantaged' and 'second language speaker' are disempowering as well as overly essentialist. Thesen (1997) found that a student thus labelled by the institution was the most literate individual in the village from which she had come. Students in her study distanced themselves from these labels, characterising themselves instead in political terms as 'we as Black people'. De Kadt and Mathonsi (2003) explored the difficulties of developing an academic voice in English, a second language, with some students consciously 'shouting out to be seen as African' (2003:95), using their voice to show bias towards 'the poor and less fortunate'.

That academic voice can sometimes function in opposition to own voice or expression of an African identity is explored by McKenna (2004). Lecturing staff and student interviewees in her study were shown two responses to the question 'Name and discuss the three forms of taxation'. One response, which named and compared the forms of taxation, was framed in the essayist, 'to the point' mould. The second not only named the three forms of taxation, but illustrated and evaluated each type by reference to its effect on the poor. The lecturers interviewed focused on the ways in which this answer deviated from the point, and regarded it as 'jumbled [...] propaganda grafted onto the basic economic ideas' (2004:275). In contrast, the students interviewed, while recognising it as less likely than the first to be highly graded, regarded the second answer as a better one, noting that it had been 'written by someone who "has her voice" and is "saying what she feels is right"' (2004:275).

Preparing students for the linguistic demands of their discipline

A second tradition of South African EAP scholarship, more directly in the ESP/EAP tradition, has focused on preparing students to use their disciplines' specialised language. Although I consider the studies in this section for their focus on disciplinary language, it should not be thought that these studies give no attention to context, including students' prior literacy practices. However, their primary focus is on describing the literacy that students need to acquire to be integrated into their disciplines, or ways to mediate this acquisition. Thus studies in this tradition give greater attention than do those in the academic literacy tradition to the context and norms of the disciplines that students are entering: disciplinary rather than social context is emphasised.

One example is a study of the lab session in undergraduate chemistry and physics by Parkinson and Adendorff (1997) who used multiple methods including observation, interviews, analysis of participant interaction as well as textual analysis to examine the values reflected in this key literacy event in science. This study identified two kinds of lab manual, which had linguistic differences, and also reflected different beliefs about undergraduate science: a 'cookbook' manual in chemistry used imperatives to encourage students to act in following lab procedures, and an 'investigative' lab manual in physics encouraged learning to think, predict, and draw inferences.

Wyrley-Birch (2010) similarly investigated disciplinary language and values reflected in trainee radiotherapists' communication with three audiences: patients, radiotherapists,

and other health professionals. Ability to negotiate these three registers has implications for the radiotherapists' developing professional identity. She shows that the lexis that the radiotherapists used ranged from formal to informal with all three audiences. For example, the same device may be referred to as an 'immobilisation device' (formal academic term used with other health professionals), an 'impression' (formal technical term used with other radiotherapists), a 'cast' (informal technical term), and a 'mask' (polite layperson's term). Professional terms may also be used between colleagues to avoid patients understanding them.

Bangeni (2013) has a dual focus on linguistic features and students' identity development within the discipline. The study sought to describe the three move structure (identify, analyse, and evaluate) of the written case analysis genre in marketing. The genre is complicated for writers by the roles they must take up: the professional roles of problem-solver and manager, as well as the role of knower/student of the discipline addressing the lecturer as audience.

A study of legal language by Ngwenya (2006) combines an awareness of context with a focus on unpacking the linguistic features of law discourse. Included are Latin terminology, sub-technical legal words (such as 'action', meaning 'lawsuit'), identifying the agents of nominalisation, identifying subject, verb, and object of long sentences, and changing between active and passive. Ngwenya combines this linguistic focus with critical language awareness to assist students in unpacking the power relations in legal texts.

Focusing on economics textbooks in use at a South African university, Paxton (2007b) found that these were not a good model for literacy practices in economics, because the textbooks are 'single-voiced', presenting ideas as established fact and thus discouraging critical reading. Similarly, Jackson, Meyer and Parkinson (2006) found a mismatch between the reading and writing assigned to science students. The reading was largely from textbooks, while the writing was largely lab reports; these are not well modelled by textbook writing, which rather than investigating hypotheses, treats information as accepted knowledge.

In a series of studies on the use of a process approach to teach writing, Kasanga (2004) considered attitudes to and use of peer-reviewing amongst students at an 'historically Black' institution. She found that despite lack of exposure to process writing at school, students willingly employed and benefited from peer-reviewing, although they expressed a preference for teacher feedback.

Klos (2012) describes an approach to teaching attention to organisation in reading and writing to pharmacy undergraduates. Making a link with prior knowledge and home-based practices of use of traditional medicines, she based this teaching on texts related to indigenous healing therapies.

In another study that focused on language features, Pretorius (2006) found that ESL health science students who were better able to understand logical connections in information linked by illustrative, causal, and adversative logical connectors, did better academically. In response to this, she designed reading activities that target logical relations by, for example, supporting students in identifying and recognising words that signal a causal relation, and providing practice in constructing causal relations.

Ellery (2008) describes tutorials to help geography students avoid plagiarism. In interviews with students, it became clear that reasons for plagiarism included being unsure of when and how a reference must be cited, and concern over making information less factual. Angélie-Carter's insightful study (2000) of student (mis)use of the words and ideas of their sources confirms that rather than being academic dishonesty, plagiarism usually reflects 'lack of clarity about the concept of plagiarism itself'; she also found 'a lack of clear policy and pedagogy surrounding the issue' (2000:2). Students may plagiarise because they are 'trying

on' a new literacy practice which is initially foreign to them. As with learning a new language, this often involves reproducing chunks such as ideas, wordings, or text organisation. In this context, the student writer lacks authority with respect to the published text, and has difficulty developing or expressing authorial voice.

Corpora of student writing have been employed in a few studies. Parkinson (2011) compared the language features used to construct arguments in research article discussion sections to those used by undergraduate science students in the discussion sections of their lab reports. In a 2013 study, working with the same corpus of undergraduate science writing, Parkinson investigated student use of reporting verbs, and found that students' language choices reflect conversational norms, as well as beginning to share academic values regarding objectivity and evidence.

Skill-based approaches

Both the EAP traditions I discuss above take account of context: the academic literacies tradition considers social context, while EAP aiming to prepare students for the linguistic demands of their discipline takes account of the disciplinary context. However, a skills-based approach to EAP focuses on the behaviour and cognitive abilities of the learner, rather than on the context. The word 'skills' refers variously to 'study skills', such as referencing skills and library skills, or it can refer to the 'four language skills': reading, writing, listening, and speaking. Both are associated with a view of reading and writing as dependent on learner ability, as context-free and as easily transferable between contexts. Despite the dominance of an academic literacies approach in published South African research, an analysis by Boughey (2013) of abstracts for a South African language teaching conference found that abstracts in the academic literacies tradition were a minority, and that abstracts reflecting a skills-based framework were more frequent. This is suggested by phrases such as 'language and study skills', 'communication skills', and 'academic reading and writing...skills' (Boughey 2013:33). This curious finding may indicate that those employing a skills approach are less likely to publish. Indeed, Boughey (2013) notes that the common marginalisation of EAP professionals and that lack of tenure does not encourage research or vision of how best to approach EAP teaching.

Notwithstanding Boughey's claim, I found little published work in the skills framework. Kilfoil (1998) is an early example of a course emphasising study skills, and more recently McCabe (2011), at an 'historically Black' institution, justifies use of a 'course which includes basic study skills and the four basic language skills' (2011:60) by reference to a context in which students come from a wide spectrum of disciplines, and have 'generally low English proficiency' (2011:54). Butler and van Dyk (2004) too describe an EAP course for engineering students that is distinctly in the skills-based mould.

Testing of proficiency in academic language

Because of inequities in the education system both before and after Apartheid, universities have been eager to identify entrants with potential to succeed at university although they may not have achieved the requisite school grades. This 'potential' is difficult to measure, and in two widely used tests it is identified with academic literacy. Cliff and Hanslo (2009) describe the development of one such test while another has been developed by Weideman and colleagues. For reasons of equity, Van Slik and Weideman (2009) express the hope that their test will not be used to exclude entrants who do not perform at the required level,

but rather to identify those in need of support. Weideman (2008) also suggests that items on such tests must be aligned with the language instruction that follows them. However, this may not be wise if there is the disjuncture between school-based literacy practices and university practices described above. Instead, it seems more reasonable to test for facility with less specific literacy practices, and to employ the EAP intervention to support acquisition of disciplinary practices within the university.

Main research methods

The preferred research methods of those working in the academic literacies tradition are ethnographic ones, and likely, within the same study, to include multiple sources of data. For example Paxton (2007b), uses rich triangulation of data sources, including interviews with students about their writing, textual analysis of disciplinary academic texts, and analysis of student writing. Paxton (2009) draws on recordings of classroom interaction, as well as interviews with students and their tutor. Paxton (2012) allowed students to interpret their own writing, and she used classroom observation as well as students' written literacy histories.

To investigate the features of academic writing in the disciplines, textual analysis and corpus methods have also been used. For example, Parkinson (2013) used corpus methods to compare use of reporting verbs and the agents of these verbs in learner writing and in professional writing. Goodier (2008) compared case reports written by student and professional radiographers, using move analysis.

Future directions

The change in student demographics at South African universities in the last two decades has necessitated adaptation by universities to the needs of 'non-traditional' students, rather than catering only to students whose prior literacy experiences mesh with expected university literacy practices. EAP researchers have played an important role in uncovering prior student literacies and how these mesh, or fail to mesh, with university expectations. EAP professionals have not only worked with students to assist them in acquiring the practices of their disciplines, but have worked with discipline specialists to assist them in adjusting their practices to their students. This attention to the socially situated nature of literacy and to issues of identity has been an important contribution to the transformation of higher education in South Africa.

However, text and pedagogy have been underemphasised in many of these important contributions. Indeed, a weakness of the academic literacies model, as Wingate points out, has been its failure to 'come up with an alternative writing pedagogy' (2012:28). Lately, however, academic literacy scholars have begun to call for a dual emphasis on text and context. For example, while viewing favourably a move away from text towards practice as the primary focus in academic literacy research, Lillis and Scott (2007:21) warn against neglecting focus on detailed analysis of texts. Paxton (2012) too recommends combining text analysis with ethnographic methods that allow insight into context. This dual focus has usually been neglected by South African researchers however, with heavy emphasis either on the context or on text.

EAP research in South Africa, both research and practice, would benefit from reliance on both the strong tradition of exploring social context, and the tradition of textual analysis and the ways such analysis can be used to benefit EAP students in the classroom. Archer (2008) is such a study: it situates student acquisition of an important disciplinary

genre within an academic literacies framework that takes account of prior literacies, and deliberately facilitates their extension and connection to disciplinary ones. Another example is Paxton's (2007b) critique of first year economics textbooks: while placed firmly within an academic literacies framework, it provides a useful discussion of how the author used texts other than the textbook to develop students as critical readers with a heightened sense of the intertextuality of all texts. Looking to the future, further development is needed of ways to avoid marginalisation of students' first language both inside and outside in the EAP classroom (Madiba 2013).

Further reading

Archer (2008); Paxton (2007a, 2007b)

Related chapters

- 2 General and specific EAP
- 3 Academic literacies
- 4 English as the academic lingua franca
- 8 EAP at the tertiary level in China
- 9 EAP in Latin America

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8

EAP AT THE TERTIARY LEVEL IN CHINA

Challenges and possibilities

An Cheng

Introduction

The People's Republic of China (China) has more than 1.3 billion people. As the world's most populous country, China has the world's largest population of college students, with an estimated total of about 25 million students enrolling in post-secondary institutions in 2009 (Bolton and Graddol, 2012). The number reached 27.63 million in 2014 (Ministry of Education of China, 2015). Almost all of these students study English. For this reason, China has been recognized as “a major site of TESOL [teaching English to speakers of other languages] activity,” and College English teaching in China has attracted the attention of scholars from China and abroad (e.g., Borg and Liu, 2013, p. 271; You and Dörnyei, in press).

Scholars in China have argued that English language teaching (ELT) at the tertiary level in China has entered the “后大学英语” [“post-College-English”] era with the changes in student demographics and government policies (Cai, 2012, p. 11). For example, students are now entering college with higher English language proficiency, and this reality has prompted teachers of English to rethink the goal of English teaching at the tertiary level (Botha, 2014; Gao, Liao and Li, 2014). At the same time, the Chinese government has actively promoted bilingual and English-medium instruction (EMI) classes as part of its efforts to internationalize China's higher education (Hu and Alsagoff, 2010; Yu, Peng and Han, 2009). These and other pedagogical realities in the “post-College-English era” have led ELT scholars in China to call for a more prominent place for EAP courses in the tertiary-level ELT curriculum (e.g., Cai, 2012; Sun, 2010; Wang and Yao, 2013).

Below, I will describe the context and status of EAP research and practice in China at the tertiary level. Drawing upon publications in and outside of China, I will describe the larger context of ELT in China, and review the arguments for and against a more prominent role for EAP in China's ELT curriculum. I will also examine the status of EAP practice targeting graduate students, before concluding with some thoughts on future EAP research and practice in China.

EAP at the undergraduate level in China: replacing English for general purposes (EGP) with EAP?

Given the large number of English language learners at the tertiary level in China, what to teach and how to teach these students in English classes become a high-stakes and, at times, contentious issue, leading to heated debates about the role of EAP in the college ELT curriculum for non-English majors (Cai, 2012; Wang and Yao, 2013).

A brief overview of College English teaching (CET) in China

A brief description of the context of ELT for non-English majors at the college level in China is useful for understanding the debates. ELT at the college level is divided into two main streams in China: one for a relatively smaller number of English majors (英语专业学生) and the other for non-English majors (非英语专业学生), who constitute the majority of English learners in Chinese universities (Cheng and Wang, 2012; Sun, 2010). Given the overwhelmingly large number of non-English majors, any EAP efforts targeting this population is likely to have a much stronger impact on a much larger number of students and teachers (Rao and Lei, 2014). In addition, due to the various reasons that will become clearer later in the chapter, the reform of the ELT curriculum for non-English major undergraduate students, or 大学英语教学 (“College English teaching,” or CET, as ELT to non-English majors is called in China), has become “an urgent and challenging project facing educators and scholars in China” (Xie, 2014, p. 44). Therefore, this chapter will concentrate on CET. Readers interested in the curriculum emphasizing literature, culture, and international understanding for the much smaller number of English majors can refer to Cheng (2002) and Qu (2012). Those interested in the test-dominant ELT curriculum for primary and secondary school students where EAP plays a negligible, if any, role can refer to other sources (e.g., Hu, 2009; Li and Baldauf, 2011; Wang and Chen, 2012; see also Chapter 34).

One important point about CET is the centralized model of education in China where decisions about curriculum, including the CET curriculum, are determined by the Ministry of Education (MOE) in Beijing (Rao and Lei, 2014; Xie, 2014). For example, in the past few decades, MOE has set several policy mandates that led to the revisions of the CET curriculum (Li, 2012). The most notable revision was based on the *College English Curriculum Requirements* issued by MOE in 2004 for trial implementation, and formally published as a policy for nationwide implementation in 2007 (MOE, 2007; see also Feng, 2009; Li, 2012). The document mandates that CET should develop students’ comprehensive speaking, listening, reading, writing, and translation skills (Feng, 2009). This policy document places a strong focus on speaking and listening (Feng, 2009; Li, 2012), possibly as a corrective to the emphasis on reading in the previous curriculum (Cai, 2012). The document also stipulates that, in principle, English should occupy 10 percent of the total credits required for an undergraduate degree (Feng, 2009).

In China, CET classes are taught by teachers in the Department of College English. These teachers are often perceived as instructors rather than academics and as having a lower professional status than that of their colleagues in the Department of English who teach English majors (Borg and Liu, 2013). In recent years, many separate English skills courses have often been incorporated into one four-semester course called Comprehensive English or Integrated English (综合英语) that supposedly integrates all four skills (Cheng and Wang, 2012; Li, 2012). Taught in almost all universities in China, Comprehensive English is based on a uniform syllabus, similar textbooks, and a corresponding exam system (Rao and Lei,

2014). The low status of CET teachers and their perceived lack of professional preparedness as English teachers, as well as the dominance of Comprehensive English, profoundly influence the debates about the role of EAP in CET, as we will see later.

To assess the English proficiency of non-English majors in the four skills on graduation, a national standardized test called College English Test has been administered annually by the College English Examination Guidance Committee nation-wide since 1987 (Cheng and Wang, 2012). The College English Test system consists of six bands for non-majors, each band covering one semester of the Comprehensive English course. Sophomores with four semesters of English study are required to pass College English Test 4, a requirement often linked with a student's eligibility for the bachelor's degree (Liao, 2004), although some universities have become more lenient about this requirement in recent years (Feng, 2009). Since the College English Test is still a graduate requirement, some scholars have noticed the "teaching-to-the-test" phenomenon in many universities in China (e.g., Xu and Liu, 2009). For example, although the CET curriculum requirements put forward by MOE (2007) mandates that CET should aim to develop students' comprehensive speaking, listening, reading, writing, and translation skills, CET in many colleges still often focus on helping students pass College English Tests 4 and 6 in which speaking and listening are not emphasized (Feng, 2009; Rao and Lei, 2014). Therefore, any effort to reform the CET curriculum, including the discussion about the role of EAP in the CET curriculum, will need to keep the impact of the required College English Tests in mind, as we will see later.

Another MOE policy document that influences the possible role of EAP in the CET curriculum is entitled *Guidelines for Improving the Quality of Undergraduate Teaching* (MOE, 2001). This policy paper specified that 5 to 10 percent of the courses for undergraduate students should be taught in English or another foreign language by 2004 (Feng, 2009; Flowerdew and Li, 2009a). These English-medium courses have become increasingly prevalent since 2004 due to MOE's unwavering support for them (Bolton and Graddol, 2012). For example, Jinan University in Guangzhou had offered 400 EMI courses by 2011, and Fudan University in Shanghai had offered more than 138 such bilingual and EMI courses by 2012 (Cai, 2012). In the business school of Sun Yat-sen University in Guangzhou, over 50 courses are offered in English, and "some 41% of humanities students heard 'about half' or 'all' English in their lectures" (Botha, 2014, p. 5). These bilingual or EMI courses are often taught by subject-matter faculty, rather than by ELT teachers, using textbooks in English (Li, 2012; see Chapter 6), thus posing special challenges for students taking these classes. MOE's promotion of bilingual and EMI courses, as well as the need to improve the English study skills of the students taking these courses, will become relevant in discussing the debates about the relation between EAP and CET later.

The status of EAP at the tertiary level in China

With the background information about CET in China above, we can now examine the current status of EAP in the CET curriculum. Cargill, O'Connor and Li (2012) note that EAP seems to be a rather new term in the CET circle in China, and the introduction of overseas EAP programs started only recently, possibly because of the history of CET. Specifically, they point out that, before the mid-1980s, CET in China was predominantly general English or basic English (基础英语) with an emphasis on reading materials in English for science and technology (Cargill, O'Connor and Li, 2012). Many subject-oriented textbooks, such as medical English or business English, were popular in university teaching at that time (Duan and Gu, 2005).

In the mid-1980s, CET practitioners started to argue about the content of CET. Some CET teachers and observers outside of CET began to claim that CET should aim at developing in students a solid foundation of knowledge and skills in English. Those holding this view argued that students would have no difficulty communicating in academic and work settings once they have mastered general English. Indeed, some even argued that a scientific variety of English did not exist, and there was only general English used for scientific purposes (cf. Hyland, 2006; see Li, 1992, for a summary of this view).

Gradually, the emphasis on the common core of general English knowledge and skills regardless of students' disciplines became the guiding principle of CET from the mid-1980s onward (Feng, 2009). Popular CET textbooks of general English started to be adopted nationwide (Li, 2012), and they often include such topics of general human interests as “大学生活, 成长经历, 礼貌待人, 音乐之声, 卫生健康, 友谊情感, 成功之道, 文化价值” [“campus life, personal growth, politeness, appreciation of music, health and hygiene, friendship and human emotions, paths to success, and cultural values”] (Cai, 2012, p. 264; see also Li, 2012). English for special purposes (ESP)/EAP research and teaching, by contrast, started to become marginalized and declined in status (Duan and Gu, 2005). Some in China describe the current status of ESP—including EAP because EAP has always been promoted as an integral, if not the central, component of ESP in China (Cai, 2012)—as “惨淡经营, 步履维艰, 几乎到了自生自灭的地步” [“dismal, struggling, and left to fend for itself”] (Cai and Liao, 2010, p. 47; see also Lu, 2013) and as “日益萎缩, 正面临退出高等教育舞台的危险” [“dwindling in status and risking becoming irrelevant in higher education”] (Luo, 2006, p. 56).

The call for a prominent role for EAP in China's CET

Given the perceived crisis of EAP, some EAP practitioners have begun to advocate a more prominent presence for EAP courses in China's CET curriculum (e.g., Cai, 2012, 2014; Liu, 2013; Sun, 2010). They argue that focusing on the general purpose of laying a solid foundation in English and developing comprehensive English skills have resulted in, among many other problems, CET repeatedly teaching the same vocabulary items and grammatical structures as well as covering the same general-interest topics taught in high school (Cai, 2010, 2012, 2014; Huang et al, 2007; Yin and Yan, 2011). With increasingly higher English proficiency, fewer and fewer college students have the motivation or patience to learn the same old vocabulary, grammar, and topics in the prevalent Comprehensive English course (Cai, 2012; Lu, 2013).

Moreover, focusing on general English in CET is considered by the proponents of EAP as fundamentally flawed because the comprehensive English skills emphasized in CET through general-interest topics are insensitive to students' communication needs for future study and work. Cai (2012), for example, notes that, in the 2007 *College English Curriculum Requirements*, the objective of CET is defined as “培养学生的综合应用能力, 特别是听说能力, 使他们在今后学习、工作、和社会交往中能用地英语有效地进行交际” [“to develop students' ability to use English in an all-around way, especially in listening and speaking, so that in their future study, work, and social interactions, they will be able to exchange information effectively”] (MOE, 2007, translation by Li, 2012, with minor revisions by me). The advocates of EAP argue that “future study” is too vague to be useful and should be specified as “为本科期间用英语进行专业学习服务” [“to serve the needs of students who will use English to study in their subject areas during their undergraduate study”] (Cai, 2012, p. 83).

Specifically, for most undergraduate non-English majors, using English for future study should mean using English to (1) study in bilingual and EMI courses in one's area; (2) read the literature and be informed of the latest development in one's discipline; and (3) participate in international conferences in one's field (Cai, 2012; Lu, 2013; Luo and Li, 2008). All of these needs, apparently, can be met more effectively in EAP courses, rather than in EGP courses. More benefit to students than EGP courses, therefore, are EAP courses that target students' study needs, especially with the prevalence of bilingual and EMI courses that students need or are required to take. Instead of the Comprehensive English course in the first two years of college, CET should transition to a curriculum model similar to this:

- 1 an elective, remedial English enhancement course (0 to 2 credit hours) for those who need to improve their comprehensive general English skills;
- 2 a series of required English for general academic purposes (EGAP) courses (8 credit hours in total) to enhance students' EAP listening, reading, writing, and speaking skills;
- 3 a series of elected English for specific academic purposes (ESAP) courses (2 to 4 credit hours in total), such as business English and legal English, based on the students' subject areas (Cai, 2012, p. 217; see also Huang *et al.*, 2007, for a similar model).

This argument for replacing EGP with EAP, exemplified by the proposed curriculum model above, is considered by some as a spanner thrown in China's CET works (Wang, 2011; Wang and Yao, 2013) due to its calls for a drastic break from the discipline-neutral EGA model underpinning the current CET curriculum in China. Such a proposal, if accepted by the CET circle and implemented from the top down through MOE policy mandates, would possibly result in the complete overhaul of the whole CET curriculum with new EAP-based textbooks, redesigned English tests, and retraining of CET teachers for EAP-focused teaching.

The resistance to the “replacement” of EGP with EAP

The proposal has, unsurprisingly, encountered objections (e.g., Wang and Yao, 2013). Some argue that CET should stay focused on EGP because China is a vast country with huge educational discrepancy due to differences in regional development and the urban/rural disparity, as noted by You and Dörnyei (in press). Consequently, students may enter university with varying levels of English proficiency (Huang, 2012), and many may need the general English classes to further consolidate their foundation in English and broaden their linguistic repertoire before they are ready to take EAP classes (Wang and Yao, 2013). Moreover, some first- and second-year college students may not have declared their majors and, thus, may not even have engaged in any discipline-specific communication tasks in Chinese, let alone in English. The relevance of EAP courses to these students remains an open question (see Wang and Yao, 2013, and Wang, 2011, for further arguments about the unsuitability of the “replacement” model which may not work in the Chinese context).

Another reason that the proposed EAP-focused CET curriculum is encountering resistance is because many in the CET circle believe in CET's additional goals of cultivating students' humanistic qualities (素质 or “suzhi”) and developing students' international perspective. Indeed, the *College English Curriculum Requirements* (MOE, 2007) lists “提高综合文化修养, 以适应我国社会发展和国际交流的需要” [“improve students' cultural qualities so as to meet the needs of China's social development and international exchange”] as part of the objective of CET (Li 2012, p. 110). Some in the CET circle, thus, worry that replacing

general English classes with EAP classes undermines this goal of developing students' humanistic and cultural qualities necessary for intercultural exchange.

EAP proponents have attempted to address these and other questions which have become the barriers to implementing an EAP-focused CET curriculum (e.g., Cai, 2014). Some of these perceived hurdles seem unique to the Chinese CET context. They include the influence of the centralized system of education on the nationally implemented CET curriculum with its accompanying College English Test 4, educational discrepancy and its impact on students' English proficiency, and the debates about how CET can contribute to the development of the whole person. Teachers' concerns about their ability to work with specialized varieties of English has been noted as a general factor affecting EAP teaching in many contexts (Basturkmen, 2010; Hyland, 2006; see Chapter 2), and it becomes an aggravated issue in the Chinese context due to CET teachers' low professional status and their perceived lack of preparedness as English teachers in general, and as EAP teachers in particular (Cai, 2012; Huang *et al.*, 2007; Luo, 2006; Zhang, Zhang and Liu, 2011; see also Chapter 41).

Examples of EAP courses in the CET curriculum

Even with these potentially powerful mitigating factors, EAP practitioners in China have started to partially reform the CET curriculum through offering EAP-focused courses in different universities. At Fudan University, for example, EAP courses are offered based on disciplines, such as EAP for students in science and technology, EAP for management students, and EAP for students in the humanities, among others. Each course covers all four EAP skills—reading, writing, listening, and speaking—for academic purposes (Cai, 2012). Tsinghua University in Beijing offers EAP courses based on skills and on students' proficiency levels: EAP Listening and Speaking (Level 1 to Level 4) and EAP Reading and Writing (Level 1 to Level 4) (Zhang, Zhang and Liu, 2011). University of Nottingham Ningbo China (UNNC) has adopted the EAP model practiced at its UK home campus. It offers four EAP modules in the first year (Center for English Language Education of University of Nottingham Ningbo China, n.d). These EAP modules have reportedly achieved great success with students noted as being able to participate successfully in their EMI courses starting from the second year (Shu and Chen, 2010).

Scholars in China have noticed that “in spite of the tremendous effort in teaching and learning English, the ‘paying too much and receiving too little’ phenomenon in CET remains a big concern among English educators and practitioners in China” (Xie, 2014, p. 44). Therefore, the ongoing debates about reforming CET in general and reconsidering the possible place of EAP in the CET curriculum in particular will, undoubtedly, continue, if not intensify, in the future. With the increasing number of curriculum experiments such as those at Fudan, Tsinghua, and UNNC, it is foreseeable that EAP practitioners may start to experiment with EAP curriculum in more settings. These settings may include prestigious universities, second-tiered universities, universities in the affluent coastal areas, and universities in the remote western areas, especially with more and more universities offering EMI courses that necessitate the support of EAP. An increasing number of such cases may start to have the “trickle up” effect that may lead CET scholars and policy makers to reconsider the role of EAP in the Chinese undergraduate ELT curriculum in the future.

EAP at the graduate level in China

China's institutions of higher learning admitted about 621,300 graduate students in 2014 alone (Ministry of Education of China, 2015). These graduate students, who participate in more than 58 percent of scientific research projects in China, have significantly contributed to China's scientific innovations and economic development (Gu, Zhang and Liu, 2014). In fact, graduate students in China, especially doctoral students in the sciences, are required to engage in research and to publish their research findings in English-medium journals, sometimes as a degree requirement (Cargill, O'Connor and Li, 2012; Flowerdew and Li, 2009a, 2009b; Li, 2007, 2014). Graduate students at higher-ranking universities are also expected to publish in English in international journals in order to enhance the research profile of the research group of which the student is a part, and to increase the chance of winning more research funding for the group (Flowerdew and Li, 2009a; Li, 2007).

The requirement to publish in refereed international journals seems to apply more to graduate students in the sciences in top-tier research universities (Li, 2007) than to students in the social sciences or humanities (Flowerdew and Li, 2009a). Luo and Xiao (2011), for example, notice that many non-English major graduate students still often publish in Chinese journals.

Part of the reason for graduate students to publish research articles in Chinese journals may have to do with the English language proficiency of many Chinese graduate students in general and with their EAP skills in particular (Luo and Xiao, 2011). Some case studies on graduate students in China can offer us a glimpse into the English language proficiency and EAP skills of these students (Li, 2007; Luo and Xiao, 2011).

For example, Li describes the English learning experience of Yuan, who was a third-year doctoral student of chemistry at a major university. As an undergraduate, Yuan passed CET 4 only after the second try, and he failed to be admitted into the master's program at his university because of his low score in the English test that was part of the entrance exam. He was admitted into the master's program after the second try although he barely passed the English exam. He passed his CET 6 after the fifth try when he was a first-year master's student. According to Li, Yuan's experience of learning English was "typical for a student in China who is not majoring in English" (Li, 2007, p. 59). In a study of four graduate students by Luo and Xiao (2011) carried out in a university lower in status than the one in Li's study (2007), all four students had to take CET 4 multiple times before they passed, and one still had not passed CET 6 when the study started. Such a "typical" profile of English learners at the graduate level in China hints at the challenges for many graduate students to transition from learning EGP to using EAP proficiently for study in their own fields during their degree study (Luo and Xiao, 2011). Others have also noted the difficulties many graduate students in China encounter when they learn to write an academic paper (Cargill, O'Connor and Li, 2012; Flowerdew and Li, 2009b; Huang, 2012).

Given the difficulties with English and with EAP often encountered by graduate students, EAP practitioners have argued for the importance of offering pedagogical support, possibly in the form of EAP courses, to graduate students in China (Cargill, O'Connor and Li, 2012; Luo and Xiao 2011; Ye, 2012). Li, for example, argues that:

EAP practitioners ... can certainly provide assistance more systematically, earlier in the student's graduate program...to help them to make the transition from test-oriented English learning and short-composition writing to processing and producing longer research articles in English.

(2007, p. 73; see Luo and Xiao, 2011, and Ye, 2012, for a similar argument)

Despite such a theoretical plea, “the lack of pedagogical schemes and research efforts to address ... [graduate] students’ needs seems a flagrant gap in ELT in China” (Flowerdew and Li, 2009b, p. 161). For example, Li notes that, before Yuan wrote his first article in English, he had not taken any academic writing course, and Li considers the situation of inadequate EAP support for graduate students as typically the case with students like Yuan in China (Li, 2007). Similarly, the master’s students in the paper by Luo and Xiao (2011) were not offered any academic writing courses by their university.

Graduate students do take English classes during their degree study, but these classes tend to focus on general English (Xiao, 2008; Ye, 2012). Moreover, the standards in these general English classes for graduate students have been noted as too low, sometimes lower than those for undergraduate students. As a result, some of these EGA classes for graduate students have been reported as having negligible effects on improving students’ English (Luo and Xiao, 2011). Seventy-five percent of the 85 graduate students at a university in Nanjing surveyed reported that their English improved very little after the general English classes (Xiao, 2008). The teaching objectives for the higher-level subject-specific courses, if they are offered at all, are often set too high, and very few students are able to read scientific literature in English or to write reports in English based on these courses (Ye, 2012). Universities often cannot offer EAP courses to graduate students because of the lack of qualified EAP teachers at this level (Li, 2007; Luo and Xiao, 2011; Sun, 2010).

The genre-based approach (Swales and Feak, 2012), arguably the most popular approach to teaching EAP to graduate students, has been introduced to Chinese CET teachers in recent years (Luo and Xiao, 2011). It is, however, unclear whether such an approach has actually been adopted anywhere in China, and studies reporting whether students have benefited from the genre approach or not are still rare. One exception is Huang (2012) who reported on an action research project in which she used the genre-based approach to teach a group of Chinese engineering students to write journal articles based on articles collected and analyzed by them. Through questionnaires filled out by 88 students and interview data, Huang reported positive effects of the approach on her students’ learning of EAP writing (2012). With Chinese EAP practitioners becoming increasingly familiar with the genre-based approach, it is possible that more and more courses like Huang’s (2012) will be offered, and studies looking at Chinese graduate students’ learning of academic genres may start to appear more frequently in the literature in the future.

Conclusion and future directions

Up to this point, I have discussed the ongoing debates about the place of EAP in the CET curriculum in China and the status of EAP practice targeting non-English major graduate students. Based on this discussion, it is not surprising to see why some scholars believe that EAP in China is in a precarious position. The general English courses deeply entrenched in the state-mandated CET curriculum, the accompanying high-stakes English proficiency tests, and the government’s push for bilingual and EMI courses raise the question of whether EAP will be able to find its place in the CET curriculum in China (Cai, 2012; Luo, 2006; Sun, 2010). Possibly due to such a concern, the ESP Committee of the China Foreign Language Education Association was established in 2011, one year after the inaugural issue of the academic journal 中国ESP研究 [*ESP Research in China*] was jointly published by the prestigious Beijing Foreign Studies University and the Foreign Language Research and Teaching Press.

The committee and the journal are long overdue because they can serve as valuable venues for discussing EAP-related policy and curriculum developments, presenting research findings, and raising the overall profile of both EAP research and practice in the CET circle. The need to raise the profile of EAP research is especially pressing. I noticed that many publications on EAP published in China still focus on introducing basic EAP concepts, such as materials development, teacher development, needs analysis, genre analysis, and others to ELT teachers in China (e.g., Lu, 2013; Ye, 2012). EAP-related publications also often focus on describing various curriculum and course design efforts, often concluding with a rather depressing description of the problems hindering the implementation of EAP in China (e.g., Liu, 2013; Zhang, Zhang and Liu, 2011).

Going forward, EAP practitioners in China may need to engage in high-quality empirical research on different aspects of EAP, especially projects that document student learning and teacher development in EAP programs and courses in various geographical and institutional contexts with different EAP curriculum configurations (for example, EAP following EGP, EAP in conjunction with EGP, or EAP in place of EGP, among others). At the graduate level, the growing importance of genre-based teaching suggests the need to document students' development of academic writing using this approach (Cheng, 2006). These projects that target different aspects of EAP and different learners and teachers in varying contexts in China should preferably collect multiple sources of data and undergo rigorous peer reviews (see Gao, Liao and Li, 2014, for their discussion of the problems in many ELT-related empirical projects in China). Findings from such empirical studies can help validate the existing theoretical arguments (e.g., Cai, 2012), evaluate various EAP curriculum and course proposals and experiments (e.g., Zhang, Zhang and Liu, 2011), and enhance EAP practitioners' efforts to introduce EAP concepts to ELT teachers in China (e.g., Lu, 2013). Insights developed from all these sources can help generate theoretical and pedagogical implications that will be of great interest to EAP practitioners in China and beyond. They may start to have strong policy implications that would lead to a more prominent place for EAP in the Chinese CET curriculum and in the graduate-level English curriculum.

Further reading

Cai (2012); Cargill, O'Connor and Li (2012); Flowerdew and Li (2009b); Luo and Xiao (2011)

Related chapters

- 2 General and specific EAP
- 3 Academic literacies
- 6 EAP, EMI or CLIL?
- 35 The common core in the United States
- 36 EAP pedagogy in undergraduate contexts
- 37 EAP support for post-graduate students
- 41 EAP teacher development

Note

- 1 For all direct quotes from Chinese-language publications, I have provided the quotes in Chinese with English translations. All translations are mine unless specified otherwise.

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9

EAP IN LATIN AMERICA

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Introduction

Latin America is a huge and heterogeneous region that stretches from Mexico south to Chile. If we go by the definition that Latin America is the region of the Americas where Latin languages are spoken, the continent consists of twenty-one countries. Its languages are Portuguese (Brazil), French (French Guyana and Haiti), and Spanish in the remaining eighteen countries. In some countries other languages are also spoken: for example, English in Guiana and Jamaica, and Dutch in Suriname. This linguistic situation is part of the legacy of the colonization of the continent by European powers starting in the sixteenth century. The first influential Latin American universities were founded in the sixteenth century in the colonial centers of Santo Domingo, Lima, and Mexico City.

The four most scientifically productive Latin American countries and those that harbor the greatest number of top-ranking universities and postgraduate programs – where the bulk of academic research is conducted – are the four countries classified as upper-middle income by the World Bank (2014): Brazil, Mexico, Argentina, and Chile. The remaining countries lag far behind, producing less than 0.1 percent of the world's share of science journal article output (Lillis and Curry 2013). Moreover, Brazil remains the region's only country to devote more than 1 percent of its economy to research and development, twice that of Argentina and Chile and four times that of Mexico (Van Noorden 2014). These data are important because they will help understand the results of the present research and their ensuing discussion.

Characteristics and emergence of English for specific purposes in Latin America

Characteristics of ESP/EAP in Latin America

According to Dudley-Evans and St John (1998), the language in which content courses are taught determine English for academic purposes (EAP) course contents and methods. These authors defined four different EAP contexts, the fourth corresponding to countries where content courses are taught in the national language and where English is an auxiliary language taught within or in preparation for the students' academic studies. This is the situation in Latin America. Martínez (2011: 44) labeled it the "Latinate situation" where EAP

practitioners are generally non-native English speakers who teach EAP courses in the national language, and where *undergraduate* students not only share the same native Romance language (either Spanish or Portuguese), but also generally come from the same academic discipline. Moreover, they need the same highly specific skill, either reading or writing (Martínez 2002; Holmes and Celani 2006). These students, then, tend to form highly homogeneous groups in terms of L1 and academic and linguistic interests. The situation is somewhat different at the *postgraduate* level where students, although sharing the same L1 and linguistic interest, may come from different academic disciplines.

It should be noted, though, that it is only in the late 2000s, with the advent of L2 writing courses in the scientifically most productive Latin American countries, when the concept of EAP started being used in the region. This is why we will refer to “EAP” for late onset courses only.

Birth of the ESP movement in Latin America

In 1969, Ewer and Latorre, two English teachers from the Department of English of the University of Chile, wrote *A Course in Basic Scientific English*, the purpose of which was to teach students of scientific subjects (including medicine, engineering, and agriculture) the basic language of scientific English. Without doubt, that book marked the beginning of the ESP movement in Latin America. As a matter of fact, the father of education in English for specific purposes (ESP) is generally acknowledged to be Ewer. As Howard and Brown (1997: 22) emphatically put it: “In his pioneering work in EST [English for science and technology] teacher education at the University of Chile in the 1960s, Ewer laid the groundwork for the kind of expertise an EST practitioner must have.”

It was in the early 1980s when ESP teaching started spreading in the region as a reaction to the demands of an increasing number of pure and applied science departments at Latin American universities for specialized English courses (Holmes 1985; Celani et al. 1988; Celani et al. 2005; Holmes and Celani 2006; Ramos 2008). Indeed, in Latin America as elsewhere, the ESP movement has first and foremost been a practitioners’ movement devoted to determining learners’ needs through pedagogically oriented research (Johns 2013). In 1977, the British Council organized the ESP International seminar that was held in Paipa, Colombia. It was the first time an ESP event took place in the region. Key figures of the English language teaching (ELT)/ESP profession of the time (L. Trimble, M.T. Trimble, and Widdowson) and pioneers of the ESP movement in Latin America (Celani from Brazil; Latorre, Harvey and Horsella from Chile; and Castaños from Mexico) were among the participants.

In the following decade, Brazil undoubtedly began to stand out as the leading country in the further development of ESP activities in the region. As Ramos (2008) explains, as a consequence of the growing request from Brazilian universities for specialized (scientific) English courses and for advice on the design and implementation of such courses, Celani (then the Coordinator of the Applied Linguistics Program at the Catholic University of São Paulo) designed a project at the national level. That project involved twenty universities and four technical institutes. A bid was then put in to the Brazilian Ministry of Education for financial support in 1977. Three years later, in 1980, Celani put another bid to the British Council for three Key English Language Teaching (KELT) posts who were responsible for ESP teacher development, research, and materials production.

A large needs analysis was then carried out throughout Brazil. Its results showed the necessity for ESP teacher training and materials production, the paramount importance

of the teaching of *reading* for students and researchers who had to consult English-written scientific literature, and the urgency of setting a Brazilian resource center to serve as a channel of communication for ESP teachers who were separated by immense geographical distances. That resource center, called CEPRIL (an acronym in Portuguese for Center for Research and Information in Reading) was – and still is – equipped to offer advice, resources, and teacher education for Brazilian universities (Celani et al. 2005). CEPRIL turned out to be extremely useful and valuable not only for Brazilian ESP teachers but also for ESP teachers from other Latin American countries. The principles underlying the setting of CEPRIL are described in Holmes (1985), and the book written by Celani et al. (2005) is an excellence reference for teacher training and for understanding how methodologies develop.

The Latin American ESP Colloquia

Among the different ESP meetings held in Latin America, there is no doubt that the favored and most renowned ones were the Latin American ESP colloquia that used to be held every two years in a different Latin American country. The first one was celebrated in 1988 in Brazil and the last one in 2007 in Argentina.

These colloquia were held as forums of discussion where ESP practitioners from different Latin American countries could share their teaching experiences and ongoing research projects. The British Council used to sponsor British key speakers, and the USIA (United States Information Agency) sometimes made it possible for one invited key speaker from the United States of America to attend. Argentina, Brazil, Mexico, Chile, Colombia, and, to a much lesser extent, Venezuela, were the countries with the greatest number of participants, which is not surprising since these are the countries with the greatest number of high-ranking/most productive universities (see Introduction). “The contributions of the participating countries have no doubt made an impact on the teaching of English in the region,” assert Horsella and Llopis de Segura (2003: 66). The Proceedings of the second Latin American ESP Colloquium that took place in Santiago (Chile) in 1990 were published as a special issue of *English for Specific Purposes* (Harvey and Horsella 1992).

Horsella and Llopis de Segura (2003) analyzed the titles and abstracts of the 289 papers that were presented at these colloquia between 1988 and 2000 in order to determine the most frequent ESP issues addressed. As Figure 9.1 shows, almost 70 percent of the papers focused on very practical areas, such as course design/materials development and needs analysis, by far the two most frequent concerns of ESP teachers at that time.

This confirms that needs assessment is central to ESP curriculum design – as it is in EAP curriculum design (Hamp-Lyons 2010) – and represented the core of the Latin American ESP practitioner’s work. Most needs analysis research, moreover, corroborated the paramount importance of the reading skill (not shown on Graph). Unfortunately, no follow-up study was conducted, and because of lack of financial support from both national and international organizations, these colloquia stopped in 2007.

Survey of current practice

As a follow-up study of Horsella and Llopis de Segura (2003), and in order to assess the current state of ESP in Latin America, we emailed a survey to ESP practitioners who 1) attended the last three Latin American ESP colloquia; 2) were recommended by those who attended these colloquia (snow-balling method); and/or 3) the authors of this chapter personally knew or had email contact with.

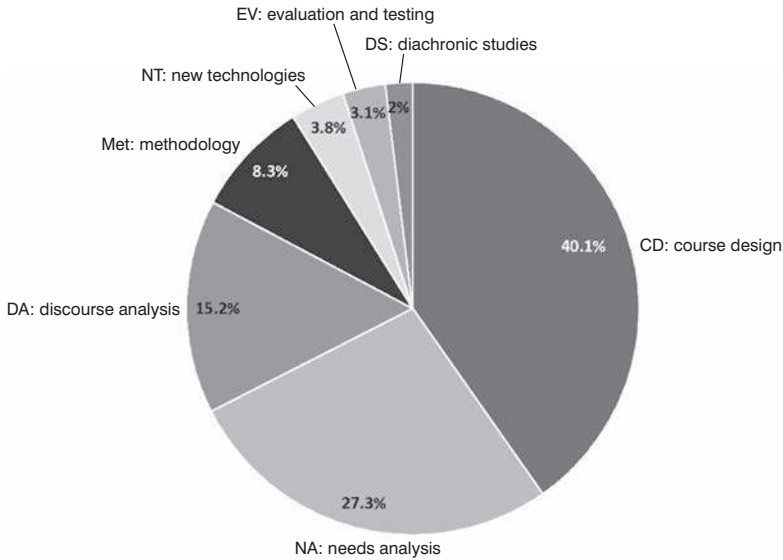


Figure 9.1 Topics covered by the papers presented at the Latin American ESP Colloquia (1988–2000)

The survey consisted of eighteen questions, such as demographic data; the date of onset of ESP courses in the surveyees' respective countries; the problems encountered (if any); the disciplines and the level (undergraduate/postgraduate) at which these courses are taught; their purpose; the materials used (self-designed or purchased); the research (if any) conducted by the EAP staff; the frequency of EAP-related seminars and/or workshops (if any); and the publication of ESP newsletter(s)/journal(s) (if any). Surveyees were encouraged to write whatever comments they wanted to make in relation to the ESP situation at their respective university or in their country.

The survey was sent to 255 ESP teachers from nine Latin American countries: Argentina, Brazil, Chile, Colombia, Costa Rica, Cuba, Mexico, Nicaragua, and Venezuela. We know that ESP courses used to be taught in Guatemala and San Salvador, but we were unable to contact ESP practitioners from these countries. Except for Cuba and Nicaragua, the nine countries mentioned above have the largest number of universities among the top 300 in the region¹ and are, as a consequence, the greatest Latin American actors on the world stage of knowledge production and exchange. The larger the number of universities in a country, the greater the number of surveys sent. Finally, in case a survey was not returned after two weeks or in case the email was returned, the survey was emailed again. If it was not returned after that second attempt, it was classified within the "no reply" survey category.

Findings of EAP practices

Response rate

Eighty ESP practitioners (31.3 percent) from eight Latin American countries responded to the survey, which means that 68.7 percent of the surveys remained unanswered (Table 9.1). The only country we did not obtain any replies from was Costa Rica. Satisfactorily, two of the four scientifically most productive Latin American countries (Brazil and Argentina) were

Table 9.1 Number of surveys sent/returned and number of participating universities in each one of the nine Latin American countries

<i>Country</i>	<i>N surveys sent</i>	<i>Number and percentage surveys returned per country</i>	<i>Percentage surveys returned over total number surveys received from the nine countries</i>	<i>N universities</i>
Argentina	58	28 (48.3%)	35.0%	19
Brazil	55	27 (49%)	33.7%	21
Colombia	35	3 (8.6%)	3.8%	2
Mexico	32	6 (18.8)	7.5%	4
Venezuela	30	9 (30%)	11.2%	5
Chile	25	2 (8%)	2.5%	1
Cuba	10	3 (30%)	3.8%	2
Nicaragua	8	2 (25%)	2.5%	1
Costa Rica	2	0		0
Total	255	80 (31.3%)	100%	55

very well represented: almost 50 percent of the surveyees in both countries replied, followed by Venezuela and Cuba with 30 percent of surveys returned.

We expected a higher overall response rate, but what surprised us most was the very low frequency of returned surveys from Mexico, Colombia, and Chile. These countries are indeed not only among the most productive ones in the region, as we stated before, but they also used to be among the strongest in ESP and were, as a consequence, always very well represented at the Latin American ESP colloquia. Our assumption is that, since the last colloquium held in 2007, many ESP practitioners had either retired (and not been replaced) or died, as we found out in a few cases.

The surveys received from Argentina and Brazil account for almost 70 percent of the total number of returned surveys. Forty different universities and/or technological institutes from these two countries are represented. Then follows Venezuela with 11.2 percent and five universities, and, far behind, lag the remaining five countries with less than 10 percent and the representation of eight different universities.

As for the 55 universities that took part in the study, they correspond either to the largest and most productive ones in each Latin American country – mainly located in the largest states – or to smaller institutions located in less populated states. Whatever the size of these 55 universities, we can assert that they form a representative sample of the institutions where ESP teaching takes place and where academic research is conducted. They also adequately represent the different regions of the nine countries that participated in this research. Overall, the data displayed in Table 9.1 reflect the relative contribution of these countries to worldwide knowledge production (see Introduction).

Onset and provision

Fifty-two surveyees (95.6 percent) reported that ESP courses are currently being taught in their respective countries. As Figure 9.2 shows, 16.7 percent of them – mainly from Mexico, Chile, and Argentina – reported that in their countries, ESP courses started in the 1970s.

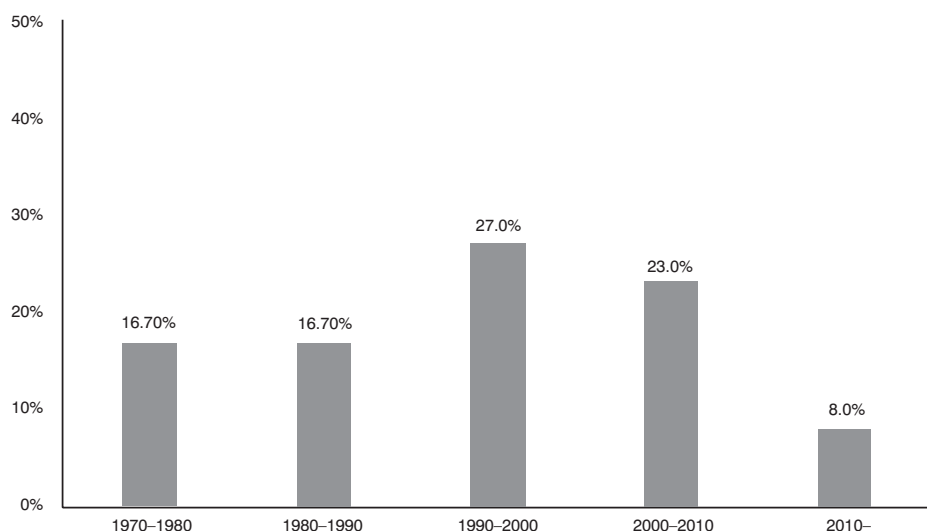


Figure 9.2 Onset of ESP courses in Latin America

This period coincides with the publication of Ewer and Latorre's book in Chile where an enthusiastic group of ESP practitioners organized seminars and other activities to promote the authors' work. Another 16.7 percent of the surveyees, mostly from Brazil and Venezuela, indicated that ESP courses were launched in their countries during the 1980s, the decade when the Brazilian ESP Project was in full bloom. But, the majority of ESP courses in Latin America (50 percent) started between 1990 and 2010 after the Brazilian ESP project had ended. In all likelihood, this is a consequence of the wealth of information that the project had produced, and of the numerous publications in the form of journal articles and books on topics related to ESP teaching published in the rest of the world, mostly in English-speaking countries. These two decades also correspond to the boom of the ESP Latin American colloquia that attracted ESP practitioners from all over the continent.

Figure 9.2 shows that only 8 percent of the ESP courses in the region started after 2010. As we will see later, the focus of these later courses differs from that of earlier ones: it is only by then when ESP started adopting an EAP flavor. As a matter of fact, it is around that time that the concept of EAP emerged and that the first issue of the *Journal of English for Academic Purposes* was published. We should lastly mention that the compulsory or optional character of these ESP/EAP courses mostly depends on the discipline and on the institution. Even within the same university, some schools may offer ESP (reading and/or writing) courses as a compulsory subject matter, whereas others do not.

Three surveyees reported that ESP courses used to be taught at their universities but no longer are and that more reductions are expected to come. The main reasons are lack of funding –hence, lack of teaching staff – and lack of interest from program coordinators. Indeed, although ESP courses are sometimes considered important by university authorities, they are not considered a *priority*. What is more, quite a few surveyees commented that ELT as a profession has a low status in their country, and that ESP is not recognized as a fully acknowledged area of expertise in teaching and research.

Two recent *intercontinental* ESP projects should be mentioned. The first one, called "Connecting continents through English," was conducted by ESP specialists from three Spanish universities who organized a series of ESP teachers training seminars in Nicaragua

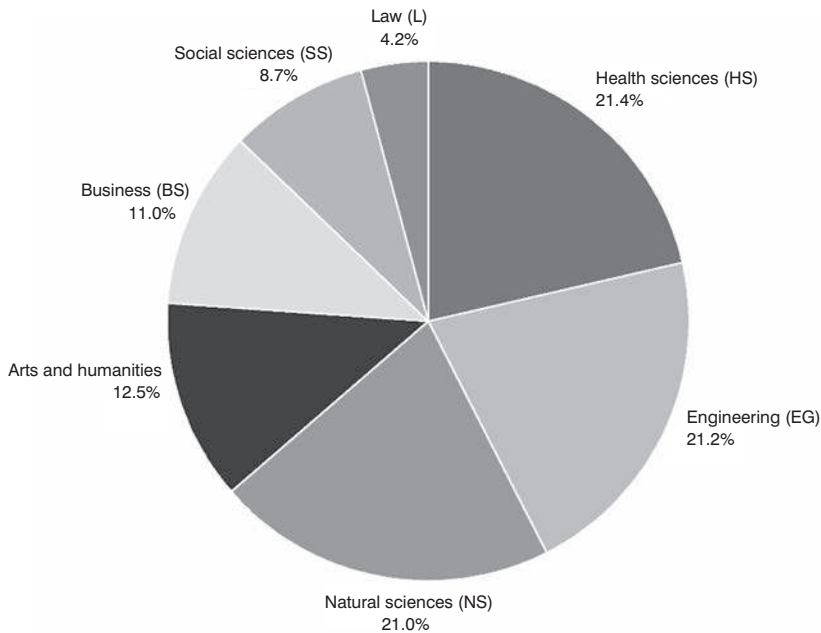


Figure 9.3 ESP courses and academic disciplines

between 2008 and 2012. The second one was the three-year-long European project (2009–2011) named “Network of Collaboration Between Europe and Latin American-Caribbean Countries” that aimed at spreading knowledge on the methods of scientific writing and open access publishing in the health sciences in Spanish- and Portuguese-speaking countries.

ESP and disciplines

Figure 9.3 shows that it is in the health sciences (21.4 percent), engineering (21.2 percent), and the natural sciences (21 percent) where ESP courses are most frequently taught. It is in these disciplines too that ESP used to be taught in San Salvador, Costa Rica, and Guatemala, but, as we explained above, we do not know whether they still are. The arts and humanities come in third position (12.5 percent) followed by business (11 percent), and, quite far behind, the social sciences (8.7 percent), and law (4.2 percent).

The prevalence of ESP courses in engineering and the natural and health sciences reflects the fact that these fields have a long, robust, and uninterrupted research tradition with postgraduate programs (MAs and PhDs) being taught at the major Latin American universities. In Argentina, some of these postgraduate courses date back as far back as the late 1890s (Martínez 2011). By contrast, research tradition in the social sciences, the arts, and humanities is rather incipient.

Skills taught

About 90 percent of the ESP courses are one-skill courses taught over one or two semesters only (Figure 9.4) because classes are usually too crowded to try to do anything else. It is therefore important to *optimize* the teaching/learning situation.

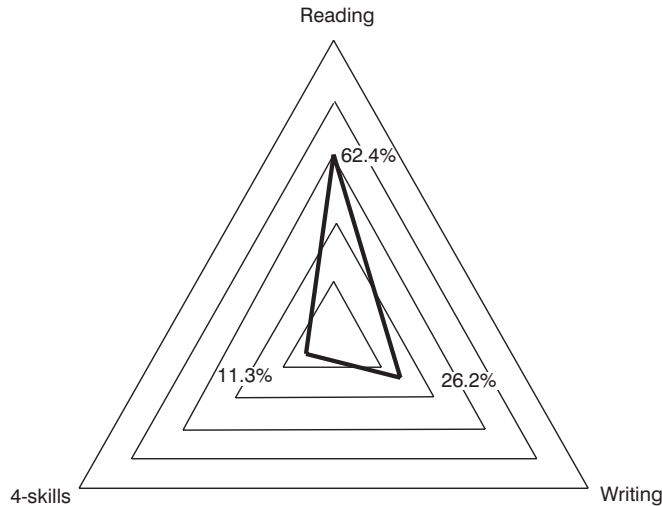


Figure 9.4 ESP courses and skills taught

The efficiency of concentrating on one skill only at a time is illustrated in Holmes and Celani (2006). Over 60 percent of these one-skill courses focus on reading comprehension and 26.2 percent on academic writing. Four-skill courses make up 11.3 percent only of all the ESP courses taught.

Reading

Reading, then, by far remains the most frequently taught skill. Several reasons account for this persistent predominance. First of all, undergraduate students in engineering, natural sciences, and health sciences are frequently exposed to English-written materials. Second, a reading competence in scientific English is a requirement for entering most postgraduate programs in these disciplines. That proficiency is measured by an exam that forms part of the selection process, which explains why preparation courses for the L2 reading comprehension test are in high demand.

In the humanities, arts, and social sciences, by contrast, competence in reading academic English is not a frequent requirement to enter postgraduate programs. As a surveyee from Argentina explained, though, in these disciplines, students do feel the need to develop a reading competence of the language but only when they conduct their literature reviews for their MA theses.

Regarding the methodology used in ESP reading courses, the comments made by some surveyees revealed that in the early years of the ESP movement (early 1960s–late 1970s), particular emphasis was put on the teaching of discipline-specific vocabulary and on the development of reading skills and strategies that enhanced the learners' awareness of the reading process. The Brazilian ESP Project produced a wide range of sample materials on these topics. As Ramos (2008) states, after almost thirty years, this approach is still the preferred one throughout Brazil and the one that has been adopted in almost all Latin American countries (cf. Celani 2008).

ESP reading courses underwent major changes in the late 1990s, though, when a growing interest in *genre* engendered a shift in their design, especially in Brazil, Argentina, and Venezuela (Martínez 2002; Vasconcelos 2007; Aranha 2009). The almost exclusively

skills- and strategies-based pedagogy converted to a more genre-based approach that aimed at developing learners' genre awareness of the two most frequently consulted and intimately related academic genres: the research article abstract and the research article itself. Emphasis then started being made on the distinctive linguistic and rhetorical features of these two genres. These ESP reading and writing (see below) courses generally follow, adopt, or adapt Swales' findings on research article introduction and move analysis (Swales 2004; Swales and Feak 2004). Interesting pedagogical proposals for the use of genres in ESP courses can be found in Martínez (2002), Ramos (2000 and 2004), and Salager-Meyer (2005).

Writing

Most of the EAP writing courses started being taught in the late 2000s. A surveyee from Mexico reported that on-line academic writing courses are currently being developed to overcome the shortage of instructors and the difficulties the interested parties have to attend face-to-face writing courses. The two following contextual factors explain why EAP writing courses are of relatively recent onset.

First of all, as time has gone by and with the increase in the number of postgraduate courses, particularly in the natural and health sciences, as we stated before, the demand for materials to help students with more advanced studies – mainly academic abstract and research article writing – started emerging. Some of these programs consider publications in English as a requirement for obtaining the degree. This is the case in major Mexican and Brazilian universities in disciplines such as dentistry, molecular biology, and genetics, where students must have published papers in English by the time they are about to finish the program (Aranha 2009). It is interesting to mention here that, in certain scientific disciplines, several Brazilian journals publish articles written in English only. For example, *Ciência e Cultura* (Science and Culture), the journal of the largest Brazilian scientific association – the Brazilian Society for the Advancement of Science – has now switched to English. Among the more recent scientific journals that are published in English only, we can mention the *Journal of the Brazilian Chemical Society*, the *Journal of the Brazilian Computer Society*, and the *Brazilian Journal of Chemical Engineering* (cf. Menezes de Oliveira e Paiva and Pagano 2001).

The problem is that although Latin American postgraduate students – especially those from the scientific and technological disciplines – are generally proficient *readers* of English language scientific texts, and although they are equipped with deep knowledge of their subject-specific disciplinary content, they are rarely proficient *writers* of such texts (Aranha 2009; Martínez 2002, 2011). As research has shown (Eisterhold et al. 1990), L2 reading to L2 writing skill transfer does not operate in a straightforward fashion. Some MA and PhD students may have some experience in writing scientific papers in their L1, but the transfer from L1 to L2 writing skills is not a straightforward process either. Specific instruction is thus needed to enable them to master the linguistic and rhetorical constraints of English-medium scientific abstracts and research articles (Swales and Feak 2009). A body of research has demonstrated, though, that individual English proficiency alone is not always the key factor to achieve success in English-language publishing. As Englander (2006) and Curry and Lillis (2014) rightly point out, larger social practices, power negotiations, politics, networks, and resources involved in academic publishing are also at stake, but such issues are beyond the scope of this chapter.

EAP writing courses are also taught in the social sciences and the humanities, but to a much lesser extent not only because, as we stated before, in these disciplines postgraduate programs have a much more recent history and a young research tradition, but also because

research results in these fields tend to be published in national and/or regional publications that are written in the country's national language.

The second factor that accounts for the rather recent onset of EAP writing courses in Latin America is the one that emerges as a consequence of the well documented “publish-or-perish” mantra imposed on scholars almost all around the world, especially on those from scientific disciplines. Scientists from the leading Latin American countries in terms of scientific productivity are certainly no exception (Englander 2006; Vasconcelos 2007; Salager-Meyer 2008; Aranha 2009; Martínez 2009). Indeed, since the late 1990s, for career promotion, scholars from these countries have felt obliged, by their national research assessment systems, to publish their research results in “high-status,” “elite” *English-language* journals indexed in center-based international databases. It should be stated here that a considerable number of Brazilian and Mexican scientific journals that used to be published in the national language have now switched to English, and some newly launched ones are published in English only.

One of the aims of EAP writing courses is thus to help these researchers succeed in academic publishing, a teaching context called ERPP (English for research and publication purposes; see Hyland and Hamp-Lyons, 2002, and the special issue of *JEAP* 7/2). Since 2011, for example, the UNAM (Universidad Autónoma de México) has been holding three-week-long immersion courses for faculty and graduate students. Participants work with their draft manuscripts and get individualized support through a focus on publishing culture, genre knowledge, and L2 writing skills. To what extent the “publish (in English)-or-perish” culture engenders the outflow of research to mainstream journals is another issue that has been dealt with elsewhere (Welch and Zhen 2008; Salager-Meyer 2008). It should be stated, though, that because of the rapidly growing presence in the Web of Knowledge of Latin American bibliometric databases (e.g. CONACYT, Redalyc, and Latindex in Mexico; CAICYT in Argentina; REVENCYT in Venezuela; and SciELO in Brazil), these indexes are increasingly being used by government bodies and academic institutions to assess researchers' productivity.

Four-skill courses

As Figure 9.4 shows, four-skill ESP courses are very rare and of rather recent onset as well. They are mainly taught at business schools (international relations and negotiations) and in workplace and occupational settings, such as the hotel industry, tourism, courses for bilingual executive secretaries, and taxi drivers (especially during the preparation for the 2014 World Cup in Brazil!), and for pilots and air traffic controllers. These courses focus on the teaching of the tasks performed in real-life situations (Ramos 2008).

A very interesting – and, we would say, unique – case of “blended teaching” between occupational and academic purposes was reported by an ESP practitioner from Cuba where English is a compulsory subject matter for two years in most universities, and where ESP is strategically linked with the specialties. In the healthcare sciences, for example, ELT extends to four or five years of the medical undergraduate curriculum, one or two of which are fully devoted to ESP (MacLean et al. 2000).

ESP courses are taught nearly twice as frequently at the undergraduate level than at the postgraduate level (Figure 9.5). Since there is a strong association between the number of postgraduate programs and scientific output (Martínez 2011), it is not surprising that the integration of EAP writing courses into disciplinary curricula – especially at the postgraduate level, as we have seen before – is greater in Brazil, Mexico, and Argentina than in other Latin American countries.

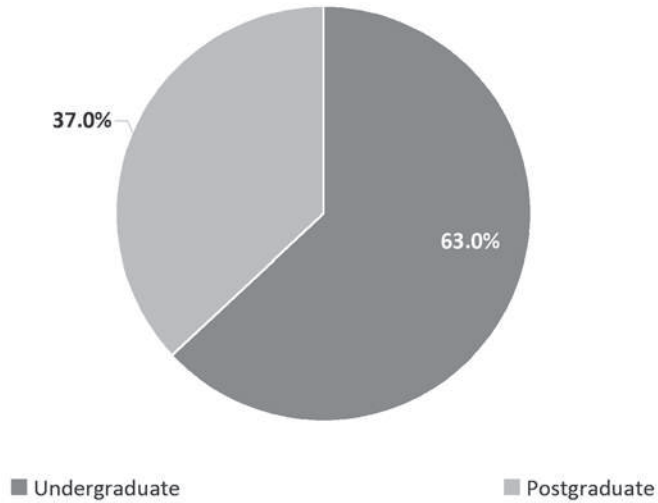


Figure 9.5 ESP courses: undergraduate and postgraduate level

EAP materials: genre-based, authentic, and specific

As shown in Figure 9.6, in the immense majority of the cases (64.2 percent), ESP practitioners write their own (ad-hoc) materials, 32 percent use both their own materials as well as purchased ones, and 3.7 percent use purchased textbooks only.

All the surveyees commented that, at the undergraduate level, because of the learners' characteristics (homogeneity in academic interests and common L1), the class material used is authentic and specific to the students' academic discipline. This allows the ESP instructor to concentrate on the specific vocabulary of the discipline that has been shown to be highly restricted (Chen and Ge 2007; Hyland and Tse 2007; Martínez et al. 2009). In Hyland's parlance (2002: 385): "... EAP practitioners must teach the literacy skills which are appropriate to the purposes and understanding of particular academic and professional

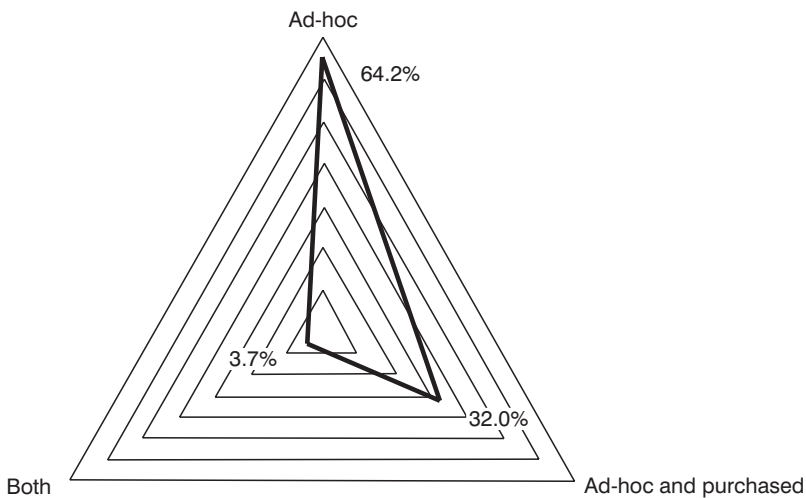


Figure 9.6 ESP materials

communities.” It is, moreover, well known that the use of authentic and specific materials increases motivation, reduces comprehension problems, and allows students to contribute their disciplinary knowledge, creating thereby an atmosphere of confidence.

At the postgraduate level, where learners tend to form more heterogeneous groups (see above), a collaborative approach is generally adopted: the learners – content experts – interact with the EAP teacher – the language expert – by providing the teaching materials that almost always consist in research articles from their disciplines. EAP teachers are then in a better position to design highly motivating genre-based materials.

Research, seminars, and journals

Overall, ESP research in the region is rather weak and is mostly conducted at TOEFL (test of English as a foreign language) or Applied Linguistics MA and/or PhD programs. Of the different areas where ESP research is carried out, Figure 9.7 interestingly, and somewhat surprisingly, shows that practical problem solving very much remains the most pressing concern of Latin American ESP practitioners. Indeed, research into course/material design, practice, methodology, and needs analysis makes up almost 80 percent of all the research presently being conducted.

Although, as we have seen before, Latin American ESP practitioners increasingly apply the concept of genre both in their reading and writing classes, only 12 percent of the ESP research is conducted in that area. The three remaining areas together account for 10 percent of the ESP research carried out in the region.

Our findings clearly show that research and pedagogical practice are still very closely linked, at least in Latin America where ESP fundamentally remains a practitioner movement. ESP practitioners are both researchers and pedagogical materials writers. As Johns (2013: 19) expresses: “ESP researchers will continue to view themselves as taking one or several professional roles.” Our results also corroborate Hamp-Lyons’ remark (2010) that assessment is the least developed research area of the field, very likely because it involves many variables that are difficult to control.

Communities of ESP practitioners and scholars get together at least annually in the majority of the countries surveyed not only to cater for professional growth (especially

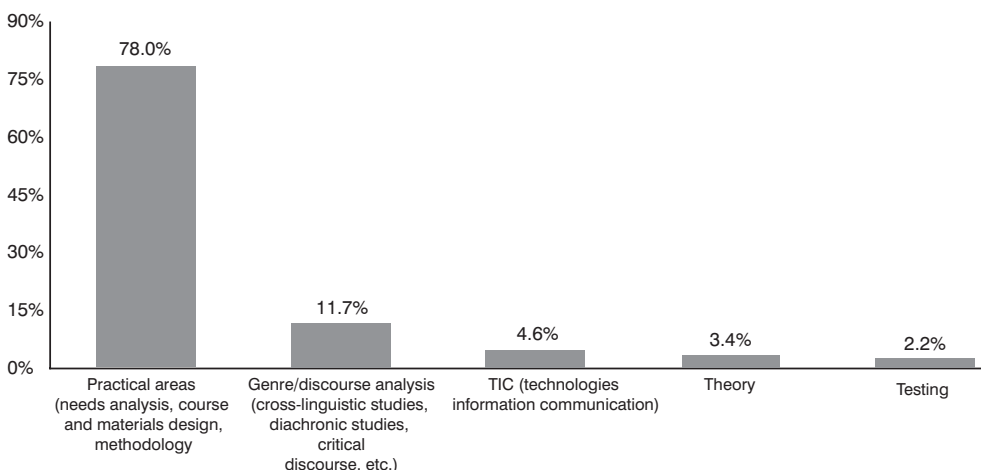


Figure 9.7 EAP research

teacher development), but also to try to find a consensus on teaching practice, mostly for reading comprehension courses. Since 2006, ESP teacher development seminars are offered on-line twice a year in Brazil. Hamp-Lyons (2010: 100) claims that “these local or regional home-grown professional communities can be a great asset to established and novice EAP teachers and researchers.”

Moreover, for the reasons we explained above – especially because of the “publish-or-perish” mantra – workshops on English academic writing are becoming increasingly popular, particularly in Brazil, Argentina, and Mexico. It is interesting to mention that quite a few surveyees lament the lack of explicit academic literacy skills (mostly writing) in the learners’ L1 because, in general, postgraduate students have great difficulties producing academic texts in their native language (let alone in a foreign language). Such courses exist, though, at some universities in Venezuela, Argentina, Mexico, and Brazil. Figueiredo and Bonini’s (2006) academic writing course in Portuguese is a good example of such L1 writing courses.

The Brazilian-based journal *The ESPecialist* is the only journal in the region that mainly publishes ESP research results. It is indexed in international databases, appears twice a year, and publishes papers written in Portuguese, Spanish, English, and French. Other journals, such as *Núcleo* (Venezuela), *Approach: A Journal of Foreign Language Teaching* (Cuba), and *Argentinian Journal of Applied Linguistics* (Argentina), only occasionally publish ESP-related articles.

Conclusions

The results we have discussed in this chapter are based on an, admittedly, small survey of Latin American ESP practitioners and so may not be representative of the continent as a whole. However, when combined with our thirty years of experience as teachers and researchers of EAP in different countries in the region, we feel confident that they represent an accurate picture of the ESP/EAP state-of-the-art situation in Latin America.

All in all, the panorama described above clearly shows that ESP is still alive in Latin America, although in better health in some countries than in others. ESP reading comprehension courses are still being taught at most major Latin American universities both at the undergraduate and postgraduate levels to help students cope with their university requirements. But EAP is also concerned today with academic courses aimed at providing researchers with the linguistic and rhetorical tools that could allow them to participate in the ongoing English-medium international dialogue of science.

Regarding the teaching of English academic *writing* per se, some sporadic efforts are in progress despite the scarcity of human and economic resources for such a demanding task. These efforts would be more fruitful and more EAP research would be carried out if there were institutional policies for their development. The problem is that, in Latin America, formal training in English is not part of the academic culture, and policy-makers appear to take English proficiency for granted in the development of science policies.

We strongly believe that improving both the L1 and L2 academic literacy skills (especially the writing competence) of Latin American scholars should not be a minor issue in policy-making. Increasing the number of researchers who are fully proficient academic writers will help enhance international awareness of this region’s scientific contributions. These issues call for urgent government attention, but not enough is being done in this respect.

The future

The findings of our EAP survey also lead us to conclude that research is needed in the following areas:

- 1 *Needs analysis surveys* should focus on EAP oral skills in all disciplines, and on the L2 reading and writing needs of social sciences, humanities, and arts students
- 2 *Testing*
- 3 *Materials and course design*
 - for academic literacy courses in the students' *L1* both at the undergraduate and the postgraduate level. This is important especially because having papers published in Spanish or Portuguese (less frequently in English) is a requirement for graduation in most Latin American doctoral programs;
 - in situations that require computer-mediated communication;
 - for *on-line writing courses* both in *L1* and *L2*.

This research could involve genre, corpus linguistics, concordances, and lexical bundle analysis.

The following suggestion is not directly related to EAP research but is important nonetheless: we strongly believe that more workshops and seminars at national and regional levels should be organized. As Hamp-Lyons (2010: 100) expresses: "It is to be hoped that local or regional homegrown professional communities will grow and spread around the world."

Acknowledgement

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Further reading

Hanauer and Englander (2013); Krzanowoski (2008); Olson (2014)

Related chapters

- 2 General and specific EAP
- 3 Academic literacies
- 14 Acquiring academic and disciplinary vocabulary
- 19 Genre analysis
- 38 English for professional academic purposes
- 42 Needs analysis for curriculum design
- 45 Assessment for English for academic purposes

Note

- 1 www.topuniversities.com/university-rankings-articles/latin-american-university-rankings/top-10-universities-latin-america-2014 (accessed August 12th 2014).

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PART III

EAP and language skills

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10

ACADEMIC READING INTO WRITING

Alan Hirvela

Introduction

As English for academic purposes (EAP) has evolved over the past four decades, an emphasis on writing has been one of its key features. This is hardly surprising, given that much of what students are asked to do in academic settings in order to both acquire and display knowledge revolves around some type of writing. What has changed over time has been increased interest in the role of reading as related to writing in line with the fact that, in academic contexts, students are not often asked to write without some kind of stimulus or input, usually in the form of reading materials (i.e. source texts). In short, they are reading for writing (heretofore RFW). Expectations for how they do so may vary across disciplinary community contexts, but the ‘bottom line’ is that it is essential for students to become adept at RFW, because this is ‘an index of successful academic achievement for students’ (Shaw & Pecorari 2013, A1). These circumstances have led to a steady focus on RFW in EAP scholarship since the mid-1980s.

Shaw and Pecorari also note ‘the intertextuality practices of academic writing are hard to learn...particularly [for] those studying in a second language [because they] have to go through a complicated process of development in their management of intertextual links’ (2013, A1). The ‘management’ they refer to revolves heavily around learning how to move from reading to writing. They note, too, that ‘EAP teachers have to guide them through’ that process (2013, A1). In EAP, then, we have an important and challenging mission as we attempt to help second language writers acquire command of the knowledge and skills necessary to perform RFW effectively.

My purpose in this chapter is to look at some key literature related to RFW and EAP in order to establish a clear sense of the current state of inquiry and understanding regarding RFW in this important domain. The thesis I will discuss later in the chapter is that precisely because RFW is hard to learn, and difficult to teach, there may be a tendency on the part of EAP teachers to seek the safer routes and be content with ensuring that students gain a minimal level of command of RFW, rather than pushing them to actively engage in moving from reading to writing in productive ways. I think this ‘good enough’ approach needs to change if the field is to move forward.

A noteworthy dichotomy underlying my thesis is found in the seminal book, *Reading to Write* (Flower et al. 1990), where, in the book’s introduction, Flower theorized reading to

write as reflecting two primary activities: (1) as a *receptive* process promoting basic academic literacy, and (2) as a *transformational* process geared toward the acquisition of critical literacy. As she characterized the distinction, the receptive activity (such as summary writing) is a limited and unproductive use of reading for writing, and teachers should not stop at that point in the instructional act but instead should be striving toward helping students learn about RFW as a transformational activity as well. I will return to that distinction in the discussion section at the end of the chapter.

Contextualizing reading for writing

In this first part of the chapter, I revisit some key points in the literature regarding the construct of reading for writing itself in order to establish a conceptual foundation from which to work in the remainder of the chapter.

Hirvela (2004) asserts that RFW has followed two general directions since its foundational work in the 1980s. One direction is input based; the other is output based. The *input-based* view is one in which learners use reading as input for learning *about* writing in the target language, as in the use of models of writing. The models illustrate the rhetorical and linguistic features that learners can then imitate in their own writing. Thus, they learn about target language writing through the act of reading.

The *output-based* approach is one in which students must transfer content from material read to a text that they write. Here the focus is on the act of writing and the text-production processes that enable the writer to appropriate source text material in accepted ways. This is the approach that appears to dominate RFW instruction in EAP. As Carson (1993) has explained, ‘The phrase *reading for writing* can be understood as referring most specifically to the literacy act in which readers/writers use text(s) that they read, or have read, as a basis for text(s) that they write’ (p. 85). Flower (1990), operating in a direction similar to Carson’s, defined reading for writing as ‘the goal-directed activity of reading in order to write’ in which ‘the reading process is guided by the need to produce a text of one’s own’ (pp. 5–6).

Another helpful attempt to capture the nature of reading for writing, from Jakobs (2003), builds around the analogy of reproduction, or what she calls ‘reproductive writing.’ In her typology, reproductive writing is the byproduct of the interaction between three components. One is a *receptive* process, which she characterizes as an early stage in which readers are focused mainly on reading and understanding source text material. They move from there to a *reproductive* process, in which they analyze and arrange the sources in a way that eventually leads to writing. This allows movement to the *production* process, in which the actual product of reading for writing emerges. Her core term *reproductive* captures the dynamic nature of the interaction that takes place across these stages.

What we see in these different depictions of RFW is that EAP teachers face important options and choices as they plan and implement their teaching.

A look at the reading for writing scholarship

In this section I will look briefly at RFW scholarship by breaking it into several categories. One purpose in this section is to generate a sense of the scope of investigation in this field. Another is to provide some baseline understanding of what we’ve learned about RFW. A third purpose is to provide some initial direction for those who wish to learn more about this topic. The material in this section will lead into a discussion that follows in the discussion and conclusion section below.

Conceptualizing RFW

A number of sources have provided discussions of theories and models of RFW, often within the larger framework of reading–writing connections, with RFW seen as one of the core manifestations of those connections. My focus will be on literature specifically in the L2 realm, and focused in particular on RFW. Earlier work on this topic that helped lay a foundation for understanding RFW from different perspectives includes Carson (1993) and Hirvela (2004). Carson’s book chapter highlights the cognitive processes at work in the writing of summaries and syntheses, two key tasks in EAP writing pedagogy, while Hirvela examines several ways in which students can learn how to use reading as a tool for learning about L2 writing. He focuses in particular on what he calls ‘writerly reading,’ which involves ‘thinking like a writer rather than a reader so as to focus on and better understand the features of writing that make the text work as a piece of writing’ (p. 118). Also noteworthy in this earlier work is the aforementioned article by Jakobs (2003) which articulates her ‘reproductive writing’ model of RFW.

As for more recent work, an article by Dovey (2010) examines RFW from both process and product perspectives in an effort to demonstrate how EAP teachers can link genre awareness with the teaching of RFW tasks. This approach involves both directions for RFW identified earlier: reading to learn about writing, and writing based on reading. Furthermore, an article (2013a) and a book chapter (2013b) by Grabe and Zhang operate as comprehensive reviews of the reading–writing connections literature, with an overlap onto RFW, especially in the 2013a journal article.

Collectively, these sources provide a solid grounding in the dynamics associated with RFW. They also illustrate the continuing need to arrive at conceptual understandings of RFW that enrich both EAP research and pedagogy.

Source use

The RFW literature can be broken down into two general categories: that which looks at the topic more broadly, and that which addresses specific components of RFW. In the former category, there are a number of especially useful sources, beginning, chronologically, with a book chapter (1990) by Campbell, who described her study of native and non-native English-speaking students using sources while writing. A major contribution of her chapter was her introduction of a typology for examining source text use across different RFW tasks that included: *Quotation* (direct correct copying of material with no changes made), *Exact Copy* (direct copy without punctuation marks indicating the copying function), *Near Copy* (quotations rearranged syntactically or including some synonyms replacing original words in the text), *Paraphrase*, *Summary*, and *Original Explanation* (student added comments explaining cited material). That typology remains an important one today.

Also notable is Zhu’s (2005) discussion of source text use from a scaffolding perspective; that is, how a student’s task representation of an assigned RFW paper was assisted by his or her reading and note-taking connected with the source texts used to complete the task. More recent research by Plakans and Gebril (2012) looking at RFW within integrated reading–writing tasks essentially echoed the findings of Zhu’s study. These studies suggest that EAP teachers should account for such scaffolding activities when teaching students how to read sources so as to enrich the writing activity that follows.

Four articles appearing in the previously cited special issue of the *Journal of English for Academic Purposes* (2013) on source text use guest-edited by Shaw and Pecorari provide

current insights into the topic. These studies by Davis, Li, McCullough, and by Thompson, Morton, and Storch looked across different students' use of sources and found variations in how they approached RFW tasks, thus demonstrating the difficulty of trying to pin down universal or common properties in students' engagement with source use in RFW tasks. That is, individual and contextual variables must also be accounted for in attempting to capture EAP students' use of sources. Thus, as the search for conceptual understanding and viable models of RFW continues, the importance of gathering and analyzing individual student encounters with RFW remains an important need as well.

Textual appropriation

A closely related topic in scholarship on source use in RFW is that of textual appropriation; that is, students' ability to use source texts in appropriate ways relative to target language citation conventions.

The RFW focus is much more a product of this century than earlier work on this topic. Some of it overtly discusses plagiarism. For instance, Pecorari (2003, 2008) and Li and Casanave (2012) have examined this area through the lens of 'patchwriting,' a 'grey area' between outright and intentional copying of source material without proper attribution and fully appropriate use of such material. In patchwriting, students provide some degree of alteration of the original material, but not necessarily as extensively or as 'correctly' as others may require. Both of these studies highlight the complexities involved in distinguishing between plagiarism as a deliberate act of misappropriation and patchwriting as a more difficult act to interpret. Each study shows that students struggle to determine what constitutes correct use of source texts and may unintentionally plagiarize, through patchwriting, in the course of learning about textual appropriation practices.

Other important work in this area avoids characterizations involving plagiarism and investigates 'textual borrowing' as a more conventional issue in learning about second language writing. For example, in a series of papers, Shi (2004, 2006, 2008, 2011) studied different groups of L2 writers with an interest in their cultural and rhetorical backgrounds, and how they understood source text use and citation practices in L2 writing in English. She found that, for them, this knowledge and understanding was difficult to obtain and to apply. Similar results were reported in a study by Rinnert and Kobayashi (2005), who found that their Japanese university student participants had little knowledge of Western conventions for citation and felt it was appropriate to use source text material without attribution.

Summary writing

Some EAP scholarship has focused on specific applications of reading for writing, especially summary writing. One reason for this is that summaries appear to remain an essential RFW task in EAP courses. Another is that summaries provide important insights into how students move from source text reading to writing based on that reading. In other words, summaries are an ideal place for examining the relationship between EAP and RFW.

Historically speaking, summary writing is where connections between EAP and RFW were first explored, as seen most prominently in ground-breaking articles by Johns (1985) and Johns and Mayes (1990). The importance of this topic in EAP has not diminished since. As Johns (1985) explained, 'the summary task requires the use of higher order reading skills; identification of main ideas and condensation of text while maintaining the focus of the

original' (p. 495). These are challenging tasks for students reading and writing in a second language, and they help explain why EAP teachers continue to focus on summary tasks. That is, students can learn substantially from completing them. Using 'summary protocols', Johns, and Johns and Mayes, investigated the processes at work in students' efforts to summarize what they had read, and in doing so not only provided some initial insights into those efforts, but also demonstrated how such work could be carried out. In other earlier summary research, Sarig (1993), observing that 'summarizing tasks are junctions where reading and writing encounters take place and it is here that a complex composing process begins' (p.161), also set forth an important direction for summary research by categorizing the operations performed by students in generating summaries.

As summary research moved on, Kim's (2001) study of Korean college-level English as a foreign language (EFL) students offered yet another direction to pursue. In her case, the focus was on the effects of source text difficulty on students' writing of summaries. While examining their use of different operations necessary to produce summaries, Kim found that source text difficulty had some impact on which operations students used, and how well they used them. Ascención Delaney (2008) took up task effects in summary writing in a different way in her exploration of what she called the 'reading-to-write construct.' In her case, the emphasis was on different kinds of RFW tasks—writing a summary and a response essay—and the effects of different variables on students' performance of those tasks. She found that these tasks constituted different dimensions of RFW ability rather than drawing on identical abilities.

Further demonstrating the value of researching summary writing as a means of better understanding students' engagement with RFW, Yu (2008, 2009) has presented findings from two studies comparing Chinese students' summary writing in Chinese as L1 and English as L2. She found that 'the use of the different languages had significant effects on both summarization processes and products' (2008, p. 521), and that 'source text had significant and relatively larger effects than the summarizers' language abilities on summarization performance' (2009, p. 116). In other recent research, Baba (2009), examining the effect of lexical proficiency on summary writing, found that the effects of reading comprehension ability and the length of summaries produced were more significant factors in summary writing performance than lexical knowledge.

Collectively, these findings make a point that many EAP teachers have to confront in their instructional practice: that summary writing is more difficult for students than its task dimensions may suggest, and that there are multiple factors to be accounted for in trying to understand how students read and write for summarization purposes.

Citations

Much of the recent work of note in this area has come, singly and working together, from Nigel Harwood and Bojana Petrić. In two studies by Petrić, the focus was on the rhetorical functions performed by citations (2007) and students' preferences for how to use citations (e.g., direct copying of longer statements or fragments taken from those statements) (2012). Petrić and Harwood (2013), Harwood (2009), and Harwood and Petrić (2012) have also looked at issues explored in Petrić (2012) under the umbrella term of what they call students' 'citation behaviours.' Employing a variety of research approaches, with an emphasis on interview methods and case studies, these scholars have found, as in other RFW research, that consistent patterns across students and contexts are difficult to discern. Instead, there is considerable individual variability among research participants.

Other work by Pecorari (2006) and Swales (2014) has demonstrated a rather different way of looking at citation practices. In their work, these scholars have investigated students' use of citations within the realm of academic disciplinary community practices and expectations. That is, they have sought to capture students' ability to regulate their citation practices relative to what a particular community prefers, such as the use of direct quotation rather than paraphrasing. What marks this line of research as especially valuable is the way in which it reminds EAP practitioners that citation practices, which are commonly taught in EAP courses, cannot be treated only as generic operations devoid of contextual influences. Instead, students must also learn to be sensitive to what a particular academic community prefers.

Paraphrasing

Overlapping with citations, but deserving of treatment of its own, is the topic of paraphrasing. Like summary writing, paraphrasing appears to be a commonly assigned task in EAP instruction. Like summary writing, it can be said to be at the nexus of the academic reading–writing connections at the heart of RFW. The act of paraphrasing, similar to other RFW activities, begins with reading and moves to writing, with each skill dependent on the other.

While not the topic of an extensive amount of RFW scholarship, paraphrasing is an area where some of the most interesting RFW work has taken place. A good case in point is Keck's (2006) study that compared the paraphrasing of L1 and L2 writers in a summary writing task by looking at how they approached different types of paraphrasing. Here, Keck, like Campbell (1990) cited earlier, introduced an important typology of choices available to students. These paraphrase types, which reflect the extent to which student writers altered the original material being cited, include: *Near Copy*, *Minimal Revision*, *Moderate Revision*, and *Substantial Revision*. The study found a heavy reliance on *Near Copy* among the L2 writers, while the L1 writers were more inclined toward *Moderate* and *Substantial Revision*. Just as useful as the findings of this study was Keck's paraphrasing typology, which laid a foundation for future scholarship (research and pedagogy) related to paraphrasing.

Several years later, Keck (2014) conducted a study that revisited issues investigated in the 2006 study cited earlier, and that also compared L1 and L2 writers. This study, working with the same typology introduced in the 2006 research, found that the L2 writers relied more on forms of copying (*Near Copy* and *Minimal Revision*) and were reluctant to attempt more involved forms of paraphrasing (*Moderate* and *Substantial Revision*).

A 2012 study by Shi, which reported the findings of interview-based research looking at student and teacher beliefs about paraphrasing, identified a key finding that mirrors what many EAP teachers have probably found: that students tend to struggle with paraphrasing, and for a variety of reasons. Hirvela and Du (2013) produced similar findings in looking at both students' paraphrasing products and their comments on paraphrasing. In addition to reflecting Shi's findings about the complexity involved in paraphrasing effectively, Hirvela and Du's study showed that students struggled with paraphrasing partly because of how it was taught: as a decontextualized activity lacking meaningful applications and purposes. They saw no value in replacing or rearranging a few words within a sentence. What did that achieve? Why not simply quote sentences directly? Thus, lacking motivation to learn about paraphrasing, they did not take the paraphrasing exercises seriously.

Electronic sources

An important shift in RFW research in this century has been an interest in students' use of electronic source texts for RFW tasks, given the now common reliance on such texts for academic purposes.

Some of this research has focused on students' use of what have been called 'unconventional sources'; that is, those that are not considered more traditionally academic, such as materials appearing on a political group's website. In particular, Helms-Park, Radia, and Stapleton (2007), Radia and Stapleton (2008), Stapleton (2005), and Stapleton, Helms-Park, and Radia (2006) published a series of studies examining student writers' use of such sources for various RFW tasks. They found that students relied somewhat heavily on what Stapleton (2005, p. 177) called 'Web genres of questionable suitability for an academic paper,' and without an ability to discern problems with the reliability of those sources as compared to others that would be seen as more acceptable from an academic perspective. Research by Wang and Artero (2005) brought to light similar concerns, leading them to conclude that 'there is an urgent need for students to develop information literacy skills and apply to these skills in the electronic information environment' (p. 71).

Li (2012) has looked at this topic from the perspective of how students actually work with electronic sources while completing a task involving RFW. Li found that the students showed considerable variability in the search engines selected to find source materials, but engaged in only superficial reading of the sources, with the intent of finding only what they needed to provide citations for their writing. As individuals long accustomed to conducting electronic searches for their own purposes as well as academic ones, these students were well versed in techniques for quick and purpose-driven reading of their RFW sources. Another study looking at student preferences for electronic sources (and not examining the quality of the sources) is the already cited research by Thompson, Morton, and Storch (2013), who found that first year undergraduate students, while searching for source materials, relied heavily on electronic sources located mainly through Google searches.

Assessment

Another more recent development in scholarship related to EAP and RFW is an interest in integrated assessment tasks, including reading and writing tasks where students are responding to sources. Interest in this line of research arose in large part out of the adoption in 2005 of an integrated reading-writing task in the internationally dominant Test of English as a Foreign Language (TOEFL) in its internet-based (IBT) format. Other large-scale assessments have likewise moved toward integrated assessment.

Much of the work in this area has come from Lia Plakans, who, on her own and with others, has investigated integrated RFW from a variety of angles. In her 2008 work, she compared test-takers' composing processes in RFW and writing-only tasks. While finding variability among her participants, Plakans also found that the RFW tasks generated 'a more authentic' set of composing practices (p. 111). A 2009a study she conducted also focused on composing processes and once again revealed variability among her participants. Meanwhile, Plakans (2009b) examined test-takers' reading strategies and found some differences in strategy use between those receiving higher and lower writing scores, and that reading has an important role in performance on such tasks. Strategy use was also the focus of a study by Yang and Plakans (2012), which found that test-takers needed to rely on a variety of strategies as they moved between listening, reading, and writing. This study showed that a variety of

strategies are necessary for higher level performance. Plakans' 2010 study focused on test-takers' representation of the RFW tasks and the impact of that representation, and revealed differences in the participants' task representations. Other work she has been involved in has looked at, and supported, the validity of integrated RFW tasks with respect to mirroring academic writing processes used in actual academic tasks (Plakans & Gebriel 2013).

In other research in this area, Weigle (2004) and Weigle and Parker (2012) examined the effectiveness of a university-generated competency test utilizing various RFW tasks. The 2004 study found that the test required students to use RFW skills necessary for actual classroom use, and thus lent support for the validity of the test. In Weigle and Parker (2012), they were interested in the extent to which takers of the same test examined in the 2004 study were relying on copying from the source texts provided, which would compromise the validity of the test. They found that most students did not rely unnecessarily on such copying, thus further validating the test as a measure of academic writing ability.

Collectively, the growing body of literature in this area suggests the importance of continuing to study this new domain of RFW, especially since the kinds of skills involved in integrated reading-writing tasks are those that are also normally the concern of EAP courses.

Discussion and conclusion

What I hoped to convey in the previous section was the fact that RFW is a topic of ongoing and strong interest among EAP specialists, and one with an array of dimensions worth exploring. My focus now shifts to a short discussion of what I feel we need to consider as we move forward in our efforts to help students learn how to read for writing in meaningful ways that lead to valuable transfer from the EAP classroom to other academic contexts in which RFW is required. Among the issues worth exploring, I want to address the role that models of target-language writing should play. My discussion will be based on a notion introduced by Macbeth (2010) in an article describing her students' use of models in an undergraduate EAP writing course. Macbeth problematized the use of models of the kinds of texts students are expected to produce, such as summaries, through the lens of what she called the 'deliberate false provisions' of those models.

Macbeth's thesis is that, in using models, writers 'forfeit some things in order to make others vivid,' and in doing so they have to 'confront the betrayal' caused by reliance on the models (p. 33). That is, they obediently do what a model shows them to do: for example, write the first sentence this way, be sure to use at least two paraphrases in your summary, etc. However, implementing these moves is often harder than it appears, plus doing so does not necessarily help students actually *learn* how to paraphrase, summarize, synthesize, etc.; it only helps them to follow decontextualized directions and 'rules' and mimic moves that require deeper understanding in order to be used effectively. Consequently, imitating the models does not ensure effective transfer to other contexts outside the EAP course; this is the betrayal that students encounter. This is where Macbeth feels we engage in providing 'deliberate false provisions.' That is, in teaching skills like paraphrasing and summarizing through models, we are creating false notions of learning and of achievement in our students, as they may well discover when they attempt to use those skills in another course and find themselves unprepared to do so.

Whatever one's position on the use of models, I see Macbeth's notion of deliberate false provisions as extremely useful in thinking about RFW-oriented EAP instruction, where the use of models has a great deal of understandable appeal in terms of illustrating for students the various moves involved in producing successful writing based on writing. It seems safe to

assume that many, if not most, EAP writing teachers employ such models. I have myself, and I have found them both enjoyable to work with and popular among students. This is likely what many EAP practitioners have experienced. However, should that be the end of the story? Macbeth's point of view suggests that there is a need to take a closer look at the use of models in teaching RFW. I agree, and I encourage EAP specialists to engage in a meaningful, open-minded discussion of this important topic.

The debate over models in writing scholarship is not new, but in EAP circles we have not recently addressed it in any substantive way. This strikes me as odd and seems to me to be counter-productive to the continued growth of the field, as we don't actually know how well they work. Perhaps we have avoided such a debate because, given the kinds of challenges L2 writers understandably face in learning how to read for writing in another language, we, as EAP teachers, feel compelled to rely on the instructional materials that make as visible and as concrete as possible the content that needs to be learned; that is, we look to simplify as much as we can. This almost inevitably leads us to some use of models, as they demonstrate graphically how we want our students' writing to look. As teaching tools, they're wonderfully manageable. As such, they make our job much easier, and these are attributes worth remembering and valuing as we debate the use of models.

However, as we continue to use them, I believe we need to be asking ourselves if models really work as well as we assume they do, and if they are ultimately beneficial or harmful. We need to do so because these issues take us into the heart of EAP instruction; that is, what is it that we ultimately want our students to learn? Here I think there's value in revisiting the dichotomy from Flower (1990) I mentioned briefly at the beginning of this chapter: *receptive* versus *transformative* processes of learning reading to write. That may be our real topic of debate as we ponder the use of models. Should we focus on the receptive or aim for the transformative? What is in our students' best interests? These are difficult questions to answer. A productive debate over models is one way of addressing them.

One of the most powerful themes that emerges from much of the literature I reviewed in the previous section of this chapter is that reading to write is difficult for students to learn. Even such shorter activities as paraphrasing and writing brief summaries of articles continue to be challenging tasks for many students. Faced with this obstacle, EAP teachers perhaps cannot help but feel the strong temptation to turn to a reliance on models, knowing that they may well provide the students with some much needed guidance. However, as Macbeth asserts, in adopting such a practice, we are risking contentment with short-term and perhaps simplistic solutions to complex problems, rather than adopting pedagogical practices that can lead to genuine learning about how to produce the various artifacts of RFW; that is, the more transformative pedagogy Flower (1990) advocates. That is one side of the debate. On the other hand, it may be that these short-term solutions are, realistically speaking, the best we can manage given the limited amount of instructional time normally available to us, and they may work better than critics of models claim.

Of course, it could also be the case that the real issue is not a choice between a receptive or transformative orientation, but rather a wise, effective *combination* of the two, where models are used at some earlier stages and then abandoned later, or perhaps used in different ways when pursuing transformative processes in the EAP classroom. In other words, we could move along a continuum from receptive to transformative. This approach would require some keen understanding of models so as to know when to move away from them or how to adjust the approach to their use. It might also be a matter of which students we have in mind. For instance, the RFW-related needs of undergraduates may well not be the same as those of post-graduate students. This could lead to an argument for flexible use of models relative to

who is being taught, and what they are being taught. There may be EAP courses where an emphasis on the receptive processes (and thus the use of models) makes good sense, just as other courses are better suited for an orientation toward a transformative approach.

In closing, what I encourage is an active debate (and research) on this surprisingly neglected topic of the use of models to teach RFW, especially because of the integral role that models play in RFW instruction, as well as continued uncertainty over the degree to which they contribute meaningfully to learning. In the final analysis, it may not be a debate over whether to use models, but rather when and how to use them. EAP will be a stronger field when we have a better understanding of where models fit in EAP pedagogy.

Further reading

Dovey (2010); Grabe & Zhang (2013a); Jakobs (2003); Zhang (2013)

Related chapters

- 11 Language and L2 writing
- 18 Intertextuality and plagiarism
- 36 EAP pedagogy in undergraduate contexts
- 43 EAP materials and tasks

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11

LANGUAGE AND L2 WRITING

Learning to write and writing to learn in academic contexts

Rosa M. Manchón

This chapter provides a survey of work on two dimensions of L2 writing in academic contexts seldom analyzed in combination thus far (but see Manchón, 2011a): the dimensions of learning to write (LW) and of writing to learn language (WLL). The former corresponds to theory and research concerned with advancing understandings of the various facets (personal, social, educational, sociopolitical, ideological, cognitive, and linguistic) of writing in an additional language. LW preoccupations constitute the backbone of most L2 writing studies, as evidenced in the list of contents of this volume.

In contrast, when L2 writing is viewed from the WLL perspective, the key issue of concern is the examination of the role that writing may play in developing competencies in an L2, hence prioritizing the “L2” part of L2 writing. This is a much more recent strand at the intersection between L2 writing studies and second language acquisition (SLA), and one that still needs to carve its own disciplinary space given that L2 writing research has been chiefly concerned with the “writing” part of L2 writing, while SLA scholars have made a priority of “oral” language acquisition and use in their theorizing and empirical endeavors (see Ortega, 2012).

The common thread of the joint analysis of the LW and WLL dimensions of L2 academic writing undertaken here is the *connection between language and L2 writing*. This will be approached through the dual lens of the role of language in the acquisition of L2 written literacy in academic settings (LW), on the one hand, and of the role of writing in the acquisition of L2 competences in academic settings (WLL), on the other. To accomplish this task, I will synthesize past and current research in terms of the theoretical frameworks informing it and the main issues of debate. This review of past and present achievements (which is not intended to be exhaustive and which will put heavier emphasis on the LW dimension) will be supplemented with a brief forward-looking account of key questions on the connection between language and L2 writing in need of further theoretical and empirical attention.

Learning to write in an additional language

The importance of language in the development of academic writing skills is undisputed. From a pedagogical angle, in the recent edition of their successful manual on teaching L2

composition, Ferris and Hedgcock (2014) assert that “skillful language use is an indispensable and inextricable part of what it means to be a successful writer” (p. 311). Based on this premise, their book includes a new chapter on “Developing language skills in the writing class: Why, what and how”. Their proposal is a welcome addition to many previous texts aimed at elucidating the most pedagogically valid approach to cater for the language needs of L2 writers in academic settings.

The importance of language in the acquisition of academic writing abilities has similarly long been acknowledged in the area of writing assessment, a domain in which Weigle (2013) has recently proposed to disentangle the “writing” and “language” dimensions. Accepting that “second language writing ability requires both writing skills, which may or may not have been learned in the writer’s first language, and proficiency in the second language”, and accepting also that writing ability and writing skills “can be considered a separate construct in its own right, and thus a complete picture of second language writing needs to consider both language and writing ability” (p. 87), Weigle presents a proposal for using automated scoring to assess either writing ability (assessing writing: AW) or second language proficiency (assessing language through writing: ALW), a distinction intended as an expansion of Manchón’s (2011a) LW/WLL distinction to the area of assessment.

The study of language in the construct of L2 writing also enjoys a long tradition in areas other than L2 teaching and assessment. Thus, studies of writing processes have provided ample empirical evidence of the intense linguistic processing activity that characterizes writing in an additional language (see reviews in Manchón, 2013; Roca de Larios, Murphy, & Marín, 2002). Empirical evidence shows that, although the process of text generation (or “transcription”) is prioritized by both L1 and L2 writers, L1 writers consume around 50 percent of their composing time in the transcription process, whereas this allocation can go up to 80 percent in L2 writing. This greater time spent in finding ways to express one’s intended meaning has been interpreted as an indication of the predominance of language concerns in L2 writing and of the more labor intense nature of composition writing in an L2. Interestingly, in contrast to earlier models of L1 writing in which the planning and revision processes were the central components and the ones that attracted most of the empirical attention, recent developments in L1 writing research emphasize the centrality of the process of text generation (Fayol, Alamargot, & Berninger, 2012) because this “is the goal for planning and provides the product on which the review and revision processes operate” (p. 12). Accordingly, transcription has been added as a central element in Hayes’ (2012) latest attempt at model building.

Other strands of research have applied diverse lenses to their inquiries into the role of language in the learning and teaching of L2 writing in academic contexts by both international students (mostly in university contexts) and publishing multilingual scholars from a wide range of disciplines. Key issues of concern in this body of research are the characteristics and development of L2 writers’ textual production (see Hinkel, 2002; see Polio & Park, 2016; Silva, 1993, for comprehensive overviews), their identity construction and multilingual literacy practices as multi-competent language users (cf. Gentil & Sêror, 2014; Kobayashi & Rinnert, 2012; Marshall, Hayashi, & Yeung, 2012; Rinnert & Kobayashi, 2016), their writing processes and strategies as multilingual writers (as reviewed in Manchón, Roca de Larios, & Murphy, 2007; Roca de Larios, Murphy, & Marín, 2002) who can shuttle between languages and discourses (cf. Canagarajah, 2006, 2011a, b), their goals for writing in an additional language (cf. Cumming, 2006, 2012), and the challenges and dilemmas that international students and publishing scholars face in their attempts to succeed in their academic writing endeavors (cf. Flowerdew, 2013; Lillis & Curry, 2010; Kuteeva & Mauranten, 2014). This

array of research preoccupations explains the variety of theoretical perspectives that have informed scholarly work in the field. These include cognitive theories of L1 and L2 writing, theories of multilingualism and multi-competence, identity theories, goal theories, and several linguistic theories and approaches.

The research base on the role of language in the literacy practices, outcomes, and struggles of L2 writers in academic settings is too large to be thoroughly reviewed in the space available. This survey of major preoccupations is necessarily selective, but I will point the reader to further elaborations through citations of representative studies and reviews.

Characterizing the linguistic component of L2 writing abilities

We can start by isolating three dimensions of the nature of the linguistic component of L2 writing academic abilities that have attracted considerable attention: (i) the linguistic characteristics of L2 academic texts; (ii) the connection between the development of language capacities and writing expertise; and (iii) the challenges and dilemmas faced by international students and publishing academics as users of additional languages.

Characteristics of L2 texts and the development of L2 writing capacities

As mentioned above, an important linguistically-oriented line of inquiry has looked into the *characteristics of L2 texts and the development of L2 writing capacities*, or, put another way, into “what develops in L2 writing” from a linguistic perspective (see Norris & Manchón, 2012). Narrative accounts by bi/multilingual writers (mainly academics) have provided rich insights of various facets of the linguistic component of their biliteracy acquisition and development (for example, contributions to Belcher & Connor, 2001; Gentil & Séror, 2014; Tang, 2012c). Descriptive studies of the features of the texts produced by L2 writers have also produced important advances in this domain. The studies include analyses of (i) language use in a given domain (for instance, syntactic complexity (Ortega, 2003), or the development of use of lexical phases (Li & Schmitt, 2009); (ii) how L2 texts differ from those written by their L1 counterparts (i.e., Crossley & McNamara, 2011; see Silva, 1993, for a review of early research); or (iii) how L2 texts change over time (as thoroughly reviewed in Polio & Park, 2016). Over the years, these linguistic analyses have been framed in several theoretical perspectives, including systemic functional linguistics (cf. Achugar & Carpenter, 2014; Byrnes, 2009, 2013; Yasuda, 2014), theories of multicompetence (cf. Kobayashi & Rinnert, 2012, 2013), or complex dynamics systems (cf. Verspoor, Schmid, & Xu, 2012; Verspoor & Smiskova, 2012).

These diverse empirical efforts have been coupled with methodological reflections and proposals on how to best measure linguistic performance and progress in writing, a research preoccupation that witnessed a turning point with the publication of Wolfe-Quintero, Ingaki, and Kim’s (1998) seminal book, and one that continues to raise continued interest (see, for instance, Biber, Gray, & Kornwipa Poonpon, 2011; Byrnes, 2014a; Connor-Linton & Polio, 2014; Evans et al., 2014; Norris & Ortega, 2009).

The interplay between writing expertise and L2 abilities

Another research preoccupation has been the analysis of the potential interplay between writing expertise and linguistic ability, the main concern being the elucidation of whether or not L2 abilities constrain the development of L2 writing skills (see review in Roca de Larios,

Murphy, & Marín, 2002). Following Cumming's (1989) pioneering study, the field generally accepted that writing expertise and language proficiency are independent constructs, with L2 proficiency being an additive factor in multiliterate writing. Explorations of the interplay between language proficiency and writing abilities have more recently been framed in theories of multi-competence (cf. Kobayashi & Rinnert, 2012; Ortega & Carson, 2010; Rinnert & Kobayashi, 2016), which see multilingual language users' competence as distinct from the sum of their separate linguistic competencies, one in which their various languages and their writing knowledge, abilities, and practices interact in complex ways. Accordingly, relevant theoretical and empirical questions are no longer related to what writers can or cannot do in their L2 as a function of their L2 proficiency, but, rather, to how multi-competent language users make use of their various knowledge resources when approaching the writing of texts in the various languages at their disposal (see Kobayashi & Rinnert, 2013, for an exemplar study).

Two key contributions in this domain are Gentil's (2011) socially-situated proposal of the transfer of genre knowledge across languages, and Kobayashi and Rinnert's (2012, Rinnert & Kobayashi, 2016) model of the "evolving configuration of writing knowledge" (Kobayashi & Rinnert's 2012, p. 125) that tries to "explicate L1/L2/L3 text construction of multilingual writers" (Rinnert & Kobayashi, 2016). These two seminal contributions to the field have greatly advanced our vision of the phenomenon of transfer in L2 writing, making evident the need to recognize its cognitively- and socially-mediated nature and its multidirectionality (see Kobayashi & Rinnert, 2013).

Language abilities and academic success

As advanced above, another important area in the study of the linguistic dimension of academic writing centers on how language plays out in the literacy practices of multilingual writers. The field has witnessed a proliferation of debates and empirical studies on the challenges and dilemmas faced by L2 writers in their attempts to become part of given communities of practice, and how and why their status as users of an additional language influences their academic and/or professional success (cf. Flowerdew, 2013; Lillis & Curry, 2010; Tang, 2012a, b). Part of the debate has centered on the consideration of the so-called "linguistic inequality" that affects L2 writers in academic settings (Kuteeva & Mauranen, 2014; Tang, 2012a, for two recent treatments) and on whether or not linguistic challenges are a barrier to publication.

In addition to a wealth of empirical findings, several ideological positions have been adopted with respect to (i) the teaching of academic writing (see, for instance, Canagarajah, 2011a, b); (ii) how to best cater for the challenges faced by those who need to be part of academic communities of practice, and may or may not have access to professional networks (as discussed, for instance, in Lillis & Curry, 2010); (iii) questions related to positions of acceptance of and/or resistance to hegemonic, predominant discourses (see, for instance, Canagarajah, 2011a, b; Salager-Mayer, 2014); or (iv) potential ways of facilitating and increasing the presence and influence of peripheral multilingual scholars in academic communities (for instance, Salager-Mayer, 2014). Importantly, conversations have expanded to add a welcome consideration of the linguistic and cultural capital that L2 writers bring with them to their literacy experiences in an additional language (see Chang & Kanno, 2010; Tang, 2012c), thereby counteracting the "deficit" view of L2 writers that has dominated much of past discourses. Equally welcome are recent proposals that emphasize "expertise" rather than "nativeness" (Flowerdew, 2013) when considering multilingual writers' literacy

acquisition and practices. This is because, as acutely expressed by Tang (2012b, p. 12), “‘academic discourse’ is not the natural first language of any writer”.

The bilingual nature of multilingual practices

Two additional streams of research (each one framed in different theoretical perspectives) together serve to shed light on another key dimension of the language component of L2 academic writing, namely the intriguing “bilingual” nature of multilingual literacy acquisition and practices. One has delved into aspects of multilinguals’ identity construction, whereas the second set of studies has looked into multilinguals’ strategic use and interaction of their various languages while composing in an L2. A brief analysis of developments in these two important areas follows.

Identity construction

Two recent studies (Gentil & Séror, 2014; Marshall, Hayashi, & Yeung, 2012), coincidentally conducted in Canadian settings, have illuminated the way in which multilingual students and multilingual scholars exert their agency when balancing demands for using and/or publishing in the various languages that form their linguistic repertoire. Marshall, Hayashi, and Yeung (2012) report the agency and creativity exerted by eight multilingual graduate students, strategically enacting “different identities through their formal and less formal language and literacy practices” (p. 33), namely, “the identity of an accepted member of the academic community in their formal writing and broader and freer identities as writers in digital environments” (p. 33). The authors conclude that this purposeful agency on the part of these multiliterate writers and the richness of their “multilingual and multiliterate practices serves to challenge institutional discourses around multilingual learners that solely focus on deficit and the need for remediation” (p. 51).

An equally illuminating account of identity issues is provided in Gentil and Seror’s (2014) “dialogical self-case study” (p. 18), which offers a personal reflection of the authors’ “biliteracy development” and “bilingual publication practices”. Particularly relevant are their observations on their “individual language choices as scholars” (p. 19), their “commitment to academic biliteracy” (p. 22), and to the dissemination of knowledge in their various languages – as well as how and why this has changed over the years as they advanced in their careers – as a question of “identity and linguistic loyalty” (p. 26).

L1 use in L2 writing

Another key dimension of the bilingual nature of academic writing is how and why L2 writers make use of their L1 as a strategic resource when writing academic texts in an L2 (see Manchón, 2013; Manchón, Roca de Larios, & Murphy, 2007, for reviews). L2 writers have been found to resort to the L1 for a variety of purposes related to the four macro writing processes, namely, planning, text generation, revision, and monitoring. Important here is use of the L1 as a heuristics in the linguistic problem-solving activity inherent to the process of text generation (Murphy & Roca de Larios, 2010, for a study of L1-based lexical searches, and Manchón, Roca de Larios, & Murphy, 2007, for a review of L1-based L2 writing strategies).

This research also shows that L1 use in L2 writing is a function of individual and social factors. As for the former, the analysis of the L2 proficiency-mediated nature of L1 use has been widely reported in the literature. In Manchón, Roca de Larios, and Murphy (2007) we

interpreted the research as a continuum in L1 use, one that starts with a heavy reliance on the L1 at lower-proficiency levels for a whole set of purposes, including generating ideas in the L1 that are then translated into the L2, searching for the language needed to express one's intended meaning via the L1, or evaluating the appropriateness of linguistic choices through back translation. As proficiency increases, a lesser use of the L1 is observed, although the L1 nevertheless still continues to represent a useful strategic device. Thus, more proficient L2 writers resort to their L1 in order to solve linguistic problems (thus deploying a whole range of L1-based lexical retrieval strategies), to overcome task demands, or to facilitate the kind of engagement in deeper levels of processing that higher levels of L2 proficiency allow (see Manchón, Roca de Larios, & Murphy, 2009; van Weijen et al., 2009, for two representative studies).

Despite these general tendencies, notable individual differences in L1 use have also been reported, even in the case of writers at the same proficiency level: highly proficient L2 academic writers may or may not make use of their L1 use (see Beare & Bourdages, 2007; Matsumoto, 1995, for studies of the latter), and the same variation has been observed in the case of less experienced writers. For instance, Gosden (1996) found four different patterns in the way in which a group of Japanese novice researchers writing their first scientific research article for publication wrote their first L2 draft. Thus, whereas some participants wrote the full draft in Japanese and then translated it into English, others opted for writing an outline in Japanese and subsequent translation into English; still others wrote notes in English, expanded them into full sentences, and then completed their first draft, and yet other writers did write their first draft completely in English.

In addition to L2 proficiency, L1 use in L2 writing is also a function of cognitive and social variables (Manchón, 2013). Two cases in point are Hu's (2003) study of the writing processes of 15 international science and engineering Chinese students at a Canadian university, and Ferenz's (2005) language of planning used by advanced MA and PhD English students of Russian and Hebrew origin residing in Israel. Hu (2003) found that the manner in which the Chinese participants in the study resorted to their L1 resulted from the interplay of a range of factors, including "the language of knowledge input, the language of knowledge acquisition, the development of L2 proficiency, the level of knowledge demands, and specific task conditions" (p. 39). In his analysis of language choice while planning, Ferenz (2005) concluded that recourse to the L1 in L2 writing is a function of both cognitive-affective factors (including motivation, the need to overcome cognitive load, or the language in which knowledge is stored), and social factors given L2 writers' linguistic choices are socially mediated by what they perceive is valued in their writing social networks.

Writing to learn an additional language

This part of the chapter will look into the WLL dimension, which is a vibrant SLA-oriented strand of L2 writing research that has so far provided (i) rationales for the language learning potential (LLP) of L2 writing, and (ii) a growing body of empirical evidence on the manner in which writing itself and the processing of feedback can contribute to L2 development.

The origin of the interest into the LLP of L2 writing can be traced back to Cumming's (1990) pioneering study in which he argued that "composition writing might function broadly as a psycholinguistic output condition wherein learners analyze and consolidate second language knowledge that they have previously (but not yet fully) acquired" (Cumming 1990, p. 483). Importantly, Cumming also claimed that challenging L2 writing "elicits attention to form-meaning relations that may prompt learners to refine their linguistic expression – and hence

their control over their linguistic knowledge”, a process claimed to be “facilitated by the natural disjuncture between written text and the mental processes of generating and assessing it” (p. 483). Cumming’s study was followed by Qi and Lapkin’s (2001) partial replication. Together, these studies served to draw attention to the important linguistic processing that takes place while writing, pointing at the same time to potential learning outcomes that may derive in terms of expansion and/or consolidation of L2 linguistic knowledge. They also speculated that such potential learning outcomes may more likely be the result of complex, problem-solving types of writing tasks that entail a real challenge for students at ideational and linguistic levels. Yet, this agenda was not immediately taken up in the field of English for academic purposes.

This situation has ostensibly changed in the last few years as we have witnessed a proliferation of theoretical accounts of the rationale of the LLP of L2 writing (based on cognitive theories of L1 and L2 writing as well as cognitive and sociocultural theories of SLA; see Manchón, 2011b, c; Manchón & Williams, 2016), as well as an emergent line of empirical research, although one that has paid only limited attention to academic writing contexts (but see Byrnes, 2014b; Manchón & Roca de Larios, 2011). Collectively, these theoretical and empirical efforts have revolved around two main questions: what is unique about writing that can potentially lead to advancing language competences, and what learning outcomes can be expected to derive from engaging in academic writing tasks?

As mentioned above, several theoretical frameworks provide the theoretical underpinnings for the purported language learning potential of L2 writing, a potential that is associated with the act of writing itself as well as to the processing of feedback. Of special relevance are those recent developments in L1 writing research mentioned in an earlier section that emphasize the centrality of the process of text generation, theories of problem-solving (see Manchón & Roca de Larios, 2007), as well as several SLA theoretical approaches, including those of a cognitive nature (mainly Skill Learning Theory, the Focus on Form research, the Noticing Hypothesis, and the Output Hypothesis), and sociocultural approaches to language learning and use (as recently reviewed in Bitchener, 2012; Manchón, 2011b; Ortega, 2012; Polio, 2012; Williams, 2012).

The general consensus in the field is that L2 writing (in both individual and collaborative conditions; see Storch, 2013) can potentially lead to language learning as a result of (i) the availability of time that characterizes writing (which is even more the case in academic settings); (ii) the visibility and permanence of both the written text and the feedback on it; (iii) the challenging, problem-solving nature of academic writing tasks; and (iv) the languaging, metalinguistic reflection, and noticing processes that may result from the scaffolding provided in collaborative writing conditions. As noted in a previous review of these issues (Manchón, 2014, p.99):

The pace and permanence of writing make it possible for L2 writers to be more in control of their attentional resources, more prone to prioritize linguistic concerns (in contrast to oral production) and, accordingly, more likely to attend to focus on language during both their composing activity and their processing of the feedback received. Similarly, the problem-solving activity engaged in during writing requires decision-making (at various levels) and deep linguistic processing with potential beneficial effects on learning.

It has been posited that these conditions may be conducive to learning. Thus, engaging in challenging academic writing tasks is thought to foster crucial learning processes that

can indirectly lead to advancing language competences, such as attentional focus-on-form processes, the formulation and testing of hypotheses about the L2, and the production and self-assessment of one's own linguistic options and metalinguistic reflection. Writing is also posited to have a more direct potential contribution to language learning by helping learners develop fluency and automaticity as a result of the conditions for communicative practice that writing academic texts favors. In addition, writing itself, provided it entails problem-solving, can play a role in developing explicit knowledge about the L2.

Regarding the language learning potential of feedback processing, Bitchener (2012; Bitchener & Ferris, 2012) claims that this processing can contribute to learning by helping learners to expand their explicit knowledge and to increase the accuracy of their use of the L2. These learning outcomes are purported to be mediated by a number of variables that include feedback factors (which type of feedback is provided and how), task factors (types of writing tasks), and linguistic factors (which linguistic elements are targeted in the feedback provided). In addition, a whole set of individual factors have also been found to play a role: cognitive factors (analytic ability), linguistic factors (L2 proficiency), and affective factors (beliefs, goals, and attitudes). Finally, a crucial variable in bringing about language learning is the depth of the L2 writer's own engagement with and reflection on the feedback received.

Some of these tenets have been put to the empirical test, and the field has seen a proliferation of studies intended to shed light on the LLP of feedback and of collaborative writing. However, few of these studies have focused on individual academic writing or on issues relevant to the learning and teaching of writing in academic settings. Three recent studies are exceptions to this trend. In Manchón and Roca de Larios (2011) we followed a group of university students enrolled in an EAP course for the duration of the course (9 months) and traced their writing development as well as their perceptions of the LLP of their academic writing activity. We concluded that our results were relevant in shedding light on a range of factors interpreted as instrumental in bringing about L2 learning, namely (p. 181):

the role played by self-initiated and teacher-led noticing processes and associated learning actions, extensive and challenging output practice, and the availability of tailor-made form-focused instruction in bringing about learning through writing. The participants' own perceptions of the language learning potential of writing was also found to be both a powerful motivating factor in their literacy experience and one of the goals that guided their writing activity.

In another study within the same research program (Nicolás-Conesa, Roca de Larios, & Coyle, 2014), a close connection between goals for and approaches to writing, on the one hand, and the kind of linguistic processing and linguistic problem-solving behavior engaged in, on the other, was uncovered. Importantly, such problem-solving activity is considered to be crucial in bringing about language learning through writing (see Manchón & Roca de Larios, 2007; Ortega, 2012). In addition to these more cognitively-oriented studies, systemic functional linguistics has also illuminated the potential connection between the engagement with complex and challenging, meaning-making academic writing tasks and L2 development (cf. Byrnes, 2014b).

Empirical research on the WLL dimension of L2 writing research is nevertheless still in its infancy, and hence much further research efforts are needed before we can come to more robust conclusions on the role of writing in developing language competences in academic settings. Some fruitful avenues to explore in future research agendas are suggested in the next section.

Suggestions for future research.

As far as the LW dimension of L2 writing is concerned, further research efforts should go to the study of the linguistic dimension of writing development. Norris and Manchón (2012) offer detailed theoretical and methodological suggestions for a future research agenda in which writing development is approached in theoretically sound, methodologically appropriate, and pedagogically valid ways (see also Polio and Park, 2016). The way in which the “multi” in multilingual writing is negotiated at process and product levels also deserves further theoretical and empirical attention. For instance, in relation to how academics exert their agency in their multilingual practices, an important issue for future research agendas is to disentangle in what way such agency is mediated by ideological commitments/positions and/or the stage in one’s professional career. In other words, a question with important ethical implications worth asking is who is in a position to choose whether or not to publish in languages other than English (which necessarily entails opting for not publishing in top, high-impact factor journals, for instance), or in a position to choose to resist what has come to be known as “hegemonic discourses”.

Future research agendas on the role of language in the acquisition of academic literacies would also benefit from expanding the range of contexts and academic writers investigated. For instance, Gentil (2011, p. 20) recommends adding “populations representing other configurations of writing expertise and language proficiency” such as “highly literate writers in their L1 with only incipient oral proficiency in their L2, who may be found among visiting scholars in foreign-language environments”, or “writing professionals who encounter a new language”.

Regarding the WLL dimension of L2 writing in academic settings, future research efforts should go in the direction of exploiting the LLP of the act of engaging in individual, challenging academic tasks. The questions awaiting an answer are the ones that have already been uncovered, questions that include (i) whether writing in academic settings leads to expansion or consolidation of L2 resources, or (ii) whether feedback processing on one’s own writing simply leads to immediate “uptake” or rather to long-term “retention”. In this respect, I have previously suggested that a crucial issue to be teased out empirically is the difference between “feedback for accuracy” and “feedback for acquisition”, a distinction that in my view is at the basis of the disciplinary debate on the effectiveness of error correction. Similarly, Ortega (2012) has claimed that:

progress will remain slow unless researchers committed to investigating these L2 writing–SLA interfaces are able to develop a positive program tasked with the challenge of explaining the various and complex roles that explicit and implicit knowledge might play in L2 writing.

(p. 410)

It is hoped that traveling these research avenues can result in tangible advancements in theory and research on the role that language plays in the acquisition of L2 written literacy in academic settings, as well as on the role that L2 writing can play in the acquisition of L2 competences in academic settings.

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Further reading

Gentil (2011); Kuteeva & Mauranen (2014); Manchón (2011a); Tang (2012a)

Related chapters

- 4 English as the academic lingua franca
- 10 Academic reading into writing
- 22 Critical perspectives
- 38 English for professional academic purposes

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12

DIALOGIC INTERACTION

Helen Basturkmen

Introduction

This chapter focuses on academic events that involve spoken interaction between students and their lecturers, teachers or tutors, and between students. In particular, it reviews research that has led to descriptions of discourse in dyadic and multi-party interaction, such as in seminars, tutorials, question–answer exchanges in classes and in one-on-one encounters, including office hours. Such descriptions play an important role in helping English for academic purposes (EAP) practitioners understand the nature of the linguistic demands that students face in dialogic speaking in academic contexts, and why such speaking may be an area of concern for learners using English as an additional or second language in their academic studies.

Dialogic interaction plays a very important role in teaching and learning. At tertiary level, some speaking events, such as seminars, classroom discussions and office hours, may consist almost entirely of dialogic (two or multi-party) interaction. Some largely monologic events, such as classroom teaching and lectures, may include interludes of dialogic interaction; for example, in the form of question and answer exchanges that arise incidentally during teaching or at the end of lessons and lectures. Spoken events based on or involving dialogic interaction also play a very important role in professional academic communication. See, for example, studies of discussions following conference presentations (Wulff, Swales and Keller 2009) and expert-to-expert, or peer, seminars (Aguilar 2004). However, the focus of the present chapter is limited to dialogic interaction in student learning contexts, primarily in higher education.

This chapter examines the literature on dialogic interaction in academic events in disciplinary study, mainly in higher educational contexts. Most studies reported in the EAP literature have concerned dialogic interaction in higher education rather than school settings, although there are some exceptions. See, for example, the school-based studies of Bunch (2006) and Bruna, Vann and Escudero (2007). The EAP-oriented research has led to the development of a body of knowledge about types of academic speaking events involved in academic study and their concomitant features of interaction and discourse. This knowledge is drawn on by EAP teachers, and course and materials developers to devise pedagogical descriptions of the discourse and identify the linguistic knowledge and skills, or competencies, that EAP or English as a second language (ESL) students need in order to participate in speaking events.

Learners of academic English exist on a continuum which includes non-native speakers, speakers of non-standard varieties, and native speakers with limited exposure to academic

English (Anstrom et al. 2010). Most EAP research has examined discourse in spoken academic events in order to develop understanding of the linguistic competency needs of non-native speaker students, although recently some research has been set out to develop understanding of the linguistic competency needs of international teaching assistants (Reinhardt 2010). The main, but not exclusive, focus of the present chapter is on dialogic interaction in relation to the English learning needs of non-native speaking students.

Studies of dialogic interaction in ESL or EAP classrooms have not been included in this review of the literature as the field of EAP is primarily concerned with helping language learners with their target situations; that is, study in disciplinary areas. It is also because the kinds of teaching and learning activities in ESL or EAP classrooms may be distinctive, and the forms of interaction they involve dissimilar to those in disciplinary study settings.

The remainder of this chapter is organised into seven sections. The second section describes characteristics of the topic in EAP. The third introduces educational perspectives on the role of dialogic interaction. The fourth section identifies critical issues for EAP practice. The fifth section examines current contributions (major strands of research interest) and is followed by a section that describes the main research methods involved. The sixth section draws on ideas presented in earlier sections to make a number of suggestions for EAP pedagogy and this is followed by a section that identifies gaps in the literature and makes suggestions for the future research agenda.

Characteristics

Most attention to academic speaking in the EAP literature to date has been on lectures (Feak 2013; Swales 2001), possibly due to the role of the lecture as the predominant method of university teaching around the world (Nesi 2012). In EAP, there has been considerable research to describe the discourse features of lectures or to understand the nature of students' difficulties in understanding lecture content. The aims of lectures compared to seminar- or discussion-based classes are generally distinct, and this impacts on the nature of the instructional discourse involved. A major aim of lectures is to convey a body of information and ideas, whereas a major aim of seminar or discussion type classes is to engage students in considering and discussing information and ideas as a means of developing in-depth understanding.

EAP-oriented research into discourse in seminars and other forms of dialogic interaction is fairly limited. However, dialogic interaction in academic settings is an important topic for EAP. In disciplinary study, question–answer type interaction enables lecturers and teachers to assess their students' understanding of instructional content. It can enable students to consolidate their understanding, for example, by asking clarification type questions, or contribute to discussion, for example, by suggesting ideas or questioning ideas presented by others. Dialogic interaction plays an important role in disciplinary acculturation (Hyland 2013) and as a means by which students form relationships with their lecturers, teachers and peers. EAP practitioners are often keenly aware that some of their learners have difficulties in or concerns about participating in academic discussions and question–answer exchanges. As a result, many EAP courses include some instruction on discussion or seminar skills.

Conventionally, EAP teaching has used a study skills type approach to help learners develop speaking skills. EAP speaking skills are typically broken down into two categories, presentation skills and participation skills (Fielder 2011). The latter are dialogic interaction skills, and EAP instruction in these skills often includes a focus on functions, such as 'asking questions', 'asking for clarification', 'agreeing' or 'disagreeing', 'initiating comments

or responding to comments' (Jordan 1997), 'criticising/objecting' and 'presenting reasons' (Fielder 2011). Other areas targeted in instruction may include turn-taking and information about participant roles and their functions (for example, the role of discussion leader in encouraging people to participate or keeping the discussion on track).

The language description provided in instruction typically takes the form of useful expressions, such as, *I'm not sure what you meant* or *Could you please explain what you mean* for the function of asking for clarification, *I really don't agree with you* or *I'm not sure that I agree with you* for the function of disagreeing, or *Let's find out what some others have to say on this* or *What do others think about that* for the role of the discussion leader in encouraging people to participate. Methodologies used in teaching often include discussion practice activities followed by teacher or peer feedback or student self-reflection on performance.

Educational perspectives

Most EAP practitioner interest in dialogic speaking has concerned learning to speak (development of EAP learners' discussion skills) rather than speaking to learn (the role of dialogic interaction in learning). Be that as it may, the role of dialogic interaction in learning lies at the heart of endeavours in EAP teaching. It is because speaking is generally understood to be integral to disciplinary learning and socialisation that EAP instruction focuses on developing learners' discussion skills.

In education, the role of learners is no longer seen as being mainly one in which students simply receive information transmitted to them by their lecturers or textbooks. Generally, the transmission view of teaching in which students are seen as receivers of knowledge from teachers and lecturers has come to be replaced with a view in which students are seen as needing to be actively engaged in the learning process. It is now generally recognised that learners need to be involved in processing, creating and shaping knowledge. This changing view has implications for instructional discourse. If students are to be actively engaged in learning, they need opportunities for participating in and contributing to classroom discourse. Dialogic interaction between teachers and students is, thus, an important means by which students can become actively engaged in learning events. The ability to communicate in and follow academic discussion and spoken interchanges is seen as a critical area for academic success. As such, the development of this ability is seen as critical for academic success.

Haneda and Wells (2013) describe a sociocultural view of learning as one that emphasises students being actively engaged and participating in the co-construction of knowledge through dialogue with their teacher and peers. They describe the functions of such participation in terms of enabling students to clarify, modify and extend their understanding of course content, and providing opportunities for students to formulate their thinking through speaking. This view of the role of dialogic interaction reflects a social constructivist theory of cognitive development in which learning is achieved first through social interaction, and second through internalisation by the individual.

Critical issues

Teaching EAP seminars or discussion skills is not an entirely unproblematic endeavour. Two important issues for EAP practice concern the relative importance (or not) of dialogic speaking skills for learners, and the disparate nature of events (and concomitant variation in interaction and discourse) in higher education that go under umbrella terms, such as 'seminar' or 'discussion' class.

How important are dialogic speaking needs?

Findings about the importance of dialogic interaction and discussion skills from needs analyses have been mixed. In some contexts, dialogic speaking or discussion skills may be relatively unimportant. Speaking can be seen as the least important linguistic skill for undergraduate study (Skyrme 2010) especially in the first years of study (level one and level two). At these levels, listening and reading skills (lecture and textbook comprehension) are often seen as being more important. EAP instruction has tended to focus more on developing learners' listening and reading comprehension skills or on developing their writing skills since the students are usually assessed by their subject lecturers by means of their writing.

However, this may vary in different contexts. A survey of first and second year engineering students in an English-medium university in the Middle East (Basturkmen 1998) found that the students ranked speaking as the second most important skill for academic study (following listening). In this engineering studies context, speaking was perceived by students to be more important than writing. Needs analyses conducted in the Hong Kong context (Evans and Green 2007; Hyland 1997) suggested that across disciplinary areas, undergraduate students ranked academic speaking just behind academic writing in terms of perceived difficulty. However, students reported that they were 'more comfortable' with planned speaking, such as presenting information, compared to unplanned forms of speaking, such as participating in discussions (Evans and Green 2007: 13). Based on findings from a needs analysis, Fielder (2011) suggested oral skills (presentation and participation skills) as the second main area (following aural skills) for syllabus development in a pre-sessional EAP course setting in a German university context. Needs analyses conducted in the US (Ferris 1998; Ferris and Tagg 1996) showed a widespread expectation that students in higher education would interact orally with their teachers and peers, and participate orally in classroom events. The views of many hundreds of ESL students (mostly undergraduates) in different higher education settings in the US showed that students' views varied in the different contexts. The study found that in general, students were more concerned about participating in whole-class than small-group discussions.

There are often strong expectations that higher level and graduate students will interact orally in classroom contexts (Morita 2000). Investigation of East Asian graduate students' listening and speaking skills for non-science and non-engineering university studies in the US (Kim 2006) indicated that for this group three out of the four most important skills that would enable them to meet requirements in their content courses were concerned with dialogic speaking. (These were asking questions during class, small-group and whole-class discussions.) Leading class discussions and participating in whole-class discussions were areas of particular concern, whereas asking questions before or after class or in office-hour meetings were of limited concern. The literature suggests that participation in seminars and discussions often remains a persistent problem for non-native speaker postgraduate students who often experience specific difficulties in articulating and expressing ideas, formulating a contribution quickly, entering the discussion and being uncertain about the value of a contribution (Jordan 1997).

Although speaking in seminars and discussions may in some settings be seen as the least required skill, it may nevertheless be the skill area that ESL students find most daunting (Furneau et al. 1991; Skyrme 2010). As language learners may feel anxious about their ability to participate orally in their disciplinary classes, EAP instruction may prioritise the development of discussion skills on the basis of this subjective need, not only because of their objective importance for academic study.

Do event types vary?

A second critical issue concerns the variation in dialogic event types and speaking. Swales has noted (2001: 34–5) that academic speaking is ‘much more variable in structure, function, and style than academic writing’. This variability has implications for identifying students’ dialogic speaking needs. One factor in such variability is the range of event types that exist – seminars, tutorials, classroom teaching, discussion groups and so forth. Often a range of disparate events are subsumed under umbrella terms, such as discussion classes. The kinds of seminars and discussions held in different institutions and disciplines vary considerably. There are also differences in the objectives or functions of different event types. For example, tutorials often have different objectives than seminars, the proportion of time spent in free discussion can vary (tutorials or seminars in some settings may involve a high proportion of teaching with only occasional opportunities for student questions) and the nature of discussion involved can vary (a group discussion may centre on a problem-solving task in which the aim is to reach a convergence of opinion or on issues in which a divergence of opinions would be expected) (Jordan 1997).

One study in a UK university context (Furneaux et al. 1991) found four types of seminar events: student-group work (such as a problem-solving activity), the lesson (such as reviewing prepared answers to a case study), discussion (such as talking about a set reading) and seminars involving presentations. A study of discussion-based classes on an MBA programme in a UK setting (Basturkmen 1996) found three event types (discussion following a presentation by a guest speaker, discussion following a presentation by a class member and tutorials). The variety of event types is a critical issue for EAP practice in that learner difficulties can be related to the nature of the event. For example, learners may feel less anxious about their performance in student group-work type seminars compared to presentations or discussion of issues type seminars.

Current contributions

The research in this area has very largely been in the form of observational studies. Three major strands of research interest are evident. The first strand is description of target language use, which is generally seen as the central focus of research in EAP (Flowerdew and Peacock 2001). Research in this strand has identified types of dialogic events, and described features of language use or discourse. The second strand is investigation into the role of dialogic interaction in second language learners’ socialization into academic communities, and the third strand is study of the ways interaction may be structured to support disciplinary learning.

Event types and discourse features

Studies have shown that at lower levels of higher education, especially in the first and second year of undergraduate study, lectures tend to be the main spoken event type. However, at higher levels of study, especially at graduate level, seminars become a more common major, if not *the* major, spoken instructional genre (Basturkmen 2001; Hyland 2013; Weissberg 1993). A number of types of seminar event have been identified. These include teacher or lecturer-led discussions, presentations by a guest speaker followed by class discussion (Basturkmen 1996), and presentation by a student followed by discussion, or student-mentor seminar (Basturkmen 1999; Weissberg 1993; Northcott 2001). Additional events include student

discussion pairs or groups (Basturkmen 2003; Tin 2003) and one-on-one type interactions, such as student–tutor meetings or office hours (Crandall 1999; Farr 2003; Limberg 2007; Reinhardt 2010; Skyrme 2010) and thesis supervision meetings (Tseng 2014).

Researchers have set out to identify the distinctive features of seminar discourse. For example, corpus-based comparison of lecture and seminar discourse indicated that the pronouns *I* and *you* were more frequent in seminar discourse whereas the pronoun *we* was more frequent in lecture discourse, a finding reflecting differences in the ways speakers typically engage with one another in these distinctive event types (Hyland 2013). Some research has provided descriptive accounts of interaction in a particular event type. For example, Limberg (2007) shows a five-phase structure (summon-answer, opening, outlining academic business, negotiating academic business and closing) in office hour meetings.

Other research has compared interaction patterns or the kinds of questions driving interaction in different event types. For example, study of discussion-based classes on an MBA programme (Basturkmen 1996) found that spoken exchanges following presentations typically took the form of question–answer routines (simple or extended), whereas exchanges in tutor-led discussions were often longer and more complex in nature. The study found that students tended to ask more seeking information or clarification type questions to guest presenters and tutors, and more questions that challenged ideas or suggested alternative points of view to other students (see Excerpt 1). Both kinds of questions were, however, evident in both kinds of speaker configuration. A student question that appears to challenge or suggest an alternative point of view is shown in Excerpt 1, which is taken from a small-group case study discussion. In this part of the discussion, the MBA students are discussing why the company (*‘they’*) did not opt to develop an innovative system that was available to them. Student 2 challenges the point of view expressed by Student 1 concerning the designer of the system (*‘him’*).

Excerpt 1

Student 1: Yeah they let him go and they should have told him your idea is very good and so you have to develop it for the company.

Student 2: No I think the fact is that they actually didn’t let him go, they didn’t realise the potential of this invention ... they didn’t actually recognise this system as a product.

Some researchers have considered how speakers perform a particular speech function. Félix-Brasdefer and Bardovi-Harlig (2010), for example, examined refusal strategies used by native speaker students to reject the advice of their advisor during academic advising sessions. Crandall (1999) reports an investigation into requests made by native and non-native speaker students to their lecturers during office-hour conversations. Both studies used their findings to inform the development of pragmatics-focused materials for use in EAP teaching.

Socialization

Writers have recognised that participation in interactive academic speaking events depends not only on speaking skills but also on a number of social and identity factors. Feak (2013: 38) describes a number of potential challenges and threats to identity that non-native speaker students may experience in interacting with US speakers in class settings. Such class settings can be ‘particularly stressful for students from non-Anglophone countries who see themselves as less capable but nevertheless eager to contribute to classroom and small-group discussion’. A dominant group of domestic students may set a ‘tone’ that seems to exclude

others, and the international students become reluctant to participate due to feelings of marginalisation and ‘uncertain cultural identity’.

Empirical studies to examine the role of dialogic interaction in socializing second-language students into their academic communities have been conducted. Morita (2000, 2004), for example, has investigated the processes by which the newcomers (English L2 students) became socialised into an academic group culture through their participation in language-mediated activities. In a longitudinal study, Morita (2004) observed whole-class and small-group discussions in graduate seminars to explore the participations of a number of the L2 students, and elicited students’ self-reports to gain insights into how the L2 students constructed their identities in the class interaction and the reasons for any reticence in speaking during discussions. The study found the L2 students’ views of their competency as class members and the reasons for being silent during discussions varied in relation to the local classroom contexts. Of particular relevance to EAP were the findings that indicated a number of interrelated issues at play; not only language issues but also issues concerning culture, identity, the curriculum and pedagogy of the local classroom contexts were found to lie behind the students’ reluctance to engage in dialogic interaction.

Disciplinary learning

Participation in dialogic speaking in class settings is understood to be an important means by which students can develop their understanding of and ability to articulate disciplinary matter. This can occur, for example, when students ask lecturers or peers questions to check their understanding of the content in prior discourse (lectures, presentations or contributions to discussion). The responses to such questions can be important for the learning of the student who asked the question, and also for the learning of other students listening to the question–answer exchange. Observational research shows also that teachers’ responses to students’ contributions can integrate feedback on both language and content. Gibbons (2003: 247) observed teaching in a school science classroom to find multiple occasions in which the teachers, through interactions with ESL students, were able to provide scaffolding to ‘mediate between the students’ current linguistic levels in English and their common sense understandings of science ... and the educational discourse and specialist understanding of the subject’. One such form of scaffolding was the teacher recasting (reformulating) a student’s contribution to discussion and extending the meaning in the student’s contribution.

A study of language-related episodes in teacher-fronted classroom teaching in first year tertiary level accounting classes in the New Zealand context (Basturkmen and Shackleford 2015) found multiple examples of language-focused interaction. (In this setting, the classes were a mix of English L1 and non-English L1 students.) Excerpt 2 shows such an interaction in which the lecturer responds to a student’s contribution by extending the content and offering a reformulation of the ideas appropriate to the accounting disciplinary register. In this setting, dialogic interaction appeared to offer opportunities for learning disciplinary content and forms of expression in conjunction. In first year disciplinary study, all students are, to an extent, learning the disciplinary register.

Excerpt 2

Lecturer: What benefit is there to a shareholder if there are no dividends but the business is expanding?

Student: Hopefully in the future though they’ll get more.

Lecturer: Hopefully in the future there will be dividends yes and...?

Student: They'll maintain the growth value of the shares?

Lecturer: Yes, we might look for capital growth in the shares.

Dialogic interaction can also play a role in student learning of disciplinary content by students co-constructing ideas and information. Study of patterns of interaction (Basturkmen 2003) showed interaction in graduate student–peer discussion sometimes involved simple exchanges of pre-formed ideas (students appeared to present their existing ideas), and sometimes more complex exchanges in which ideas emerged through negotiation and co-construction. The latter, thus, appeared to offer opportunities for the student speakers to refine and develop their ideas through interaction. See also research findings from Tin (2003), showing how exploratory talk in group discussions seemed to help learners construct ideas and develop their thinking.

Main research methods

Observational and discourse-based studies of dialogic speaking generally include recording and transcribing authentic target events; that is, events in disciplinary study. Transcripts are examined for one or more specific features of discourse. A number of corpus-based studies of academic speaking have been conducted. Some researchers in this area have drawn on large-scale corpora, such as the Michigan Corpus of Spoken Academic English (MICASE). See, for example, Hyland's (2013) report of a comparative analysis of features relating to interactivity and personalisation in seminar and lecture discourse, and Csomay's study (2007) of lecturer and student turn-taking in American university classrooms. Some researchers have developed a small corpus of spoken language in a particular setting. See, for example, Farr's study (2003) of listener response tokens in student–tutor meetings in the discipline of language teaching in one university setting in Ireland.

Researchers have used a number of analytical approaches and frameworks to analyse speaking. These approaches include conversation analysis (Farr 2003), exchange structure (Basturkmen 2002) and speech act analysis (Crandall 1999; Félix-Brasdefer and Bardovi-Harlig 2010; Reinhardt 2010). Similar to research into speech acts in general, research into speech acts in academic interactions tends to focus on one or two speech acts of particular interest, the extent the speech act is used in one or more speaking events, the kinds of linguistic realisations used and the strategies involved.

To date, most observational and discourse-based studies have drawn on data from face-to-face settings. However, research has begun to examine computer-mediated communication (CMC) given the prevailing trend towards online learning environments. Tseng (2014), for example, investigated CMC supervisory dialogues between supervisors and the students doing masters theses in a Taiwanese context. The study investigated the collaborative nature of discourse between supervisors and students in online environments. Some studies have included an additional ethnographic strand of enquiry into the academic discourse community values and expectations for dialogue in subject teaching (Jordan 1997). For example, Tseng's study (2014) included interviews with supervisors to enquire into their reasons and expectations for collaborative dialogue with their supervisees.

Recommendations for practice

This section draws on ideas and issues discussed above in making suggestions for EAP practice. First, given the significant variation in types of event – for example, the range of events that go under the umbrella term ‘seminar’ – an important consideration for EAP course designers is to determine the types of interactive speaking events that their learners will encounter in their target departments. To do this, EAP teachers and course developers can usefully observe events in the target settings in order to try to understand the nature of the events that their students will face, and the interaction patterns and the features of discourse these events entail. EAP teachers and course developers devising instruction to help learners develop the skills and competencies to participate in dialogic interaction in higher education need to clearly identify the type of events that the students are most likely to encounter on their particular programmes of study, and the typical forms of interaction that are involved. As a secondary measure, interviews with disciplinary lecturers, teachers and tutors can enable EAP practitioners to gain an understanding of the objectives and expectations for particular event types as seen by members of academic disciplinary communities. Talking to disciplinary lecturers can be a useful means of finding out about the goals for the events and expectations regarding student participation. An important function of EAP instruction in discussion skills is to familiarise learners with the target events and their objectives (Furneau et al. 1991).

As described above, learners’ concerns about participating in seminar and discussion in disciplinary classes can vary across contexts. It is recommended, therefore, that prior to developing a new programme or course, EAP practitioners investigate needs to identify, for example, the kinds of dialogic speaking events of concern to the students in question. The postgraduate students in non-science and non-engineering disciplines reported in Kim (2006) were more concerned about leading discussions and speaking in front of others than in one-on-one situations with their lecturers. However, a different set of concerns might be found elsewhere. As described above, the relative importance (or not) of dialogic speaking skills can vary considerably according to context.

As has been noted, conventional approaches to teaching seminar or discussion skills often include some focus on speech functions, such as ‘agreeing’ or ‘disagreeing’. Some commercially produced materials include lists of speech act exponents or typical realisations, for example, formulaic ways of expressing disagreement. However, in some cases the descriptions provided may be fairly restricted (for example, limited to a few useful phrases or possible realisations for certain speech functions). Empirical studies of discourse have tended to show a more complex picture of speech function realisation. As illustrated in Excerpt 1, even a short example can provide a number of insights into how a speech function or interactional sequence can be performed in a particular context. Findings from discourse-based studies of academic events have generally indicated that speaking in dialogic interaction is generally fairly complex. For example, a disagreement speech function is not often realised by means of a simple turn-initial gambit, such as *I disagree*, and an exchange is often much more than a simple question and answer sequence.

Turns at talk and exchanges in interaction tend to be complex and multi-faceted. It is, thus, suggested that EAP instruction can usefully focus on this kind of discourse complexity. For example, the EAP teacher could lead the class in examining a transcript or recording (or segment from it) to help learners recognise and understand the function of various elements in the discourse. EAP teachers and materials producers could usefully draw on examples in corpora of academic speaking or discourse-based studies to develop more detailed

descriptions. A further possibility is for the EAP teacher to develop materials or descriptions of discourse using samples of authentic interaction in recordings or transcriptions. They may (following ethics requirements in their institutions) be able to record one or two seminars or discussions in their own institutions.

The literature indicates that dialogic interaction has an important role in disciplinary learning and socialisation. Not all learners are necessarily fully aware of this. They may not, for example, be aware of the kinds of scaffolding that teachers or lecturers can provide in responding to a student contribution to discussion (see Excerpt 2). EAP instruction has traditionally focused on 'learning to speak' (helping learners develop their speaking and discussion skills). EAP practitioners may wish to consider addition of a further focus, a focus on 'speaking to learn' (raising learners' awareness of the role of dialogic interaction in learning and socialisation). EAP practitioners could, for example, use samples of interaction to highlight specific learning opportunities in segments of dialogue (for example, the kind of learning opportunity provided by the lecturer's response in Excerpt 2), or arrange for EAP students to observe a target situation event (a disciplinary seminar or discussion class) to consider why this kind of event is held, the forms of interaction involved and how they might contribute to disciplinary learning or socialisation.

Future directions

There has been limited research into dialogic interaction in relation to learning in EAP. Skyrme (2010) has argued that research in EAP has generally focused more on written than spoken genres, but notes that interest in the value of speaking for learning is growing. Gibbons (2003) has suggested that teacher–student interaction in the content-based ESL classroom is an area that warrants further research. Research into lecturer–student and student–student interaction in the disciplinary classroom (in either school or higher education levels) also appears warranted. There is a need to develop understanding of ways that learning, including learning the disciplinary register, a concern of central concern in EAP, can be supported by interaction in disciplinary class discussions and question–answer exchanges. Information on the opportunities that such interaction can hold for learning can usefully inform the EAP speaking curriculum.

Few would dispute that academic language use varies in different disciplines. The language used to write or talk about science is not the same as that used to talk about mathematics (Schleppegrell 2001). Although there has been considerable research to understand the nature of disciplinary differences in academic writing, the same cannot be said of research into dialogic forms of academic speaking. It is generally understood that dialogic event types vary across disciplines. For example, business studies often include case study discussion classes. However, at present there is little information about disciplinary uses of language in dialogic interaction. For example, little is known about the extent that interaction in similar speech events is characterised by different linguistic choices, speech functions or exchange patterns along disciplinary lines. Might the ways students typically formulate contributions to discussions linguistically vary in hard and soft sciences, for example? Might the tendency for use of a particular speech function vary according to disciplinary area? Do exchanges tend to be longer and more complex in class discussions in humanities and social sciences or in natural science and engineering?

Very little research had focused on learners' development of EAP speaking skills compared to other skill areas (Robinson et al. 2001). This lacuna may be related to the difficulty of assessing the development of interactive speaking skills. Assessment might require setting

up tasks in which students work together in group discussions or observations of students' performance in simulated or actual seminar or tutorial type events, tasks in which a student's performance may impact on the performance of another or others. Participation in dialogic interaction is a key skill area for some groups of EAP learners; for example, research suggests this is often the case at postgraduate level. Studies of the value of dialogic speaking for learning within EAP remain scant. Research into how students acquire academic dialogic speaking skills is needed. Research could endeavour to assess the ways that formal EAP instruction supports learning or to identify developmental changes in student performance data (for example, contributions to discussions made by students over time when immersed in disciplinary study). A further possibility might be to search for evidence that students have noticed linguistic features of dialogic speaking. Students might, for example, be asked to keep a learning journal of their observations and developing understanding of features of dialogic speaking in disciplinary events, such as seminars.

To date, most EAP-oriented research in the area has focused on communication in face-to-face interaction. However, with the increasing use of online learning environments, it is expected that there will be more research into dialogic interaction in computer-mediated discourse. Studies may draw on synchronous computer-mediated dialogues, text-based chat sessions, video conferencing sessions and Skype type communications. Depending on the research aims, study could be made of student–student interaction, lecturer–class interaction or one-on-one lecturer–student communication.

Further reading

Bowles (2012); Feak (2013); Robinson et al. (2001)

Related chapters

- 26 Seminars
- 30 The academic poster genre
- 36 EAP pedagogy in undergraduate contexts
- 37 EAP support for post-graduate students
- 42 Needs analysis for curriculum design

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13

LISTENING TO LECTURES

Michael P.H. Rodgers and Stuart Webb

Upon entering university, students encounter many aspects of academic life to which they may have been previously unaccustomed, not least of which is the language specific to the context. For those students who are language learners (LLs) studying abroad, this can be especially challenging because academic English may be different from their previous experience with the language (Hyland 2009), and they must quickly become proficient in the production and comprehension of academic discourse across all four language skills to be successful in their studies. However, comprehension of academic spoken English, such as that found in lectures, may be one of the most challenging aspects of studying at English-medium universities (Dang and Webb 2014; Flowerdew 1994). Moreover, academic listening comprehension is vital because so much of what university students need to understand and learn is conveyed through the lecture (Hyland 2009). Although LLs will likely have previously developed their listening skills and knowledge of the spoken form of the language through the study of English for academic purposes (EAP), at university they face the daunting task of concentrating on and understanding long stretches of academic spoken English from lecturers who do not make allowances for the L2 listeners in the class (Field 2011).

In this chapter, the lecture is conceptualized as a primarily monologic learning event that takes place in a classroom with 40 or more students (Hyland 2009; Lynch 2011). Although the focus of this chapter is on listening comprehension in lectures, much of what is presented can certainly be applied to listening in other academic situations (e.g., seminars, tutorials, group discussions, and meetings with staff) where comprehension of spoken discourse is necessary (Lynch 2011).

Listening in an academic context

In order for students to comprehend a lecture, they must invoke the processes associated with general listening comprehension. These are fundamentally inferential processes in which the listener constructs meaning from available knowledge sources (Lynch 2006). Knowledge sources can be differentiated as either linguistic or non-linguistic. Linguistic sources of knowledge can include phonological, lexical, syntactic, semantic, and discourse knowledge. Non-linguistic sources can include topical, contextual, and world knowledge (Buck 2001). The different types of knowledge are utilized through top-down and bottom-up processing in a complex interaction that the listeners use to create a mental representation of the input (Park 2004; Vandergrift 2004). Bottom-up processing begins with decoding phonemes to identify individual words and construct a literal understanding of what is spoken. Top-down processing is dependent on the background knowledge students bring to the listening event.

Background knowledge allows the listener to make inferences based on what they hear (Long 1990). Although the contributions from top-down and bottom-up processing are not constant and their relative contribution can change within different parts of a listening event, these two processes are used simultaneously to construct meaning (Brindley 1998). When sufficient information has been processed through top-down and bottom-up processing, comprehension can occur (Buck 2001).

There are a number of factors that can affect the ability of LLs in academic settings to successfully use bottom-up processing. These include familiarity with the accent of the speaker, the clarity of pronunciation, the presence of hesitations, the extent to which reduced forms are used, the occurrence of the prosodic elements of speech, the speech rate of the speaker, and the length of the listening event (Buck 2001; Jordan 1997; Lynch 2011). Because the ability to recognize individual words and formulaic sequences and recall their meanings is key to the utilization of bottom-up processes in aural texts, the vocabulary knowledge of the listener is another factor that has been shown to affect bottom-up processing, and consequently listening comprehension (Buck 2001). Research has indicated a relationship between comprehension, LLs' vocabulary size, and the percentage of words that are known in an aural text (Bonk 2000; Milton et al. 2010; Stæhr 2009; van Zeeland and Schmitt 2013). Moreover, insufficient vocabulary knowledge is believed to be one of the largest factors contributing to a lack of comprehension of academic spoken English (Goh 2013; Vidal 2011).

Through top-down processes, LLs make use of what they already know to contextualize and understand what they hear (Lynch 2006). There are a number of different sources of background knowledge that can affect the comprehension of academic spoken discourse (Lynch 2011), but two are of particular relevance for EAP programs. The first is knowledge of the content of the lecture. This may come as a result of prerequisite classes attended before the course, participating in previous lectures in the course, or completion of the pre-reading assigned before the lecture (Bruce 2011). Developing content knowledge is often outside the purview of most EAP programs, but those that cater to technical fields may help to develop background knowledge through teaching discipline-specific content. The second source is knowledge of the structure of the discourse genre. In this case, understanding the structure of academic lectures can help students to improve their listening comprehension. For many LLs studying abroad, the differences between the academic culture of their home country and the country they are studying in can lead to unfamiliarity with how information is presented in lectures and what is expected of students in a lecture (Nattinger and DeCarrico 1992). EAP programs have a responsibility to teach students about lecture discourse structure and how information is conveyed in this genre of discourse.

Although comprehension of lectures is reliant on general listening processes, academic listening is obviously not a purely aural experience. Students also have visual sources of information that they can make use of to increase their comprehension. Research has indicated that one visual component of the lecture, paralinguistic information, can assist comprehension (Sueyoshi and Hardison 2005). A study by Ockey (2007) investigated the differences in the way LLs reacted to having either images or video of the lecturer present when listening to two university lectures. The time the ESL students spent observing the sources of visual input was measured, and the students reported on whether they believed the imagery helped or distracted them, as well as which visual cues they used while listening. Ockey found that the majority of the students spent considerably more time watching the video than looking at the still images. The learners did not report using any visual cues with the stills but reported using a variety of cues with the video to gain more information about the lecture. These cues included lip movements, hand motions, facial gestures, and body gestures.

The information presented aurally in lectures is also often accompanied with another visual source of information in the form of slides from presentation software such as PowerPoint (Field 2011; Jordan 1997). While the amount and type of information included on lecture slides is very much related to the individual lecturer and the academic discipline, the slides by and large support the aural input in a summative role. Main points are presented on the slides, with the lecturer paraphrasing and elaborating on the written information. Intuitively this may seem like something that would improve comprehension for LLs but this would likely depend on the degree to which there was conformity between the aural and visual information. However, incongruity between what is presented on the screen and what the students hear may lead to comprehension difficulties, because it can be cognitively taxing for L2 listeners to link the two forms of input (Field 2011).

For teachers, there is often the dilemma of whether to concentrate on bottom-up or top-down skills when preparing students for academic listening situations in English. The reality is that lower proficiency L2 listeners need help with both. Less proficient listeners are weaker in bottom-up processing and need more contextual support early on to make up for a lack of automatic linguistic decoding skills (Lynch 2006; Tsui and Fullilove 1998). They need to learn to lessen their reliance on prior knowledge, or using guessing from context strategies, and increase their ability to rapidly and accurately decode linguistic input.

One area of EAP instruction that can help improve comprehension through bottom-up processing is vocabulary instruction. A principled approach to teaching vocabulary involves developing students' vocabulary size to allow them to cope with the lexical challenges of academic spoken discourse. This can include teaching vocabulary from frequency lists, as well as words appropriate for academic discourse or a specific discipline. EAP teachers also need to ensure that students have appropriate knowledge of the discourse genre that they are trying to understand and learn from (Hyland 2009). This means that EAP students should be taught what a lecture entails in the context that they are preparing to study in, and how lecturers in this context present the information that is most important to the students. In addition to time spent developing LLs' ability to make use of the processes involved in listening, EAP programs should also devote time to preparing students to better utilize both the aural and visual information they encounter in lectures (Field 2011; Jordan 1997; Lynch 2011). This involves direct instruction in note-taking skills (Flowerdew 1994), and the obvious benefits that accompany the process of noting and recording the salient information presented by a lecturer.

Vocabulary knowledge and lecture comprehension

Insufficient vocabulary knowledge has been identified as a major factor contributing to unsatisfactory comprehension of academic spoken English (Evans and Morrison 2011; Stæhr 2009). To address this, it is advisable for EAP programs to set vocabulary learning as a principal goal towards preparing LLs for academic listening. However, in order for an EAP program to develop LLs' lexical knowledge, it is first essential to have an idea of the vocabulary size necessary for comprehension of a lecture.

Two recent studies have investigated the lexical coverage of academic listening texts (Dang and Webb 2014; Webb and Paribakht 2015). Lexical coverage, or percentage of words known in a text, is useful because it indicates the vocabulary size necessary for comprehension of a text. Of all factors affecting comprehension, coverage may be the most influential (Laufer and Sim 1985). Drawing on the British Academic Spoken English (BASE) corpus, Dang and Webb (2014) investigated the vocabulary size necessary to reach two levels of lexical

coverage. They used the benchmarks of 95 percent and 98 percent coverage to represent minimal and ideal coverage (Laufer and Ravenhorst-Kalovski 2010) because these levels have been identified in other studies of lexical coverage (Hu and Nation 2000; Nation 2006; cf. Schmitt et al. 2011; Stæhr 2009; van Zeeland and Schmitt 2013). Dang and Webb found that, on average, a vocabulary size of 4,000 word families plus proper nouns and marginal words provides 95 percent coverage, and 8,000 word families plus proper nouns and marginal words provides 98 percent coverage of academic spoken English.

These findings are supported by those of Webb and Paribakht (2015) who investigated the lexical profiles of listening passages from an English proficiency test. The passages, which included interviews, announcements, dialogues, and short lectures, were taken from CanTEST which is used for admission purposes at many Canadian universities. They found that a mean vocabulary size of 4,000 word families was necessary to reach 95 percent coverage, and knowledge of 10,000 word families was needed to reach 98 percent coverage. The findings from these two studies indicate that learners need to know 1,000 to 2,000 more word families to reach 95 percent and 98 percent coverage of academic spoken English compared with general spoken English (Nation 2006; Webb and Rodgers 2009a, 2009b). This is supported by an earlier study that found that learners need a larger vocabulary size to deal with academic discourse than they do for general conversation (Adolphs and Schmitt 2004).

Even with an idea of the vocabulary size necessary for comprehension of academic spoken language, setting a target vocabulary size for EAP students remains difficult. This is because the findings from the studies by Dang and Webb (2014) and Webb and Paribakht (2015) also indicated that the vocabulary size required for comprehension can vary considerably by text and academic subject. Dang and Webb, for example, found that the vocabulary size necessary to reach 95 percent and 98 percent lexical coverage in the life and medical sciences field was 5,000 and 13,000 word families. However, 95 percent coverage was provided by 3,000 word families and 98 percent coverage by 5,000 word families in the social sciences. Webb and Paribakht also observed substantial variation between the lexical profiles of the listening passages for different test items. This is not surprising because variation in the vocabulary size necessary to reach the same levels of coverage has been observed for different texts and genres in other forms of spoken discourse including movies (Webb and Rodgers 2009b) and television programs (Webb and Rodgers 2009a). These findings indicate that students that may have the vocabulary knowledge necessary for adequate comprehension of lectures in one discipline may have difficulties with comprehension of lectures from other disciplines (Hyland and Tse 2007).

The differences in lexical demands of the academic disciplines indicate how difficult it might be for EAP teachers to set a blanket vocabulary goal for their students. Moreover, the lexical demands between lectures from the same course are also likely to vary; having adequate comprehension of one lecture does not ensure that the level of comprehension of other lectures will be similar. This indicates that developing vocabulary knowledge is likely critical for comprehension of academic spoken discourse.

Teaching vocabulary from word lists may be more effective and efficient than to try and raise L2 learners' vocabulary knowledge to 4,000 or 5,000 word families. The best known and most widely used list of academic vocabulary is the Academic Word List (AWL: Coxhead 2000). The AWL includes the most frequent general academic vocabulary (570 word families). However, while learning the AWL may be an effective way of reducing the lexical demands of academic written text, little is known about the extent to which knowledge of the AWL can improve comprehension of academic spoken text. Dang and Webb (2014) examined the potential value of the AWL for improving comprehension of academic spoken

English and found that the AWL accounted for only 4.41 percent of the tokens in the lectures they analyzed. They point out that this is about half the coverage the AWL provides in other studies of academic written corpora (cf. Coxhead 2000; Hyland and Tse 2007). Therefore, learning the AWL may not have the same value for understanding academic spoken English that it does for comprehension of academic written English. The amount of coverage that the AWL provides for academic spoken English was also found to vary considerably by discipline.

There is little in the way of pedagogically friendly alternatives to the AWL, especially for spoken discourse, but a number of lists of academic formulaic language have recently been developed. The Academic Formulas List (Simpson-Vlach and Ellis 2010) is made up of 607 three-, four-, or five-word phrases. Two hundred and seven of these phrases are core for both written and spoken academic language, and a further 200 items represent the top spoken formulaic sequences. In order to facilitate the list's use in EAP programs, the sequences are ranked according to a measure of utility called 'formula teaching worth', and are classified in a pragmatic functional taxonomy (e.g., expressions for framing attributes, expressions for specifying quantity). Another larger list is the Academic Collocation List (Ackermann and Chen 2013) which consists of the 2,468 most frequent and pedagogically relevant lexical collocations. Collocations in this list are defined as words that co-occur plus or minus 3 words from the node word and include noun, verb plus noun/adjective, verb plus adverb, and adverb plus adjective combinations. While the list does not differentiate between the collocations that appear more commonly in spoken academic language, the Pearson International Corpus of Academic English, from which the list is compiled, is made up of 37 million words of academic written and spoken texts from five English-speaking countries.

These broad-spectrum lists of word families and formulaic language are useful for teachers in EAP programs because they provide guidance for choosing items that are the most beneficial for comprehension of academic discourse. However, vocabulary that is important for one academic discipline may not be as important for another (Charles 2012). For this reason, discipline-specific or technical vocabulary lists are important pedagogical resources for LLs preparing to study a specific subject (Hyland and Tse 2007). While there are numerous studies that identify the technical vocabulary for different disciplines including those for medicine (Wang et al. 2008), engineering (Ward 2009), chemistry (Valipouri and Nassaji 2013), and nursing (Yang 2015), there is still the need for more lists across a wider range of academic disciplines.

Studies examining the vocabulary in academic spoken texts underscore the need for sufficient vocabulary knowledge to increase the possibility of lecture comprehension. The research points to the vocabulary size a student in an EAP program should set as a learning goal. Dang and Webb (2014) recommend knowledge of the most frequent 4,000 word families (95 percent coverage) as the minimum vocabulary size a learner should have to adequately comprehend academic aural texts. Learners, however, can reach 95 percent coverage of lectures and seminars with a vocabulary size of the most frequent 3,000 word families and knowledge of the AWL. Similarly, once an EAP student has a vocabulary size of 3,000 words, another option may be to choose to learn the vocabulary from a list of technical vocabulary. It should be noted that studies of the lexical challenges of understanding academic speech do not account for other factors that may affect comprehension. However, support for comprehension would also come from communication strategies, handouts, pre-reading, lecture slides, dictionaries, and viewing gestures and facial expressions.

The challenge for EAP teachers is to identify the list of words that would be most useful for their students' understanding of their future academic discipline. Because a vocabulary size

of at least 4,000 words is likely required for comprehension of academic spoken discourse, and there is insufficient classroom time to teach thousands of words, it is recommended that students are also encouraged to learn strategies to effectively and efficiently learn vocabulary on their own. Maximising the opportunities for encountering and practicing recognition of the spoken form of words may be of greatest benefit in improving vocabulary knowledge, and in turn comprehension of lectures (Field 2008; Lynch 2011).

The discourse of lectures

The discourse structure of academic lectures is, at its simplest, designed to inform (Lee 2009), and if students are experiencing comprehension difficulties then its objective is not being realized. Successful academic listening has long been linked to the ability to identify relationships between elements of lecture discourse, and to recognize the role of discourse markers in indicating the structure of a lecture (Crawford Camiciottoli 2004; Richards 1983; Vandergrift 2011). Compared with other types of spoken discourse, discourse markers in lectures have a more prominent role, occur more frequently, and provide more listening support (Biber et al. 2004; Nattinger and DeCarrico 1992). Students need to be able to recognize these discourse markers in extended discourse, take notes, and incorporate other information sources such as the lecture slides or supplemental material from hand-outs (Flowerdew 1994). The ability of an LL to do this is very much dependent on their knowledge of the discourse that is specific to the academic setting and applying this knowledge to understand how the lecture is likely to develop (Goh 2013). This, in turn, can lead to improved comprehension, note-taking, and recall of lectures (Jung 2003).

There are, however, a number of factors that may make recognition and use of lecture discourse markers difficult. The first factor is that the type and frequency of occurrence of the discourse markers employed is dependent on the style of lecture (e.g., conversational, rhetorical, reading), and the style employed is often related to the discipline and the country in which a lecture takes place (Dahl 2004; Hyland 2006; Lin 2012). The second is that even when learners recognize the discourse markers, the unique pragmatic function (understanding the function of an utterance and its intended effect) of some markers in lectures may mean that they are serving a function in the lecture unfamiliar to the LLs' (Nattinger and DeCarrico 1992). This highlights the importance of L2 learners understanding the unique pragmatic characteristics of lectures to interpret what is said and to react appropriately (Goh 2013). The third factor is that students in lectures are not always aware that they are experiencing comprehension difficulties. Due to insufficient knowledge of the discourse markers for spoken academic language, students miss relationships signaled by these markers (Nattinger and DeCarrico 1992).

Recent corpus-based studies provide information that can be used by EAP programs to alleviate the difficulties that some L2 learners experience. The results from research by Barbieri (2015) illustrate how the use of discourse markers can be dependent on the context in which the lecture takes place. Barbieri investigated the relationship between the use of involvement markers in lectures and three situational factors: academic discipline, level of instruction, and class size. Involvement was operationalized by the presence of certain linguistics markers (e.g., intensifiers, slang, confirmation checks) deemed to represent the interpersonal dimension of classroom discourse. Barbieri found that the use of these markers is widespread regardless of the situational factor, with more involvement markers present in small humanities and social sciences classes, and in graduate courses. This indicates that there can be a high degree of interactivity in lectures and seminars in the North American context,

and EAP instruction would be well served to raise students' awareness of how requests for involvement are marked in the classroom. However, teachers should also inform EAP students that the amount of interaction asked of them may vary according to their discipline, the size of the class they are attending, and that the country they are studying in may have a different culture of interactivity in lectures from their own.

The value of understanding the pragmatics of lectures is illustrated in a pair of studies by Deroey and Taverniers (2012) and Deroey (2015) that investigated the use of metapragmatic markers used to indicate the importance or relevance of points made in lectures. Deroey and Taverniers identified a wide range of relevance markers with metalinguistic nouns with the link verb *is* (e.g., *the key is...*) and verbs with clausal complementation (e.g., *I need to stress that this is...*) occurring most frequently. Deroey found that most importance markers were oriented towards the listeners (e.g., *you should bear in mind...*) or towards the content (e.g., *the point is...*) over orientation towards the speaker (e.g., *I want to stress...*) or the speaker and listeners (e.g., *I ask you to bear in mind...*). The researchers highlight the significance of this line of research by pointing out that while teaching EAP students to recognize important points in a lecture is crucial, EAP materials tend not to feature metapragmatic markers based on corpus findings but include archetypal markers which are actually relatively uncommon (e.g., *you should note...*). They state that while these markers may not come intuitively to mind for EAP instructors or material writers, the value of these authentic and multifunctional discourse markers for lecture comprehension is obvious.

A study by Martinez et al. (2013) highlights the difficulties that students can have identifying discourse markers in lectures. They examined the linguistic patterns that lecturers in British universities use to define key terms or concepts, and found that there was considerable variation and complexity in the ways this was achieved. Methods of defining terms fell into three categories. The first was to use phrases where the intention to explain the terms is relatively transparent. This is accomplished through the use of verbs such as *call*, *define*, and *mean* (e.g., *...by which I mean...*) but these occurred relatively infrequently. More common were phrases that did not include the more explicit defining verbs which would make it less obvious for a listener to discern that something was being defined. The final method was through long, oblique discussions of the term in question with little overt signaling that a concept was being defined. The results from this study illustrate how students may miss relationships signaled by the discourse markers. To alleviate this, LLs need to be taught that concepts may be defined not using the explicit terms that are frequently taught in EAP textbooks, but, rather, lecturers may use more subtle and less obvious means.

These corpus-based studies provide useful guidance about the structure of lecture discourse that should be presented to L2 learners. However, the reality is that most EAP listening programs are based upon commercial textbooks. The downside of this is that these textbooks tend to present the structure and language of the lecture as simply organized and transparently coherent. Actual lectures, however, are a much less tidy form of discourse. Based around this simplified conceptualization of spoken academic discourse, EAP listening textbooks are commonly made up of note-taking activities based on short scripted lectures (Flowerdew and Miller 1997). Ideally, however, students should be exposed to longer samples of authentic lectures (preferably from the academic discipline of the students' chosen field), allowing them to encounter relevant and authentic discourse markers as they occur in spontaneously delivered, non-scripted spoken language (Field 2011; Flowerdew and Miller 1997; Nattinger and DeCarrico 1992).

Note-taking in lectures

While there may be more to academic listening than the limited definition of attending a lecture and taking notes (Feak and Salehzadeh 2001; Lynch 2011; Vandergrift 2004), recording the information presented in a lecture in note form is still a significant part of what students do in the university setting. In its simplest form, note-taking is transcribing what the lecturer says or writes on the board (Jordan 1997). In reality, note-taking is a more personal and complicated process that serves to enhance the clarity of the information presented through summarization of long stretches of information, paraphrasing the lecturer's words, and highlighting certain items to make them more salient (Jordan 1997). Ultimately, students need a set of notes from which they are able to review and apply the information presented in the lecture at a later date. Note-taking can be a particularly challenging activity for EAP students given that they must simultaneously integrate aural input with the visual input and decide what to record in their notes (Gruba 2004). There are, however, a number of benefits of note-taking beyond having a record of the lecture available for posterity that may benefit the EAP listener. Note-taking has been shown to provide opportunities for the students to organize the lecture content as they listen, aid the memory's encoding process (Chaudron et al. 1994; Dunkel and Davy 1989), maintain attention during the lecture, and consolidate knowledge of the information encountered in the lecture pre-reading (Dunkel and Davy 1989).

Producing a quality set of notes is very much a skill that EAP students need to develop. This is important because the quality of a student's notes has been shown to correlate with better long-term recall of the lecture information (Chaudron et al. 1994). To take good notes, the student must learn to distinguish between the more and the less important information presented in a lecture, and then record the information deemed significant at a point in the lecture where they can avoid missing other equally or more important information. The goal is to record this information in a brief and clear format, utilizing a consistent personal shorthand allowing for later utilization of the notes (Chaudron et al. 1994; Jordan 1997). It is clear that EAP students would have to be proficient at L2 listening in order for them to effectively take notes in this manner. Research by Song (2012) highlights the interconnectivity of listening ability and note-taking. Song found that ratings of note quality taken during short lectures were good indicators of academic listening proficiency. The ability to identify and record topical ideas was shown to be a better indicator of listening proficiency than recording details or inferential information. These findings indicate the importance of explicit note-taking instruction in EAP programs, in particular to have learners not only record details like a stenographer, but to more importantly discern and document the topics and sub-topics presented.

Some of what has been previously described as important for note-taking may now be out-dated, however. The widespread use of PowerPoint and other recently developed software has changed the nature of what students do in a lecture (Lynch 2011; Vandergrift 2007, 2011). In many cases, the lecture materials are made available on learning management systems such as Blackboard or Moodle prior to the class, and students take notes directly on the lecture handout or printed copies of the actual slides. For the EAP student, this reduces the strain of having to record all the important information. However, it may change the type of information that needs to be recorded and may be even more taxing for the L2 listener. Because lecturers tend not to read directly from their slides but rather paraphrase them while embellishing main points with definitions and examples, note-taking has become the ability to recognize the spoken information that is not presented on the slides (Field 2011).

In general, EAP students need to be trained in note-taking skills (Flowerdew 1994). Although EAP students would have an easier time understanding lectures if they were all structured the same way, they are more likely to encounter a variety of structures depending on the academic discipline and the lecturer. EAP teachers should endeavor to raise awareness about the unique types of lectures that students might encounter in university, and how the information is presented differently in them (Hyland 2009; Jordan 1997). As well, the recent shift in the way that lectures are delivered, and the resulting change in the way notes are taken, means that EAP students should receive instruction in reading PowerPoint slides and taking notes from them. From an academic listening perspective, the lecturer's paraphrasing of the information presented on the slides may be more difficult for learners to comprehend (Field 2011) so direct instruction in extracting the relevant information from paraphrased lecture materials is vital.

Future research directions

Research investigating the lexical coverage provided by the AWL indicates that it does not offer the same support for comprehension of academic spoken text that it does for academic written text. While formulaic language lists have been developed to be beneficial for understanding both spoken and written text, there is a need for an Academic Spoken Word List (ASWL) (Dang and Webb 2014). An ASWL would ideally be made up of a manageable number of word families that provide good coverage of spoken academic texts across a variety of university contexts. The difference in coverage provided by the AWL across different disciplines also signals a need for the development of more technical vocabulary lists especially those that have specific relevance for spoken discourse.

The results from recent corpus studies provide guidance for teachers attempting to alleviate the difficulties that EAP students may have with the recognition and application of discourse markers found in lectures. However, they unfortunately do not indicate how their findings and recommendations bear out in practice. To this end, there is a need for classroom-based research on the effectiveness of teaching discourse markers, and the effects of this on lecture comprehension (Martinez et al. 2013). In addition, there is a lack of studies that investigate whether the use of discourse markers differs from country to country and by academic discipline (Deroey and Taverniers 2012; Martinez et al. 2013). Findings from this line of research would allow EAP teachers to tailor their instruction of lecture discourse to the individual needs of their students.

Because the way that lectures are delivered has changed, research into how this affects note-taking and listening comprehension needs to be examined (Lynch 2011; Vandergrift 2011). Lectures are becoming increasingly more multimodal with the use of PowerPoint slides, integrated video and audio content, and embedded hyperlinks to externally hosted content such as webpages and podcasts. Questions that can drive this line of research include:

- 1 Does taking notes by annotating copies of presentation software slides affect lecture comprehension compared with more traditional approaches of note-taking?
- 2 Because the proliferation of tablets and notebook computers in the classroom has changed the way that lecture information is recorded, does taking notes using these devices change the quality, type, and amount of notes taken, and does this have implications for lecture comprehension for EAP students?
- 3 What are the implications for the different aural and visual input sources present in a multimodal lecture for note-taking and listening comprehension in general?

- 4 What are the keys to taking notes from PowerPoint-based lectures that can be taught to EAP students? In relation to this, are there different styles of PowerPoint presentations that are more prevalent in certain academic disciplines, and how does that affect the note-taking training?

Further reading

Goh (2013); Lynch (2011)

Related chapters

- 14 Acquiring academic and disciplinary vocabulary
20 Multimodal approaches to English for academic purposes
24 Lectures
26 Seminars

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14

ACQUIRING ACADEMIC AND DISCIPLINARY VOCABULARY

Averil Coxhead

Introduction/definitions

Vocabulary in English for academic purposes (EAP) is a rich and fast moving area of endeavour, which is growing rapidly beyond the historical areas of English as a first language contexts such as the USA, UK, Canada, Australia, and New Zealand, to English as a second or foreign language contexts (Evans & Morrison 2011), including Spain, Turkey, Taiwan, and China, for example. Acquiring academic and disciplinary vocabulary is an important task of both first and second language learners of EAP. This task involves learning to recognise and use vocabulary that is closely tied to the content of a particular field of study. Woodward-Kron (2008: 246) points out the close relationship between a student's disciplinary knowledge and the specialised language of the discipline. However, as Flowerdew (2014: 6) states, there is a major gap in the EAP literature, in particular of studies that 'go beyond simple frequency counts and also consider learnability and teachability'.

Academic vocabulary has been classified in many ways in the literature over the last decades. It has been divided into English for general academic purposes (EGAP) and English for specific academic purposes (ESAP). Academic vocabulary can be seen as a layer of vocabulary that occurs across a range of academic subject areas, meaning students would encounter this vocabulary in biology or chemistry, linguistics or law. There is argument about whether there is a core of academic vocabulary (see Hyland & Tse 2007), for example, because occurrence of words in a particular area does not necessarily mean that these items are used in the same way or with precisely the same meaning in different subject areas.

Disciplinary vocabulary is, in some ways, somewhat easier to define than academic vocabulary. One element of definition of disciplinary vocabulary is that it has a narrow range of occurrence within a particular subject area. That is, it occurs in texts in particular subject areas but does not tend to occur outside those texts. The frequency of disciplinary lexical items in texts is also important to the definition. If items are shared with other discipline areas, higher frequency of occurrence in a particular discipline can be seen as a marker of disciplinarity (Chung & Nation 2004).

Disciplinary vocabulary is often referred to as specialised, technical, semi-technical, or sub-technical. These terms at times signify differences in definitions of what can be

considered discipline-specific vocabulary. For example, Mudraya (2006: 242) defines ‘sub-technical vocabulary’ as lexical items that have both non-technical and technical senses in engineering. In EAP studies, disciplinary vocabulary refers to particular subject areas within a university. Hyland (2008), for example, analysed lexical bundles in professional and student writing in four disciplines: electrical engineering, biology, business studies, and applied linguistics.

At times, disciplinarity might seem quite clear cut, as in the case of words such as *photosynthesis*, but other examples suggest difficulties with definitions, for example with lexical items such as *clinical* (compare *clinical trials* with *a clinical decision*), and proper nouns such as *Parkinson* or *Parkinson’s* where the family name of a researcher becomes the name of a disease or a medical condition. Interestingly, the number of proper nouns can vary in texts, depending on the discipline. For example, in a US-based middle school social studies and history corpus, proper nouns make up almost 6 per cent of texts (Greene & Coxhead 2015), and includes words such as *Gettysburg* which is both a place name and a major historical event.

Chung and Nation (2004: 104), in an investigation of methodological approaches to identifying technical vocabulary, point out that there had been few studies of technical vocabulary in texts. The authors suggest that this gap is because the field suffered from a lack of agreement on the nature of this vocabulary and how it could be reliably counted. Early estimates posited about 5 per cent of a text, or roughly 1,000 words or fewer, in a subject area would be technical in nature (Coxhead & Nation 2001: 252). However, more recent work suggests that even larger percentages of academic texts might be technical. Chung and Nation (2003) identified 30 per cent of an anatomy text and 20 per cent of an applied linguistics text as technical vocabulary.

Academic and professional studies tend to be high-stakes environments for learners. Being able to use and understand specialised vocabulary can signal membership of an academic or professional field (Wray 2002). For language learning in general, Milton (2009: 64) argues that, ‘building a large vocabulary of several thousand words appears to be an absolute condition of being able to function well in a foreign language’, and that 3,000 words or more are needed by learners ‘to approach full comprehension’ of the texts they are reading. Because of the large number of lexical items that students need in order to deal with their academic studies in English, research into this field can support learners and teachers in making decisions on where to put their efforts and time, both in class and for independent study. These decisions are usually driven by the needs of the learners.

What is the vocabulary learning burden of academic texts?

Recent research has drawn on the concept of the ‘vocabulary load’ of academic texts. That is, how many word families are there in a text? A word family means the inflections and derivations of a word. For example, the word family for *invest* would include *invests*, *invested*, *investing*, *investment*, *investments*, *reinvest*, and so on. The vocabulary load of a text can be determined by the percentage of coverage of a text using word lists. Nation (2006) found that 98 per cent coverage of academic written texts is reached at 8,000–9,000 word families, using his word lists based on the British National Corpus (BNC). Recent work by Hsu (2011) looks into the vocabulary thresholds of textbooks and research articles for business students, while Hsu (2014) considered the vocabulary load of engineering textbooks in Taiwan. Vocabulary load analyses can be extremely enlightening about texts used in classrooms. Coxhead, Stevens and Tinkle (2010) found that the vocabulary load of a science textbook used in the final year of secondary school education in New Zealand was over 20,000 word

families. It is quite unlikely that any student (native or non-native English speaker) reading that text would have a vocabulary size knowledge of over 16,000 word families (Coxhead, Nation & Sim 2015).

More specialised academic texts tend to need more word families to reach 98 per cent, as evidenced by a study from Radford (2013), who compared the vocabulary load of academic journals in computer science in the 1950s with journals in computer science in the 2000s. Radford counted proper nouns in the texts separately (see above). He found that 9,000 word families from the BNC covered 86.41 per cent of his approximately 2,290,000 corpus of journal articles, with proper nouns covering 2.94 per cent of the corpus. Radford (2013) also noted that from the 1950s to the 2000s, articles have almost doubled in length and around one-third more word families were used in the 2000s than in the 1950s. Radford's study suggests that there are items outside the first 20,000 word families that might be specific to computer science, but much more research needs to be done in this field as in other areas of specialisation. This study goes some way towards documenting lexical change in a rapidly growing and specialising academic field.

The gap between what vocabulary learners need to know to understand their academic texts and lectures in English is highlighted starkly in a study by Ward (2009a). Ward tested the vocabulary knowledge of undergraduate engineering students in Thailand, using the first 2,000 words of Michael West's (1953) General Service List (GSL) (West 1953) and Ward's own (1999) 2,000 word Engineering Word List (EWL). Ward (2009a) found that the vocabulary knowledge of the approximately 250 learners in his study represented roughly half the GSL and less than half the items on the EWL. Ward makes a strong case for teaching in his context to be much more focussed to better serve the needs of these learners. Another demonstration of the importance of vocabulary in university context is Harrington and Roche's (2014) use of the measurement of vocabulary knowledge (in this case, vocabulary size, and speed of response) as a way to identify at-risk students in an English-as-a-medium-of-instruction university in Oman.

Reading, writing, vocabulary, and EAP

Reading for academic purposes in the course of university study can involve exposure to several million running words each year. The nature of the words encountered while reading is a fundamental topic of research into academic and disciplinary language. An example of this research is work done by Miller (2010), whose US-based study analysed the percentage of the Academic Word List (AWL) (Coxhead 2000), as well as readability/complexity and syntactic features of the texts in two corpora: university textbooks and English as a second language (ESL) reading books. The textbook corpus contained six disciplines: business, humanities, natural science, social science, education, and engineering. In the AWL comparison, the researcher found that roughly half as many AWL items were in the ESL reading materials as were in the university level texts, which Miller (2010) points out means that on an average page of 400 words, an ESL textbook would contain approximately 15 fewer AWL items per page than a university textbook. The researcher comments,

It is possible, then, that the ESL textbooks are providing students neither the exposure to the range of academic vocabulary nor the number of encounters with academic vocabulary that they may need to develop successful comprehension of university textbooks.

(Miller 2010:39)

Vocabulary is also important for writing for EAP, particularly as writing is the most prevalent form of assessment at tertiary level. Storch and Tapper (2009) investigate how an EAP course impacts on academic vocabulary use in postgraduate writing at an Australian university. They find evidence of increased usage of academic vocabulary items (from Coxhead's 2000 AWL) and appropriate use of those items by the participants in their writing. The authors suggest that various aspects of the course might have supported students' development of academic vocabulary, including reading in specialised subject areas, a direct focus on academic vocabulary through teaching, feedback on writing, and discussions during the course. In a New Zealand study of the use of vocabulary in writing by EAP students, Coxhead (2012) examined essays and reading texts together with student interviews to find out more about the decisions these writers made on vocabulary use in their writing. She found a range of factors that affected vocabulary use in writing, including the academic audience for student writing, the beliefs of the writers themselves about academic and discipline specific vocabulary, their risk-taking behaviours, and how sure the writers felt about their vocabulary knowledge.

Critical issues and topics

Three topics will be discussed in this section, focussing on the acquisition of academic and discipline-specific vocabulary. These topics are: identifying this vocabulary; high frequency words with specific meanings in academic or discipline specific texts; and multi-word units and metaphor in academic texts.

Identifying and categorising academic and disciplinary vocabulary

Identifying and categorising academic and disciplinary vocabulary for EAP is important for setting learning goals, checking progress, and helping tomorrow's language learning today. Word list research has gained momentum as corpus linguistic techniques and tools have been developed and made readily available. Early research on word lists for academic purposes include Xue and Nation's (1984) University Word List, which was an amalgamation of four existing word lists. Coxhead's (2000) Academic Word List used a corpus-based approach to identify 570 word families that occur outside the first 2,000 words of West's (1953) GSL, and across 28 subject areas in four academic disciplines. See Coxhead (2011a) for an overview of the AWL. Other specialised word lists which have used similar methodological approaches to the AWL but in different academic subject areas are, for example, Martínez, Beck and Panza's (2009) examination of academic vocabulary in agriculture, and Coxhead & Hirsh's (2007) Science Word List for EAP (see Coxhead 2011a for more examples). Other lists, such as Ward's (2009b) Engineering English word list for lower proficiency undergraduates, were based on the materials that a particular group of learners have to read in the course of their studies, thereby targeting the development of a very particular set of lexical items.

With the advent of larger corpora has come more word list research, including Gardner and Davies' (2013) new academic vocabulary list, based on the 120-million-word academic subsection of the Corpus of Contemporary American English (COCA) corpus. The website for this corpus is particularly useful for investigating words in use. Examples of recent subject-specific word list development include Valipouri and Nassaji (2013) on academic vocabulary in chemistry, and Yang's (2015) academic word list for nursing.

While word list research can help identify vocabulary across or within disciplines, there is still a major issue in deciding just how specialised a word might be. In some ways, working

out which words might be technical is easier for lexical items which occur within a narrow field because they are immediately recognisable as technical in nature. Some examples include *sternum*, *costal*, and *vertebrae* in anatomy (Chung & Nation 2003). These researchers used a scale to identify the technical vocabulary of an anatomy textbook. The steps in the scale range from words that have no connection to the field of anatomy to those that only occur in that field/are unlikely to be known outside that field. The group of words on the scale is for function words that are not related to anatomy, for example, *adjacent*, *early*, and *between*. The second group is for words that have a minimal relationship to the field of anatomy, such as *structures*, *supports*, and *protects*. The items in groups 1 and 2 are not considered technical vocabulary, according to Chung and Nation (2004: 253). The third group is for words that are more closely connected to anatomy, including words such as *liver*, *skin*, and *muscles*. The final group is for words that are specific to anatomy, including *hematopoietic*, *demifacets*, and *pedicle*. The researchers used the same technique on an applied linguistics text and found that approximately 20 per cent of the applied linguistics text were in the third and fourth groups, and were therefore technical. However, more words from the applied linguistics text (around 88 per cent) occurred outside that specialised subject area. Categorising words may seem relatively straightforward but it demands a great deal of skill, specialised knowledge of a field, and decision-making.

A fairly quick way of finding technical vocabulary is by comparing a specialised and general purpose corpus as reported in Chung and Nation (2004). Items which occur in only the technical corpus are labelled ‘technical’. Items in the general corpus are clearly not technical. Items which occur in both corpora are then designated technical or general based on a ratio depending on their frequency in either corpus. Chung & Nation (2004: 259) decided on a ratio of 50 occurrences in the specialised corpus to one occurrence in the general corpus and found that with this ratio, lexical items had more than a 90 per cent chance of being technical vocabulary.

In a study of the level of specificity in the writing of university students in the UK, Durrant (2014) drew on the five million-word British Academic Written Corpus (BAWE) (Nesi et al. 2007). Durrant shows that the writing in the corpus in the different disciplines is very diverse, but the amount of specialised vocabulary differs across disciplines. This finding, as Durrant (2014: 353) points out, is in line with Chung and Nation’s (2003) work using the scale outlined above.

High frequency words with technical meanings

The second issue with academic and disciplinary vocabulary relates to the previous one in that high frequency words can occur with technical meanings in academic texts. That is, everyday words can take on specialised meanings in particular contexts; for example *print* in computer science and *output* in applied linguistics. Sutarsyah, Nation and Kennedy’s (1994) study of an economics textbook found 34 words (including *cost*, *supply*, and *average*) occurred on average once every ten words in the text. They also found that 20 of these words were clearly essential to economics. Quero’s (2013) analysis of technical vocabulary in medical texts found a large number of items which might appear to be more general purpose than specific, including names such as *Stevens-Johnson*, and words such as *TEN*, *FISH*, *radical*, and *culture*. These items all have highly technical meanings in medical texts. *Stevens-Johnson syndrome* is a possibly life-threatening skin condition. *TEN* stands for *toxic epidermal necrolysis*, and *FISH* stands for *fluorescence in situ hybridisation*. *Radical* is a common collocation in medical texts for *free radical*, and *cultures* are used in laboratory procedures. Hyland and Tse’s (2007)

study of collocations and bundles in academic writing suggests that corpus analysis can help distinguish between instances where everyday words are being used with a technical meaning.

The examples above illustrate some of the learning burden for second and foreign learners of English as they acquire academic and disciplinary vocabulary. However, this burden does not necessarily only present itself to second or foreign language learners of English. Native speakers of English also have to learn specialised or technical vocabulary as part of their studies in secondary school (see Coxhead 2011b) and university studies, as demonstrated by work such as Basturkmen and Shackleford (2015) in accounting.

Multi-word units and metaphor in EAP

The third issue is the categorisation and learning of multi-word units and metaphor in EAP. Multi-word units might include common collocations (such as *significant finding* and *data analysis*) as well as bundles of three or four words (for example, *as a result of/on the basis of*). The gathering of large corpora and analysis of vocabulary patterns in different academic subjects has begun to shed light on the frequency, roles, and use of such units.

Studies on collocations in academic and discipline specific contexts are beginning to appear in the literature. A recent example of word list research in this area is Ackermann and Chen's (2013) academic collocation list. Durrant (2009) carried out a large-scale study of academic collocations in a 25-million-word academic corpus across five academic disciplines. Table 14.1 lists the top ten collocations from his study.

Crawford Camiciottoli (2007) finds some interesting examples of word compounds in her 109,449-word corpus of twelve business lectures, including *bottom-up*, *cost-cutting*, and *cure-all* (2007: 139–140). Table 14.2 shows the most frequent two- and three-word phrases in a corpus of Business English from Nelson (n.d.), and three-word bundles in Crawford Camiciottoli (2007). The two-word phrases from Nelson and the three-word lexical bundles from Crawford Camiciottoli appear to be much more closely aligned to Business English than the three-word phrases.

Other examples of recent collocation work can be found in Liu (2012). For more on multi-word units in academic written and spoken texts, see Biber (2006).

Hyland's (2008) analysis of a corpus of professional and student academic written English looked at lexical bundles across four academic disciplines: electrical engineering, biology, business studies, and applied linguistics. Hyland (2008: 12) finds differences in the frequency and distribution of these bundles in the different disciplines. In an analysis of the top 50 bundles from each discipline, over 50 per cent occur only in one discipline, and only 30 per cent are shared in two other disciplines. The bundles are then categorised according to a modification of Biber's (2006) framework, and three main categories emerge: research-oriented bundles such as *in the present study*; text-oriented bundles such as *in addition to*; and participant-oriented bundles such as *it should be noted that*. Other studies focussed on lexical bundles in academic texts include Ädel and Erman (2012); Biber, Conrad and Cortes (2004); Cortes (2004); and Byrd and Coxhead (2010).

In the spoken and written Academic Formulas List (AFL; Simpson-Vlach and Ellis 2010), formulas are categorised into their functions; for example formulas of contrast and comparison (p. 499) such as *and the same* and *as opposed to* occur in both speaking and writing; *(nothing) to do* and *the same thing* are primarily from spoken data; *be related to the* and *is more likely* are primarily written data. This list is interesting because the researchers included 'teachability' as one of the principles for item selection, alongside frequency.

Table 14.1 Top ten key academic collocations and their mean frequencies from Durrant (2009: 166)

<i>Word 1</i>	<i>Word 2</i>	<i>Mean frequency/million words</i>
this	paper	163.68
associated	with	315.52
this	study	296.96
based	on	404.64
and	respectively	249.68
due	to	374.12
consistent	with	121.88
between	and	935.56
was	performed	84.8
related	to	190.72

Table 14.2 The most frequent two- and three-word phrases in Nelson (n.d.), and three-word bundles in Crawford Camiciottoli (2007)

<i>Two-word phrases Nelson (n.d.)</i>	<i>Three-word phrases Nelson (n.d.)</i>	<i>Three-word lexical bundles Crawford Camiciottoli (2007)</i>
interest rates	a lot of	local productive systems
cash flow	one of the	option value model
market share	the end of	factors of production
stock market	in order to	the GDP deflator
Wall Street	we need to	high-tech companies

One problem in identifying long and sometimes quite complex noun phrases that are common in academic writing (Biber 2006) is that patterns might not be continuous in texts. For example, a target bundle from academic texts might be ‘the consequences of + *noun*’, which is part of a highly frequent frame ‘the XXX of XXX’. An example from analysis of a written academic corpus shows that while ‘the consequences of + *noun*’ is used in academic corpus, the frame can include a range of other items as well, as can be seen in the examples in Box 14.1.

Box 14.1 Examples of ‘the consequences of + *noun*’ in a written academic corpus

the income tax **consequences of** payments

the tax **consequences of** leases

the concrete social **consequences of**

While the frame of ‘the XXX of XXX’ might be frequency in academic texts, actual strings such as *on the basis of* may not occur very often at all. For example, *on the basis of* occurs only 308 times in a 3.5-million-word corpus of academic writing. That is, it occurs 106 times per million words, or 53 times in 500,000 words, or just twice in 15,625 words (Byrd & Coxhead 2010: 47).

Metaphor in EAP

Metaphor can be seen as another type of multi-word unit in vocabulary studies. It is important in EAP for several reasons. The first is that metaphor makes up a reasonable percentage of academic spoken language. In a UK-based study of metaphor in four 11-minute university lectures from the British Academic Spoken Corpus (BASE) (for more on this corpus, see www2.warwick.ac.uk/fac/soc/al/research/collect/base/), Littlemore et al. (2011) found the density of metaphors was 4.1 per cent. The second reason is that EAP learners do not necessarily find metaphors easy to understand. In the same study, Littlemore et al. (2011) found that out of 132 (on average) problematic items in a lecture, 50 (38 per cent) were metaphorically used words that students perceived as problematic. Littlemore et al. (2011: 418) note,

In sum, across the lectures overall, an average of around 42 per cent of the words or phrases that a student found difficult to understand were, in fact, metaphorically used items. The reason for such metaphor use was to enhance comprehension of the lecture topic, through explanation, exemplification, evaluation, and so forth.

Furthermore, of those problematic ones, students were not able to explain the meaning of almost 50 per cent of the metaphors that were used. Littlemore (2001) found comprehension problems for 20 Bangladeshi postgraduate students in lectures because the students often missed the evaluative component of the lecture. This is an important finding given that evaluation is one of the functions of metaphor use, as well as a core activity of academic studies.

Current practice worldwide

This section looks at a range of research into teaching and learning academic and specialised vocabulary in a variety of contexts and countries.

Classroom-based studies

In a study by Peters and Fernández (2013), the researchers wanted to find out what kinds of vocabulary their Spanish building engineering or architecture students needed help with, and what resources they used in their studies to help them with unknown vocabulary. Examples of words from this study include: *benefit, cladding, crack duct, insulation, lintel, lump, measure, porous, resources, straw, and stress*. The authors found that the learners tended to look up technical words in dictionaries (such as *gutter, façade, and rubble*). But they also found that general and scientific vocabulary, such as *framework, sustainability, and consumption* caused more problems for them than the technical words.

Basturkmen and Shackleford (2015) observed two accountancy lecturers in two sets of two-hour classes over a three-week period in a higher education institute in New Zealand and found 46 per cent (76 out of 164) of the language-related episodes targeted a word form.

Box 14.2 An example of a vocabulary-related episode from Basturkmen & Shackleford (2015: 92)

L: What are the options in terms of using that as influencing your internal finance? (silence)

L: See the bit in the middle – delayed payment to trades payable.

Pay more slowly. Your suppliers have done a job for you – he wants his money within 30 days. You give it to him after 45 or 60. Push him out to two months. It means you keep your funds internally.

That is, there were on average 20 vocabulary-related episodes per hour, which the researchers (2014: 94) suggest is evidence of the importance to the lecturing staff of vocabulary to the content and learning of the students in their study.

An example of a vocabulary-related episode is in Box 14.2. In this example, the lecturer explains what ‘delayed payment to trades payable’ means, using a short definition and an example. Such examples demonstrate how the lecturer actively helped the students, through definitions and an example, with the technical language of accountancy while lecturing the content of the subject (Basturkmen & Shackleford 2015: 92).

Other studies have focussed on the teaching and learning of multi-word units in classrooms. Jones and Haywood (2004), for example, looked at the learning of formulaic sequences in an EAP context in the UK. The researchers/teachers employed a range of teaching methods to draw their learners’ attention to lexical bundles in texts and to encourage the use of these formulaic sequences in the participants’ writing. The findings suggest that although the participants’ awareness of formulaic sequences was raised as a result of this study, the researchers find little evidence of actual use of the sequences in the participants’ essay writing. A study in Kuwait in 2012 by Alali and Schmitt (2012) compared single-word learning with learning idioms among 35 participants from an international girls’ school. These participants were 12–13 years old. The researchers found better gains in learning for single words than idioms for these participants. Alali and Schmitt (2012) conclude that, in terms of engagement, learning idioms is similar to the learning of single words and that repetition, as found in many other vocabulary studies, has a strong effect on learning.

Technology and specialised vocabulary learning

Csomay and Petrović (2012) investigated the potential for learning legal terminology from discipline-specific television shows and movies. The researchers selected lexical items in their study using both their corpus and legal dictionary searches. Technical law terms included *bar*, *arrest*, *constitute*, *deny*, *court*, *document*, *permit*, *warrant*, and *excuse*. Their 128,897 running word corpus contained seven movies (for example, *A Few Good Men* and *Runaway Jury*) and five episodes of the long-running television series, *Law and Order*. The researchers found 22.4 technical word families per movie and 12.2 technical word families per TV episode. These technical terms were not dispersed evenly throughout the movies and TV shows, but were unevenly distributed between scenes. Technical vocabulary accounts for over 5 per cent of their corpus.

Csomay and Petrović (2012) divided the technical terms in their study by frequency and used concordance data from their corpus to support vocabulary learning in their classes.

Table 14.3 Examples of frequency bands of technical items from *The Rainmaker* (adapted from Csomay & Petrović 2012: 312)

Bands	<i>The Rainmaker</i>
1 (5–7 encounters)	We're gonna ARGUE Great Benefit's motion to dismiss I'm prepared to ARGUE the motion Let him ARGUE the case
2 (8–9 encounters)	I come from Memphis to DEPOSE four people I'm going to DEPOSE Mr Lefkin, then I'm going to go The DEPOSITION is set for next Thursday afternoon I'm going to take DEPOSITIONS from all the executives
3 (10+ encounters)	You should fight for your CLIENT She no longer works for our CLIENT Your CLIENT has a million dollars

Table 14.3 shows examples of the use of *argue*, *depose/deposition*, and *client* (in capital letters in the table) from *The Rainmaker* movie, adapted from Csomay and Petrović (2012: 312).

The spoken language from the movie may be useful in the classroom by serving as an interesting and helpful comparison with the way these words might be used in a variety of discipline-specific written documents.

The availability of electronic texts and concordancing software means students now have ready access to corpora. Cobb's (n.d.) Compleat Lexical Tutor website has several specialised corpora, such as medicine. Students can also build their own corpora. Participants in Charles's (2012: 100) do-it-yourself (DIY) corpus building study saw advantages in this approach because of the relevance to their own academic studies in terms of sharing the same discipline-specific vocabulary in their own writing and in their corpora. DIY corpus building supported their understanding of this vocabulary and the context of its use.

Rusanganwa's (2013) study investigated the learning of technical vocabulary (for example, *parallel-plate-capacitor*) by undergraduate students of physics at a university in Rwanda. The researcher compared the impact on vocabulary learning through multimedia presentations of images, graphics, texts, and animations with traditional blackboard approaches using blackboards to convey the same information. In both modes, students could pronounce key lexical items, discuss ideas, and make notes. The analysis shows that the multimedia group made more gains in knowledge of the target vocabulary in post-tests. Work by researchers such as Rusanganwa needs to be fostered and supported in many countries where access to computers or textbooks might be limited.

Recommendations for practice

Nation's (2007) Four Strands is a useful framework for analysing vocabulary learning activities and vocabulary curriculum design. The four strands are:

- meaning-focussed input (learning through reading and listening);
- meaning-focussed output (where learning is through writing and speaking);
- language-focussed learning (where learners deliberately study aspects of words such as pronunciation and spelling);
- fluency development.

See Hirsh and Coxhead (2009) for suggestions on incorporating Nation's strands into the design of Science-specific vocabulary learning.

A scale like Chung and Nation's (2003) can be adapted so that teachers and students can make use of them to decide which words they need to focus on in class or independent learning and why (see Coxhead 2014). Learners benefit from learning to notice common patterns such as *the consequences of* occur in their academic texts, and notice how patterns might differ across disciplines or subject areas. They can also learn how to use these patterns accurately and fluently in their academic speaking and writing. Teachers can use data like those in Table 14.3 from Csomay and Petrović (2012) to raise awareness of the presence and patterning of technical vocabulary from a corpus before or after watching the movie or TV programme in which the items appear. As an example of a post-watching activity, teachers could have learners rank the vocabulary items in terms of their connection to law or degree of technicality. To find out about the vocabulary used in specialised texts, teachers can analyse their own texts, as well as those of their learners' texts using Cobb's (n.d.) Compleat Lexical Tutor website.

Coxhead (2011c) found negative effects for students when they are pushed to produce vocabulary in writing, including anxiety and interference between words that look similar. For example, one of the writers in Coxhead's study (2011c: 10), Crystal, struggled with the words *ethic* and *ethnic*, which she encountered in the source reading for her writing and was asked to include in her own essay writing. Crystal said,

[I] didn't use it [ethic] because of ethnical/ethnic. It means standard of behaviour. These two words got similar spelling, I was just afraid I mix them up. Tried to use but because there was ethnic, it confused me and there was not lots of time so I give up [sic].

Finally, a note of caution is needed with word lists for pedagogical purposes. Teachers and learners need to know how and why a word list was developed, what decisions were made along the way, and why. They need to know whether a word list has been validated in some way. Furthermore, Durrant (2014) encourages us to consider not only the vocabulary learners are exposed to, but what they themselves produce in their specialised areas. When it comes to specialisation through academic studies, it is important to find out at what point it is better for learners with special purposes to start focussing on learning the specialised vocabulary of their chosen field (see Coxhead & Hirsh 2007).

Future directions

As we have seen in this chapter, the range of studies in this area is ever-expanding. One avenue of future research is more in-depth investigations of multi-word units in use in a wider variety of subject areas. A stronger focus on learning and teaching in classrooms, independently, and in virtual environments is also needed, particularly in little-researched areas of the world. While this handbook focusses on English for academic purposes, another possible area of enquiry for the future could be academic and discipline-specific vocabulary in languages other than English.

Further reading

Coxhead (2010); Nation (2013: see particularly Chapter 6 on 'specialised uses of vocabulary')

Related chapters

- 2 General and specific EAP
- 13 Listening to lectures
- 16 Corpus studies in EAP

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PART IV

Research perspectives

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15

SYSTEMIC FUNCTIONAL LINGUISTICS AND EAP

Susan Hood

Introduction

English for academic purposes (EAP) can be conceived as a field of academic knowledge (what constitutes academic English) and a field of practice (the teaching and learning of academic English). Both fields are addressed in this chapter from the perspective of systemic functional linguistics (SFL), a social semiotic theory of language. This is primarily a linguistic take on EAP, although studies that explore other semiotic systems such as body language and image are also noted. In contributions to practice, the main focus is on tertiary contexts and transitions towards that sphere. (Humphrey, this volume, takes a school focus on EAP) In discussing contributions from SFL, a social semiotic toolkit for undertaking research and for informing teaching of EAP emerges, as do insights into key concerns for the field including the significance of disciplinary specialization, issues of stance and identity, and the management of diverse and changing technologies in pedagogic interactions.

What does it mean to take an SFL perspective on EAP?

A brief account of some relevant principles of SFL theory is necessary, as these constitute the lenses through which EAP is viewed. Core to an SFL gaze is an understanding that ‘[l]anguage is as it is because of the functions it has evolved to serve in people’s lives’ (Halliday 1978, pp.3–4). Form and meaning are not differentiated. Rather, language is theorized as meaning, and meaning lies in relations within system networks of choices such that what we say/write (image/design, and so on) means in relation to what we could have said/written/ etc. but did not. Meaning is hence a relational concept: it is *valeur* in Hjelmslev’s terms (Hjelmslev 1961).

Systems of *valeur* function across three strata of language: as discourse semantics (Martin 1992; Martin & Rose 2007), lexico-grammar (Halliday & Matthiessen 2004) and phonology/graphology (Halliday & Greaves 2008). All strata contribute to our potential to mean in language, and the systems that structure *valeur* are organized metafunctionally, as ideational, interpersonal and textual meaning. A metafunctional perspective on meaning reflects the fundamental dimensions of human interaction: ways in which we construe the world as events, entities and circumstances (ideationally); ways in which we interact with others in the expression of relationships and values (interpersonally); and ways in which we organize

our messages to make sense to others in the context of our interactions (textually). The intrinsic functionality of language as ideational, interpersonal and textual relates to the extrinsic functionality of context as register and its variables of field, tenor and mode. Genre in SFL constitutes a more abstracted stratum of context, ‘above’ register. It is realized in the recurring configurations of field, tenor and mode meanings that evolve in a culture (Martin 1992; Martin & Rose 2008).

The context of EAP

What does EAP look like from the vantage point of field, tenor and mode, and genre? What dimensions of knowledge and practice are explored and what issues for EAP are thrown into relief?

Context as *field* in SFL orients us to the ‘kinds of activities that are undertaken, and how participants in these activities are described, how they are classified and what they are composed of’. In other words, ‘how our experience of “reality” – material and symbolic reality – is construed in discourse’ (Martin & Rose 2003, p.66). In any specific context, activities are ‘oriented to some global institutional purpose, whether this is a local domestic institution such as family or community, or a broader societal institution such as ... academia’ (Martin & Rose 2008, pp.3–4). In the discourses of EAP, field foregrounds issues of content and knowledge. It is implicated in understanding difference in discourses of science, social science and the humanities, in understanding the construction of knowledge within disciplines, the content of specific subjects, or topics of academic papers. Field connects to the challenges students encounter in engaging with new academic ways of seeing and presenting ‘reality’ within disciplinary environments.

Context as *tenor* constitutes complex relations of power and solidarity that are played out in patterns of interpersonal meaning in discourse, for example, in expressions of attitude, speech function roles taken up in negotiation of meanings, and ways in which space is given (or not) to alternate propositions (see Halliday & Matthiessen 2004 on mood and modality; Martin & White 2005 on appraisal; Martin & Rose 2007 on exchange structure and negotiation).

In academic interactions, managing the relations of tenor complements the management of field. Alongside learning relevant ways of presenting knowledge, novice academics in any intellectual field learn the values intrinsic to that field, the control of resources for evaluating other contributions to knowledge, for positioning and persuading others, and for the development of repertoires of personae for shifting amongst diverse kinds of interactions (Hood 2010, 2012; Coffin 2003; Lander 2014, 2015). In planning pedagogic interventions in EAP, considerations of disciplinary difference must therefore account not only for content, but for values and the gaze of the legitimate knower: all realized in language (Hood 2010, 2015; Maton 2014; Coffin & Donohue 2014).

Context as *mode* has to do with the ways in which interactions are mediated, impacting on potential feedback and enabling the relative distancing of discourse from material reality. It orients us to patterns of textual meaning in language, to the ways certain meanings are made salient and to how participants are tracked in the flow of meaning. Mode and its realization in language are explained and exemplified in Halliday and Matthiessen (2004 on grammatical systems of Theme–Rheme and Given–New), and Martin and Rose (2007 on discourse systems of periodicity and identification). The lens of mode on EAP reveals how academic texts are textured to enable writers to guide readers towards the knowledge and values espoused. Contributions to Forey and Thompson (2009) explore, for example,

the ways in which clause level and discourse level Theme is sensitive to field (discipline), tenor (orientation to readership) and genre (story or explanatory texts). Hood (2006, 2009) shows how higher-level Theme choices enable writers to establish stance while maintaining ‘objectivity’ to the field (see also Ravelli 2004).

The textual lens of SFL also reveals the affordances and constraints on meaning of different technologies and modalities of teaching/learning EAP. SFL allows for the integration of choices across different semiotic systems. Building on theorizations of image (Kress & van Leeuwen 1996/2005), gesture (Martinec 2004) and other systems, multimodal research has expanded rapidly, often in educational contexts (Humphrey, this volume). Studies of teacher body language in EAP show, for example, its significance in coordinating participants and signaling salience (textual meaning), and in invoking attitude and negotiating meaning (interpersonal meaning) (Hood 2011b). Hood and Lander (in press) show ways in which meaning potential changes from live lecture to voiced-over slides online. Studies of multimodality in EAP take on some urgency with rapid changes in technologies and modes of communication in higher education.

Genre in SFL (Martin 1992) is a more abstracted level of context from register, defined as culturally evolved ‘configuration of meanings, realized through language and attendant modalities’ (Martin & Rose 2008, p.20). Users of English for academic purposes are acculturated via visible or invisible pedagogic practices into the high-stakes genres defining their different disciplinary cultures. The term ‘genre’ is used in a number of theories with relevance to EAP. It necessarily means something different in each. In SFL, it is a technical term for cultural configurations of field, tenor and mode meanings, realized in language and attendant modalities. It does not refer to meanings intuited about texts, or to everyday understandings of discourse shared amongst social groups. Comparative accounts of the meaning of genre from an SFL perspective are found in Martin (2014), Hood (2010) and Coffin and Donohue (2014).

The systemic perspective on meaning in SFL (as choice in system) provides researchers, teachers and learners of EAP with a framework for making visible meaning choices in texts in ways that have relevance beyond the instance.

SFL contributions to EAP framed by field

Field as a disciplinary domain proves a useful organizing framework for SFL contributions to EAP, as studies frequently refer to specific intellectual fields. However, particular contributions so-framed might foreground other contextual variables and linguistic realizations; their focus may also be on aspects of tenor, mode or genre.

Field as science

Historically, contributions to the language of science owe much to foundational studies of Halliday. He explores the evolution of scientific language from Chaucer to Newton to late twentieth-century science texts (Halliday and Martin 1993). He describes and explains the evolution of ‘a typical syndrome of grammatical features ... of scientific English’, involving nominalization and causal relations that enable ‘the clause to function effectively in constructing knowledge and value’ (Halliday 1990/2002, pp.169–173). Characteristics of scientific discourse are further explored in Martin and Veel’s (1998) *Reading Science*. A number of chapters focus on technicality and how it is built both in the evolution of the field and in the flow of scientific text. Technicality, derived initially from commonsense congruent

representations of the world, comes to condense and distil scientific knowledge so that it can enter into relations with other technicalities, continuing the process of knowledge-building in taxonomies of classification and composition. For a concise account of technical discourse in the context of EAP, see also Woodward-Kron (2008).

Studies of science discourse also highlight the critical role of *grammatical metaphor*. This refers to shifts in the congruent relationship of meaning and structural element. For example, the meaning of process may be realized congruently in the structure of verbal groups, as italicized in ‘the body *regulates* the rate in which red blood cells are produced’, or metaphorically in nominal groups, as italicized in ‘*regulation of the rate of blood cell production* relies on ...’ (see Halliday & Martin 1993). Grammatical metaphor enables meanings of clauses to be compacted to manage the textual flow of discourse, so that the compacted meaning can enter into new relationships, as illustrated above.

All metafunctions can be implicated in grammatical metaphor. Examples above constitute experiential metaphor (representations of processes as participants), but logical metaphor is also a critical resource for managing causality in science (Halliday 1993). Rose (1998, p.240) illustrates the progressive development of causality in relation to both the external logic of things happening in the world (1), and the internal logic of text (2):

- (1) *a* happens; so *x* happens > because *a* happens, *x* happens > that *a* happens causes *x* to happen > happening *a* causes happening *x* > happening *a* is the cause of happening *x*.
- (2) *a* happens; so we know *x* happens > because *a* happens, we know *x* happens > that *a* happens proves *x* to happen > happening *a* proves happening *x* > happening *a* is the proof of happening *x*.

Grammatical metaphor opens up meaning potential for construing the world in un-commonsense ways, and is, thus, key to building academic knowledge in all disciplines. From science it migrated to other domains of academic knowledge where it fulfills the same function of compacting meanings to build knowledge upon knowledge. It associates strongly with modes of interaction and connects directly to pedagogic contexts of EAP (see Schleppegrell 2004; Ventola 1996). Lemke’s (1990) *Talking Science* considers the role of spoken language into the apprenticeship of students into the field of science.

Studies of science discourse have extended across different disciplines, including physical geography (van Leeuwen & Humphrey 1996; Hewings 2004), biology (Schleppegrell 2004; Humphrey & Hao 2013) and mathematics (O’Halloran 2005). As-yet unpublished research is also emerging on the progressive role of mathematics in physics education.

The teaching of scientific English has been the focus of a number of major SFL studies. In the mid-1990s, science constituted one region of knowledge (along with English and history) in the Write it Right project in Australia (Veel 2006). The study tracked scientific apprenticeship and increasing specialization across secondary school, undergraduate and postgraduate levels of study. Findings are published for teachers and teacher educators of scientific English in Korner, McInnes & Rose (2007).

A more recent study analyzed undergraduate writing in biology (and applied linguistics) in Hong Kong as the basis for designing an online tutoring program to support assignment writing (e.g. Humphrey et al. 2010). A study of classroom discourse and knowledge building in secondary school biology (and history) in Australia (Martin & Maton 2013; Humphrey, this volume) marks the beginning of a rich new vein of SFL research in academic English

involving interdisciplinary collaboration of SFL with the sociology of education in Legitimation Code Theory (LCT) (Maton 2014). One key finding relevant to tertiary EAP is the need for teachers not only to unpack the technicality and grammatical metaphor of textbooks and readings, but, critically, to repack them. In other words, if we analogize or explain technical meanings into everyday language, we cannot abandon students there. We need to guide them back into using the specialized knowledge and language of their disciplines. The movement between commonsense and academic ways of meaning is referred to as the ‘semantic wave’, a heuristic that has been applied in both secondary and tertiary EAP programs (Coffin & Donohue 2014; Maton, Hood & Shay 2016; Matruglio, Maton & Martin 2013). A second complementary heuristic emerging from the study is the ‘power trilogy’: *power words* (technicality), *power grammar* (nominalization and grammatical metaphor) and *power composition* (the preview–body–consolidation organization of written texts) (Martin & Maton 2013). The challenges in collaborative research across disciplines should not be underestimated, but conversations between SFL and LCT continue to prove highly productive in educational contexts (Maton, Hood & Shay 2016), and are an exciting front of research in EAP.

An appreciation of the genres for doing and writing science is a feature of much SFL research in EAP. Martin and Rose (2008) introduce and model core genres for science as report, explanation and procedural recount. In Veel (2006), the configurations and sequences of genres in apprenticing students into the field are explored. Veel also illustrates the nature and function of different explanation genres found in science texts. Humphrey and Hao (2013) focus on genres that undergraduate students write in biology.

We commonly associate the language of science with impersonality and objectivity, a consequence of the ‘thingification’ of the world (Martin 2007, p.45), yet interpersonal meaning is always present. Causation in science, for example, fuses cause with modality of probability or obligation (as in *indicates*, *proves*) (Martin 2007, p.60). Hood (2010) draws on appraisal in SFL to identify how science (and social science) allows for explicit attitude in representing objects of study, but prefers implicit evaluations of contributions to knowledge. (Interpersonal meaning is discussed further later in the chapter.) Nonetheless, as Wignell (2007, p.299) notes, ‘science involves trying to understand the “world” by looking at it through a technical framework’, so in terms of register, we can say that ‘science foregrounds field’.

Field as the humanities

A focus on science discourse frequently references a complementarity with humanities discourse. A comparative focus is taken in Martin (1993, 2007) and Wignell (1998, 2007). From studies such as these, more detailed linguistic pictures emerge of how and why different academic discourses draw differently from the meaning potential of the language; that is, how they instantiate differently from systems of lexico-grammar, discourse semantics, register and genre. Where science foregrounds technicality in building specialized knowledge, the humanities rely dominantly on resources of abstraction to understand and interpret the world. Wignell (1998, p.301) explains, ‘[p]ut simply, abstraction involves moving from an instance or collection of instances, through generalisation to abstract interpretation. ... We shift from “story” to what the “story” means’. Abstraction constitutes ‘a general resource for realizing semiotic distance’, or distance from material action. So where science discourse is seen to foreground the register as field, humanities discourse is seen to foreground register as mode.

History

History has been a dominant area of SFL research in the humanities. Early studies in Eggins, Wignell and Martin (1987) are enhanced with contributions from Martin (2002), Martin and Wodak (2003) and Coffin (2000, 2003, 2006). Coffin (2003) provides a rich account of genres in history along with realizations of time, cause and evaluation. Martin (2003, 2007) also provides detailed analyses and explanations of how time and cause are realized, and shows the critical role of abstraction in realizing both. With respect to time, abstraction enables the packing up of time, shifting gaze from the unfolding of events as they happened (*and then... and then...*), to periods of time (the 1800s, the post-9/11 era), which, as they accrue density of meaning, begin to function as a kind of technicality (the renaissance, modernity, post-colonialism).

With respect to cause, Martin (2007, p.46) points to a crucial characteristic of history discourses, namely ‘their focus on explaining what happened over time, using cause in the clause to do so’. Congruent causal relations in English are managed by conjunctions between clauses (*so, because, therefore*). In the abstracted and grammatically metaphoric discourses of history, relations of cause are managed in other ways:

Inside the clause ... the nominal (*cause, reason, basis, source, motive*, etc.), prepositional (*due to, owing to, because of ...* etc.) and most importantly an indefinite array of verbal resources that allow for the subtle nuancing of causal relations in the function of interpretation.

(Martin 2007, p.46, original emphasis)

Martin (2007, p.46) illustrates the interpretive role of causal processes in:

- Their stand against injustice, however, *attracted* national publicity for Aboriginal land rights grievances.
- [It] ...*sparked* a campaign for human rights, including land rights by many Aboriginal people.

He notes that, while “cause in the clause” is also an important motif in science discourse ... scientists prefer a simple model of cause and effect; they are not interested in proliferating different kinds of cause’ (2007, p.47).

Martin (2007, p.49) also attends to differences within the realm of history discourse, noting how kinds of history are distinguished by ‘what they are used to explain’. For example;

[m]odernist history nominalizes activity and gets the resulting abstractions acting on one another; Marxist history takes this step but also technicalizes abstractions, drawing on social science to do so; post-colonial history technicalizes the abstractions as discourse, drawing an alternate ‘critical’ canon. The concern for agency remains: what differs is what ‘acts’ – modernist abstractions, Marxist technicality or critical discourse.

(Martin 2007, p.49)

Differences in discourses of history, and the humanities more broadly, are revealed in analyses of high-stakes student writing in senior secondary subjects, including modern and

ancient history (Matruglio 2014, 2010). The study identifies the genre profiles and reveals the ways in which the values of the humanities are distributed across subjects.

Interpersonal meaning is explored in history through appraisal in Coffin (1997, 2003, 2006). Coffin notes ‘the linguistic tools for evaluating and re-evaluating events in order to give new and different meanings to the past’ (2003, p.220), and how writer choices in appraisal construe different kinds of writer identity. She identifies historian voices of: recorder (more ‘objective’, no judgment); interpreter (judgment restricted to social esteem, luck, ability, courage); and adjudicator (more ‘subjective’, judgment including social sanction, im/moral, un/ethical) (Coffin 1997; Martin 2003, pp.35–36).

While dominantly relying on abstraction, history has a ‘fuzzy’ technicality, or what Martin refers to as ‘flexitech’ (Matruglio, Maton & Martin 2013, p.45), where taxonomic relations remain relatively shallow and open as in, for example, the ‘isms’ of nationalism, socialism, communism, capitalism and so on. Such flexitech is a feature of humanities discourse more broadly applying, for example, to terms such as ‘agency’ or ‘performativity’ in cultural studies.

As Martin (2003, p.22) notes, in history ‘obviously things happen – events unfold materially in the world. But it is language that makes history’. The same can of course be said for other fields of the humanities, and beyond.

Other fields in the humanities

From the 1970s onwards, SFL scholars have also turned their attention to literary studies. Contributions include Halliday (1990/2002), Hasan (2015) and Lukin and Webster (2005) amongst many others. Film studies provides one of the case studies of EAP in action in Coffin and Donohue (2014), and discourses of cultural studies are a recent focus of SFL research. For contrastive accounts of cultural studies and social science disciplines (applied linguistics, organizational studies), see Hood (2007, 2011a, 2016). For SFL studies of the evolving discourses of subject English in secondary school, see Humphrey (this volume).

Genre in the humanities

The identification of genres in humanities disciplines is a feature of many contributions noted above. Genres of history are explored extensively in Coffin (2006), Martin and Rose (2008), Matruglio (2014, 2010) and Martin (2007). System networks of agnate genres of history are developed in Martin and Rose (2008, p.130), illustrating a progression from more commonsense to more un-commonsense. The deployment of story genres in research writing in the humanities and social sciences is explored in Hood (2016). Their academic functions are revealed with reference to location, integration, range and kind of story.

Field as social science

An SFL perspective on the social sciences owes much to the work of Wignell (1998, 2007). Wignell took both a diachronic perspective, tracing the evolution of the discourse from the mid-seventeenth century to the early twentieth century, and a synchronic perspective, analyzing sample texts from the academic disciplines of sociology, economics and political science. Wignell identifies why and how social science emerges as ‘a kind of synthesis’ of science and the humanities, originating as it did in the humanities with science added later (2007, p.298). Where science technicalizes meaning from the congruent material world, ‘what social science does ... is to make the abstract technical’. It ‘takes as its starting point an

abstract construal of experiences and reconstrues that initial abstraction technically' (2007, p.298). In social science, we find a tension between the technical and the abstract, in other words between field and mode, presenting particular challenges for novice writers. The challenge of technicality in science is compounded with the challenges of abstraction in the humanities.

Relatively less attention has been paid to this domain in SFL studies, with some exceptions (e.g. Lewin, Fine & Young 2001). However, given the hybrid nature of the discourse, there are implications for learning the language of social sciences from both the sciences and humanities. SFL studies of disciplines of social science include sociology, economics and political science (Wignell 2007), education (Martin & Maton 2013), health studies and social work (Coffin & Donohue 2014; Lander 2014, 2015) and applied linguistics (Hood 2007).

Other recent interdisciplinary studies employing SFL and LCT, especially the dimension of specialization in LCT (Maton 2014), have identified the hybridity in discourses of social science with respect to the referencing of sources (Hood 2011a), locating them between the foregrounding of knowledge over knowers of the sciences, and knowers over knowledge in the humanities. Tensions between knowledge and knowers are also played out in the functions of story genres in ethnographic accounts from the humanities and social sciences (Hood 2016).

Framing EAP as tenor

The framing of EAP as field is of course just one way to present SFL contributions. Tenor is another. While some contributions discussed above refer to interpersonal meaning, further attention is warranted, given the many ways in which the system of appraisal in SFL has been deployed in research and teaching of academic language. Appraisal models resources of evaluation at the discourse semantic level of language. It comprises three sub-systems: attitude, graduation and engagement (see Martin & White 2005; Hood & Martin 2007; Hood 2010, for detailed explanations). Appraisal has provided a powerful linguistic framework for explaining how academic writers (novice and expert) strategically position and persuade their readership, especially in written discourse. SFL studies have demonstrated the significance of managing evaluative resources for success in undergraduate writing (Lee 2010a, 2010b). They have shown how writers use different resources when evaluating their object of study and when evaluating other research (Hood 2010, 2012), establishing different relationships with readers in each case. Graduation resources enable implicit rather than explicit evaluation and are a critical means by which academic writers manage the dual demands of 'objectivity' and critique when reporting on other contributions to knowledge (Hood 2010, 2012; Hood & Martin 2007).

Identity and affiliation

A number of dimensions of SFL theory that have not as yet been widely applied in research are now gaining attention. The complementary hierarchies of instantiation and individuation, for example, are opening space for exploring the uses and users of language (Martin 2010). *Instantiation* is the relation between the generalized meaning potential of the system of language and the meanings instantiated in text. It is a cline of generality. The analogy offered by Halliday is the relation of climate to weather, where climate is the system and weather the instance. This analogy usefully highlights the dynamism in language with each instance adjusting probabilities in the system in some way. The hierarchy of *individuation* focuses on

the distribution of the reservoir of meaning potential in language across cultures and social groupings, to the repertoire of individuals. The cline of individuation refers to *distribution* in its downward trajectory and to *affiliation* in its upward trajectory. Where instantiation foregrounds uses of language, individuation foregrounds users.

The interaction of these two dimensions opens space for exploring identity and affiliation (Knight 2010). First, texts instantiate both ideational and interpersonal meaning; particular evaluative meanings are said to *couple* with the particular entities and events they evaluate. These *couplings* are the basis for negotiation of solidarity and community. To the extent that couplings are shared they form *bonds* of affiliation (Knight 2010). Complexes of shared bonds form bond networks, strengthening the communities of affiliation so engendered.

‘The coupling of knowledge and value is an important dimension for any field’ (Martin 2007, p.56), and negotiating bonds of affiliation is highly relevant to notions of disciplinary identity, functioning to establish status as the right kind of knower. Hao and Humphrey (2012) apply affiliation in analyzing writer identity in published biological research. For further accounts, see Bednarek and Martin (2010).

The relationship of language system to text instance is relevant in all academic knowledge practices. Fundamental to the construction of academic knowledge is the reformulation or re-instantiation of meanings from one textual/temporal location into another. On long wavelengths of centuries, this shapes the evolution of discourses of science and the humanities; on short wavelengths of moments, a single sentence is edited in a paper. All metafunctions are implicated in such reformulations. The system–instance relation is illustrated in the pedagogic task of summary writing in Hood (2008). While frequently presented as involving ‘the creation of a shorter text in your own words’, the task is shown to require writers to go beyond the source text to reclaim meaning potential from higher levels of generality in the system, from higher up the cline of instantiation, and then to re-instantiate those more generalized meanings into specific new wordings. Without access to the more generalized meanings, students cannot succeed. The ever-present threat of plagiarism amongst novice writers is in part an issue of appropriately managing the re/instantiation of meanings.

Modes, multimodalities and pedagogy

The rapid expansion of multimodal resources in academic discourse is motivating considerable research. In science discourse, early contributions from SFL included Lemke (1993) on multiplicative relations of the visual and verbal in science texts, and O’Halloran (2005) on images in mathematics.

Challenges for effective academic knowledge building in online pedagogic interactions are explored in Drury (2004), Hewings and Coffin (2006), Jones (2007), Coffin and Donohue 2012 and Lander (2014, 2015). Lander notes the potential for confusion of spoken and written modes in online asynchronous discussions, and the tensions that play out in building community and building knowledge. Hood and Lander (in press) compare the meanings available to students in live lectures versus voiced-over presentation slides online. Other contributions aim to support teachers and teacher educators in addressing multimodal meaning-making in EAP (e.g. Callow 2013; de Silva Joyce & Gaudin 2007). Ongoing research and practice in this area is enhanced with developments in systemic functional theorizations of multimodality (e.g. Martinec 2005; Dreyfus, Hood & Stenglin 2011; Martin 2010), and with the developments in SFL-based tools for analyzing multimodal corpora (O’Halloran & Smith 2013) and for visualizing meaning (Almutairi 2015). See Humphrey (this volume) for further discussion of multimodality in school EAP.

Conclusion

SFL has had a long association with fields of education, including EAP, with theoretical insights informing contributions to understanding the un-commonsense nature of academic knowledge in different fields, the shaping of identities with shifts in register, the ways meanings are negotiated in knowledge building, the interactions of multiple modalities in pedagogic practice, the mapping of progression in curricula and much more. Recent collaborations with sociology of education in LCT have enhanced our research and practice in EAP, and interdisciplinary conversations have reflected back onto theory generating new insights. Space prevents more detailed discussions of important contributions to the design of pedagogies, as in Sydney School genre pedagogy and Reading to Learn, and their applications in EAP. For detailed accounts, see Rose and Martin (2012), and for a comprehensive account specific to EAP, see Coffin and Donohue (2014) and Humphrey (this volume).

In SFL-informed interventions in educational practice, there is an underlying concern that theory and research interact with pedagogic practice in the interests of more socially equitable distributions of meaning potential. Key to this project are principles of visibility and intervention, visibility in terms of the expectations for success in the genres that construct disciplinary knowledge, and intervention to subvert pedagogic practices that continue to socially stratify educational outcomes.

Further reading

Coffin & Donohue (2014); Hood (2010); Martin (2012); Martin & Maton (2013)

Related chapters

- 19 Genre analysis
- 20 Multimodal approaches to English for academic purposes
- 34 Pedagogic contexts

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16

CORPUS STUDIES IN EAP

Hilary Nesi

Introduction

Corpora are collections of naturally occurring language data, stored in electronic form, designed to be representative of particular types of text and analysed with the aid of computer software tools. Corpora are now common in English for academic purposes (EAP) research and practice, both to provide quantitative information about discourse, and to corroborate insights derived from more qualitative studies. They also play an increasingly important role in EAP pedagogy, providing syllabus items, examples to illustrate accepted usage, and opportunities for data-driven learning.

Most EAP corpus-related activity includes a comparative element, for example differentiating texts belonging to different disciplinary domains (e.g. Hyland, 2008), or cultural contexts (e.g. Gardezi & Nesi, 2009), exploring variation between EAP materials and the texts students encounter in the disciplines (e.g. Chen, 2010), noting signs of progress in texts produced across stages of study (e.g. Issitt, 2011), or comparing texts produced by novices and experts (e.g. Cortes, 2004; Gilquin & Paquot, 2008) and/or by L1 and L2 users (e.g. Chen & Baker, 2010; Ädel & Erman, 2012; Carrió-Pastor, 2013; Pérez-Llantada, 2014).

It is easy to get started on a corpus investigation; a simple yet discipline-specific corpus can be compiled quite quickly using students' files or resources from the web, and lists of lexical items, singly and in combination, can be generated almost instantly, using free downloadable corpus query software. Corpora of spoken academic language or handwritten academic texts require more resources, and more elaborate searches require more elaborate annotation of corpus contents, but all types of corpus investigation have their place in EAP practice; the appeal is that almost any search of any academic corpus can reveal information that is genuinely new to even the most experienced EAP practitioner.

This chapter will provide an overview of the types of corpora most relevant to EAP practitioners and their students, and will consider some of the many ways in which corpora can inform understanding of academic discourse, from lexical, phraseological, grammatical, and genre perspectives.

Types of EAP corpora

The earliest corpora of interest to the EAP community were created by publishers, at considerable cost, for lexicographical purposes. For example, the Bank of English was created at Birmingham University in the 1980s to provide information for the *Collins COBUILD English Language Dictionary* (Sinclair, 1987). Such corpora were large enough to provide thousands of examples of the more frequent lexical items, but were not designed for EAP researchers who wanted to explore the features of specific types of academic text. Since then, many specialist corpora have been created quite cheaply by individuals and small teams, and it is probably safe to say that most of the corpora now referred to in EAP research are relatively small and for private use only.

Corpora can only be shared publicly if the owners of the texts have given their permission for their use in this way, and most academics and teachers do not have the time and the resources to arrange this, or to create the documentation that a publicly available package would require. However, specialist mini-corpora are often more useful than large general corpora for investigating a specific domain, as Tribble (1997) points out. Baker (2006, p. 25), Walsh (2013, p. 40), and others have argued that the process of creating one's own corpus, rather than working with one that is ready-made, helps to give the researcher a 'feel' for the data, a sense of context, and the means to generate initial hypotheses as the first stage of corpus research. Small private corpora have been used to reveal patterns of academic language use in a wide range of genres, for example doctoral theses (Thompson, 2000; Charles, 2003, 2006), student–tutor interactions (Farr, 2003), textbooks (Mudraya, 2006; Bondi, 2012; Wood & Appel, 2014), academic bios (Tse, 2012), and research abstracts (Cava, 2011; Cutting, 2012).

Copyright restrictions make it difficult to share corpora created from academic journal content, but nevertheless a large amount of EAP corpus research and practice has focussed on research articles, because they are easy to collect in electronic form, can be selected to represent highly specific research domains, and can yield findings of great relevance to certain EAP contexts. One way of introducing corpora to the EAP classroom is to ask students to make collections of published research articles and their own unpublished writing. Students can compare research articles with their summaries of these articles, for example (Seidlhofer, 2000), or their own research reports with articles they have selected to suit their disciplinary areas (Lee and Swales, 2006). Some collections of research articles are widely known and have acquired status despite the fact that they are not publicly available: the 1.4 million word 'Hyland Corpus', for example, is referenced in many of Ken Hyland's investigations into the nature of disciplinary discourse (as in Hyland, 2005, 2009, 2012), but is only available to Hyland and his close associates.

In addition to countless home-made corpora of research articles, there exist some corpora of professional academic writing that have resolved copyright issues and are available in the public domain. The most notable of these is the academic component of the Corpus of Contemporary American English (COCA-A) (Davies, 2011; Gardner & Davies, 2014) which is made up of research articles (about 85 million words), magazines (about 31.5 million words), and newspaper finance sections (about 7.5 million words) but does not permit searches limited to a specific source, in order not to 'infringe on the domain of other resources ...which are oriented toward searching specific journals' (Davies, 2014, p. 164). The 17 million word Professional English Research Consortium (PERC) corpus of science and technology research articles, developed by a consortium with members in Japan, the UK, and the USA, contains output from nearly 300 journals; it seems that it was possible to make the texts available because the corpus does not contain complete articles, just

samples, and so science and technology researchers are unlikely to use it as a free alternative to journal subscription. Cooke and Birch-Becaas (2008) adopted another strategy to bypass publishers' copyright restrictions; their corpus was made up of drafts donated by the authors (francophone researchers in the health and life sciences) rather than the final published documents, and they describe how one version indicated what the authors originally wrote, alongside the corrections, editing, and reformulations that they later made in consultation with an L1 advisor, while other versions drew attention to lexicogrammatical features and the move structure of research articles. For obvious reasons, discourse structure is best investigated in corpora which contain entire texts.

Ädel (2006, pp. 206–207) debates whether corpora of professional writing should be the reference point for EAP activities, as although professional writing 'represents the norm that advanced foreign learner writers try to reach and their teachers try to promote', the writing of proficient L1 students may constitute a more realistic model because it is at a comparable educational level. It should be borne in mind that in many contexts students are not expected to write in the same way as established writers, for example with regard to the confidence of their claims or the strength of their conclusions (Lee and Swales, 2006, p. 68). On the whole, the findings of research article corpora seem most relevant in cases where EAP is taught to graduates preparing for research careers; at lower levels the writing normally expected of students may have a different communicative purpose, and evidence from corpora of research articles needs to be applied with caution.

Private corpora

For commercial reasons, most EAP practitioners will never be able to access some of the largest academic corpora, as they have been developed by testing and publishing companies and are only available to writers and researchers working on authorised projects. Varying amounts of information are available for these corpora. Some, such as the TOEFL 2000 Spoken and Written Academic Language (T2K-SWAL) corpus, are described in detail in publicly available reports. T2K-SWAL is the property of the Educational Testing Service, but Biber et al. (2004b) and Biber (2006) provide a full account of its design, construction, and analysis. Other large commercial corpora are introduced in conference proceedings or in research articles. The Pearson International Corpus of Academic English (PICAE), for example, is described in Ackermann et al. (2011), and The Cambridge and Nottingham Corpus of Academic Discourse (CANCAD) features in an article by Evison (2012). Still others are known only in outline: very little has been publicly revealed about the Cambridge Academic English Corpus, for example, other than that it contains more than 400 million words of published writing and teaching discourse, and is, according to the Cambridge University Press website, 'the largest and most extensive corpus of Academic English to date'. Currently, Cambridge University Press is inviting writers to contribute to a new academic writing component of the Cambridge Academic English Corpus, but so far no account of this venture seems to have been published.

The downside to all private corpora is that they can lead to duplication of effort: the same kinds of academic texts are collected and stored in different institutions, only to be analysed by a handful of researchers in each case. Lack of public access also means that many published corpus studies which could be strengthened by replication cannot be replicated, and there is no way for readers to check reported findings. However, of course, some EAP corpora are only really relevant to their own specific context, and were not compiled with the intention of deriving general insights about academic language. Issitt (2011), for example, created a

small private corpus of international student writing at a single institution, and compared the work the students produced at the beginning and end of their pre-sessional programme in order to gauge the programme's success. In this case, although the corpus findings were of concern to the people involved with the particular pre-sessional programme, it is the corpus design and the procedures of analysis that other EAP practitioners will wish to replicate.

Publicly accessible corpora

By far the largest EAP corpus in the public domain is COCA-A, which is divided into nine broad disciplinary areas: business and finance, education, history, humanities, law/political science, medicine and health, philosophy/religion/psychology, science and technology, and social science. However, although the powerful COCA interface enables comparisons across these areas, and across all the COCA domains, it is not possible to drill down to specific disciplines or subtypes of academic writing.

Other smaller but more specific academic corpora include the British Academic Written English (BAWE) corpus (Alsop & Nesi, 2009; Nesi & Gardner, 2012) and the British Academic Spoken English (BASE) corpus (Thompson & Nesi, 2001), both of which can be downloaded from the Oxford Text Archive or searched via the open-access SketchEngine interface; and the Michigan Corpus of Upper-level Student Papers (MICUSP) (Römer & Swales, 2010; Römer & O'Donnell, 2011) and the Michigan Corpus of Spoken Academic English (MICASE) (Simpson et al., 2002), both of which have interfaces at the University of Michigan.

BAWE and MICUSP are corpora of proficient student assignments, awarded high grades by subject tutors, although BAWE is bigger (6.5 million words) and focusses on the writing produced by first to final year undergraduates and postgraduates on taught Masters courses, whereas MICUSP (2.6 million words) focusses on the writing produced in the final undergraduate year and three levels of postgraduate study. This design difference is a reflection of higher education practices in the two countries: British undergraduates produce more written assessed work in the early years, but there are few formal written assessment tasks for British postgraduates beyond Masters level; doctoral students in the USA are given more written assignments which are independent of their final dissertation. The two corpora are also not entirely comparable in terms of text distribution. The BAWE corpus draws on more than twice as many disciplines as MICUSP (34+ and 16, respectively), and identifies almost twice as many writing genres, including some that are intended to prepare undergraduates for the world of work as opposed to further study ('preparing for professional practice', as described by Nesi and Gardner, 2012).

Nevertheless, the MICUSP categories of argumentative essay, creative writing, critique/evaluation, proposal, report, and research paper are not dissimilar to the essay, narrative recount, critique, proposal, methodology recount, and research report genre families in BAWE, and the two corpora provide scope for useful comparisons of student writing conventions. Whereas international journals have their own specific requirements which researchers must conform to wherever they are based, there is considerable regional as well as disciplinary variation in the requirements for student writing. These differences are highly relevant for EAP learners, who in order to be successful have to write in a style that suits the local context. For this reason, subcomponents of MICUSP and/or BAWE have also been compared with small corpora representing discipline-specific student writing in English from other regions of the world. Such corpora include a collection of writing by Pakistani economics students (Gardezi & Nesi, 2009), a corpus of Chinese undergraduate dissertations (Lee & Chen, 2009),

the Hanken Corpus of assignments by Finnish- and Swedish-speaking economics students (Hiltunen & Mäkinen, 2014), and the French and Norwegian components of the Varieties of English for Specific Purposes database (VESPA) (Paquot et al., 2013).

Although the majority of assignments in BAWE and MICUSP were written by users of English as a first language, both corpora also contain a substantial proportion of texts written by users of English as an academic lingua franca (18 per cent in the case of MICUSP and about 30 per cent in the case of BAWE). This makes it possible to compare L1 and L2 writing within these corpora; Chen and Baker (2010) and Leedham (2014) examined BAWE assignments produced by Chinese and L1 English students, for example. Neither corpus was specifically designed to compare L1 and L2 output so care has to be taken to ensure that if such comparisons are made, the L1 and L2 samples belong to the same disciplines, genres, and levels of study.

Because not all their contributors were users of English as a first language, BAWE and MICUSP might qualify for classification as corpora of academic English as a lingua franca (ELF), like VESPA, a growing collection of university student assignments produced in different national contexts (see Paquot et al., 2013), and also the written academic ELF (WrELFA) corpus, containing proficient academic ELF in the form of examiners' statements and science blogs (Carey, 2013). WrELFA is rather unusual in the field of academic ELF because corpora designed to examine the language of expert ELF users tend to focus on speech, which is more likely to retain evidence of regional variation, lost in edited written texts. In contrast, many academic corpora of L2 writing are 'learner corpora', containing assignments produced for English language courses, and intended primarily to aid the identification of learner language deficit rather than the linguistic features of academic genres and disciplines (see for example the HKUST Corpus of Learner English (Milton, 1998), the International Corpus of Learner English (Gilquin et al., 2007), and the Corpus of Academic Learner English (CALE) (Callies & Zaytseva, 2011)).

The best known ELF corpora are the Vienna-Oxford International Corpus of English (VOICE) (Seidlhofer, 2001, 2012) and the English as a Lingua Franca in Academic Settings (ELFA) corpus (Mauranen, 2003, 2012), both containing about 1 million words of naturally occurring, non-scripted, face-to-face interactions between speakers from a variety of first-language backgrounds. VOICE concentrates on dialogic speech events from three domains (professional, educational, and leisure), while ELFA contains solely academic speech events, roughly two-thirds dialogic (seminars, thesis defences, conference discussions, etc.) and one third monologic (lectures and presentations).

MICASE and BASE also have dialogic and monologic components. They are roughly equal in size (about 1.7 and 1.5 million words respectively), but MICASE captures a wide variety of spoken academic genres such as lectures, dissertation defences, office-hour interactions, and small peer-led study group sessions, whereas BASE focusses on lectures and seminars, the former led by academics and the latter by students. They have been examined, together and separately, in a number of studies, for example in terms of modifiers (Poos & Simpson, 2002; Swales & Burke, 2003; Lin, 2012), formulaic language and lexical bundles (Nesi & Basturkmen, 2009; Simpson-Vlach & Ellis, 2010), and lexicogrammatical patterns (Deroey, 2011; Deroey & Taverniers, 2012).

Perhaps because of difficulties in obtaining recording and transcription rights, there are few publicly available corpora of conference presentations, although the John Swales Conference Corpus (JSCC) contains transcripts of papers on applied linguistics topics (see Wulff et al., 2009). Doctoral students and research-active university staff would certainly benefit from access to more corpora of this kind, relating to more academic disciplines.

Methods of analysing academic corpora

Academic corpora are used to inform our understanding of academic discourse, from lexical, grammatical, phraseological, and genre perspectives. However, although corpus linguists often make qualitative judgements about meaning and communicative functions, the software tools they use are essentially quantitative, performing calculations based on the frequency of specified lexicogrammatical items.

Frequency counts can be used to generate various kinds of academic wordlists, ranging from simple itemisations of every word form to more complex comparisons within and between corpora, and lists of terms restricted to specific domains. The best known of these is still the Academic Wordlist (AWL) (Coxhead, 2000, 2011). This was a successor to the University Word List (Xue & Nation, 1984), and was generated from a corpus of texts from the arts, commerce, law, and science using the Range corpus analysis programme (Heatley & Nation, 1996). The AWL groups words into 570 'word families' which occurred in all domains and in 15 or more disciplines, excluding the most frequent 2000 words in the General Service List (West, 1953). The corpus was small by modern standards (3.5 million words) and only represented reading material as opposed to speech or student writing. Nevertheless, Coxhead's technique of eliminating both frequent and discipline-specific words identified a 'subtechnical' vocabulary set which covers about 10 per cent of the tokens in many other written academic corpora (Cobb & Horst, 2004; Ward, 2009; Chen & Ge, 2007; Li & Qian, 2010), even if coverage across disciplines has been found to vary (Hyland & Tse, 2007), and it accounts for only 4.41 per cent of tokens in the BASE corpus (Dang & Webb, 2014). A large number of resources have drawn on the AWL to describe and teach academic vocabulary, including Haywood's AWL Highlighter and Gapmaker (n.d.), and the AWL tools on Cobb's Compleat Lexical Tutor website (n.d.).

More recent wordlists have applied more sophisticated corpus analysis techniques to identify core academic vocabulary. Paquot (2010), for example, created an Academic Keyword List (AKL) of 930 items, which were significantly more frequent in a corpus of academic writing (consisting of professional texts and student writing from the Louvain Corpus of Native Speaker Essays and the BAWE Pilot Corpus) when compared to a reference corpus of fiction writing. The Academic Vocabulary List (AVL) (Gardner & Davies, 2014) was compiled using a similar method, comparing COCA-A with COCA as a whole. Likewise, the Academic Formulas List (AFL) (Simpson-Vlach and Ellis, 2010) extracted multi-word units (lexical bundles) from a corpus including MICASE, and a selection of research articles and academic texts from the British National Corpus (BNC). Simpson-Vlach and Ellis adapted the procedure for identifying bundles pioneered by Douglas Biber and his colleagues (e.g. Biber & Conrad, 1999; Biber et al., 2004a), but in order to ensure that their academic formulas were meaningful and pedagogically relevant, they used not only statistical measures of frequency but also mutual information scores, to identify collocational strength, and the qualitative judgements of experienced EAP instructors and language testers.

Unlike the Academic Wordlist, all these later wordlists included lexical items that were frequent in non-academic corpora, as long as they occurred significantly more often in the academic texts. They used the log-likelihood statistic to measure significant differences in an item's frequency, comparing their academic corpora with their non-academic ('reference') corpora, but they also took into account the fact that log-likelihood does not distinguish between items occurring fairly evenly across corpus subsections, and items occurring very frequently, in only a few subsections. These wordlists only consisted of items that were distributed across a range of disciplinary areas. In the case of AKL and AVL, they also required items to be well dispersed across individual texts in each area.

AKL, AVL, and AFL focus on core academic vocabulary, but there are strong arguments for a greater EAP focus on discipline-specific language, both because EAP learners experience difficulty with technical terms (Liu & Nesi, 1999; Evans & Morrison, 2011), and because words behave differently in different disciplinary domains, in terms of frequency and range, and also in terms of meaning and collocation (Hyland & Tse, 2007). Many recent corpus-derived wordlists have taken a discipline-specific approach, concentrating on texts from areas such as engineering (Mudraya, 2006; Ward, 2009), agriculture (Martinez et al., 2009), science (Coxhead & Hirsh, 2007), medicine (Hsu, 2013), and chemistry (Valipouri & Nassaji, 2013). Comparisons between disciplinary vocabulary requirements have also been made by means of corpus techniques. Cortes (2004) examined lexical bundles in history and biology, for example, and Hyland (2008) examined lexical bundles in applied linguistics, biology, business, and electrical engineering. Durrant (2014) used Gries's deviation of proportions (DP) statistic (Gries, 2008) and hierarchical cluster-analysis (Durrant, 2009) to capture variation in the distribution of words in the BAWE corpus, finding that although it is possible to identify clusters of students with similar vocabulary needs across different disciplines and levels, 'only around half of the words that are important for particular groups of students are generic to the writing of other groups' (Durrant, 2014, p. 14).

Many EAP-relevant corpus studies start by identifying lexical items or lexicogrammatical patterns, and then examine these in corpus output. Hyland (2004), for example, describes a process of manually coding sample texts to identify metadiscursive items, and then searching for them in a corpus of masters and doctoral dissertations. Alternatively, corpus studies may take as a starting point lists of potentially productive items developed by earlier researchers, such as Hyland (2005), who looked for interactive features in research articles, and Liu (2012), who looked for core academic bundles in sub-corpora of COCA and the BNC.

Multidimensional analysis (MDA) takes rather a different approach: instead of analysing the behaviour of specified linguistic features, it focusses on groups of texts representing registers or language varieties, and examines how they are characterised by combinations of these features. The MDA methodology, pioneered by Douglas Biber, was first used to distinguish between broad domains of use, most notably speech and writing (Biber, 1988), but has since been applied to academic corpora such as the T2K-SWAL (Biber & Gray, 2010), BAWE (Nesi & Gardner, 2012), MICUSP (Hardy & Römer, 2013), and collections of research articles (Gray, 2013). These investigations have revealed variation in the clustering patterns of linguistic features across genres, disciplines, and levels of study, with many implications for EAP. In MICUSP, for example, MDA revealed linguistic differences between writing in the sciences and the humanities (Hardy & Römer, 2013), and in the BAWE corpus, students were found to write in a less context-dependent and more informational way as they progressed through their degree programmes, with a gradual decrease in narrative and persuasive features (Nesi & Gardner, 2012, pp. 13–14).

Biber's method of MDA requires the use of an elaborate automatic annotation system to identify all the linguistic features that might contribute to the factor analysis (see Biber, 1988). For other types of analysis, corpora can be marked-up to varying degrees. Annotation can be undertaken by hand, automatically, or with some assistance from a computer programme, and can tag features relating to phonology (pronunciation or prosodic features), lexis (lemmas,¹ parts-of-speech (POS) tags, or semantic characteristics), syntax (parsing), and/or discourse features (co-reference relations, functions, or stylistic characteristics). In EAP studies, automatic lexical annotation is common: lemmatised forms are used for the creation of wordlists, and POS and semantic tagging allows researchers to search more widely for words representing specified parts of speech or semantic fields. A search for

proper noun + number within brackets + lexical or modal verb using the CLAWS POS system (constituent likelihood automatic word-tagging system; Garside & Smith, 1997), for example, will find integral citations in written academic texts, enabling the investigation of academic referencing practices (Nesi, 2014). A search for semantic tags using the USAS category system (UCREL semantic analysis system; Archer et al., 2002) reveals that words relating to DECIDING, WANTING, PLANNING, and CHOOSING are particularly common in BAWE corpus genres which prepare students for the world of work (Nesi & Gardner, 2012, p. 203).

Although some superficial features beyond sentence level, such as pronominal reference, can be identified automatically, annotation at the level of discourse is generally less advanced and has received less attention from EAP researchers. Annotation of this kind must still for the most part be done manually, and is thus too time-consuming for most EAP practitioners to undertake on a large scale. Moreover, some corpus linguists, such as Sinclair (2004, p. 191), have argued against annotating functions of discourse, on the grounds that this imposes particular interpretations of the text on the corpus user. However, in order to create useful teaching materials, it is necessary for EAP practitioners to interpret speakers' and writers' communicative intent, and for this reason discourse-level annotation has great potential within EAP, for example in the area of automated writing evaluation. Cotos (2011) describes how annotating research article introductions according to Swales' 'Create a Research Space' (CARS) model led to the development of the Intelligent Academic Discourse Evaluator, a programme that evaluates draft articles and provides feedback to novice writers.

We can expect more complex corpus-based pedagogical applications in the future, but also more revelations from simple, plain text corpora, which will continue to provide EAP-relevant information without the use of any form of annotation, for example relating to collocations, domain-specific words, and phraseology. The EAP materials created by Tim Johns in the 1980s, using text files and a simple concordancing programme, are still relevant today (see Johns, 1991, and <http://lexically.net/TimJohns/>). Despite advances in technology and corpus query techniques, the insights of the human analyst are likely to remain the top resource in EAP for a long time to come.

Further reading

Biber (2006); Hyland (2012); Nesi & Gardner (2012)

Related chapters

- 14 Acquiring academic and disciplinary vocabulary
- 19 Genre analysis
- 21 Intercultural rhetoric
- 28 PhD defences and vivas

Note

- 1 A lemma is the uninflected form of a word that can be used as a headword for a dictionary entry. For example, *believe* is the lemma representing *believe*, *believes*, *believed*, and *believing*.

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ETHNOGRAPHIC PERSPECTIVES ON ENGLISH FOR ACADEMIC PURPOSES RESEARCH

Brian Paltridge and Sue Starfield

Ethnographic research has its origins in anthropological studies of social groups within the natural settings in which they live and carry out their daily routines. Ethnographers seek to understand and describe these cultural practices through carrying out fieldwork and immersing themselves in these settings. Ethnographic approaches to investigating language learning and teaching have become more widely used in recent decades as researchers seek to better understand how learning is shaped by the social contexts in which it takes place.

There are a number of publications which discuss ethnography in applied linguistics research, demonstrating an increasing interest in ethnographic research in the field (see e.g. Dressen-Hammouda 2013; Duff 2016; Starfield 2015). There are, however, fewer accounts of ethnographic research that address the specific area of English for academic purposes (EAP). Indeed, most ethnographic research in this area could be described as ‘ethnographically-oriented’ (Hyland 2006; Ramanathan & Atkinson 1999) rather than examples of full-blown ethnographies. Ethnographically-oriented research, we argue, complements the body of textually-oriented research that has been carried out in the area of English for academic purposes in that it provides a contextual orientation to this research that moves beyond the text (Freedman 1999) in order to explore the socially situated nature of the use of language in academic settings and how we go about dealing with that language in our classrooms. Hyland (2006, p. 68), in his discussion of English for academic purposes, argues that ethnographically-oriented research:

lends itself well to education research, providing critical insights into educational processes and practices and ways of developing theories grounded in actual investigations to achieve deeper understandings of the social influences on language use in EAP settings.

Swales and Rogers (1995), similarly, argue that although there is value in textual studies and what they can reveal about specific purpose language use, more information than this is needed in order to understand the role of genres in social and institutional settings.

This chapter provides an overview of English for academic purposes research that has taken an ethnographic perspective. The chapter commences by outlining the basic characteristics of ethnographically-oriented research and research techniques that are typically drawn on in these kinds of studies. The chapter continues by reviewing examples of ethnographically-oriented research that has been conducted in the area of English for academic purposes. The particular foci will be in the areas of academic writing, speaking, reading and listening, and the teaching and learning of English for academic purposes. The chapter concludes by making suggestions for future ethnographically-oriented research in the area of English for academic purposes.

Characteristics of ethnographically-oriented research

A key feature of ethnographically-oriented research is that it studies people's behaviour in everyday rather than experimental contexts and is interested in understanding their meaning-making practices. Typically, ethnographic research involves the researcher in prolonged engagement in the research site over time, though in research with an *ethnographic orientation*, the degree of researcher involvement may be less intense than this. Data is gathered from a range of sources, although chiefly by observation and/or relatively informal conversations. The data that are collected, further, are not based on pre-set categories or explicit hypotheses but arise out of a general interest in an issue or problem (Hammersley 1990). In addition to observations and conversations, ethnographically-oriented researchers might also make use of fieldnotes taken during the observations and collect documents relevant to the particular project. These multiple data sources help researchers provide the 'thick description' (Geertz 1975) that is essential to this kind of research and to enable triangulation of the data; that is, to provide multiple perspectives on what is being examined that will enable the researcher to gain a more complete understanding of the topic being investigated.

The use of ethnographic approaches has been encouraged by what has been called the social turn (Block 2003) in language studies which has led to the desire to develop in-depth understandings of language learning and teaching in the specific (and frequently unequal) social contexts within which they are taking place. While some researchers might assume that they already know what is important and what they want to find out, ethnographic research makes no such assumption. Researchers, rather, aim to immerse themselves in the everyday activities of the group of people whose meaning-making (also known as 'emic' or insider perspectives) practices they are attempting to understand. Rather than testing preformed ideas or theories (as in deductive research), ideas are developed inductively from the observations (Blommaert & Jie 2010). This is not to suggest that ethnography is atheoretical; rather it is seen as hypothesis generating, with theory being *emergent* (often referred to as *grounded theory*), leading to the development of theorization as the research progresses (Starfield 2015).

Writing in academic settings

Most ethnographically-oriented research to date in the area of English for academic purposes has focused on academic writing. Dressen-Hammouda (2013) provides an overview of ethnographically-oriented research in relation to English for specific purposes (ESP) more broadly while Paltridge, Starfield and Tardy (2016) discuss ethnographic research into academic writing specifically at the undergraduate and postgraduate levels as well as writing for scholarly publication. Studies tend to adopt a view of learning to write as learning to

participate in the literacy practices of the academy and examine the ways in which writing is shaped by the social contexts in which it takes place.

Leki (2007) examines the literacy experiences of four undergraduate students in a US university based on a five-year longitudinal study. She aims, in her study, to uncover how these students experience and respond to the literacy demands of their studies, how their English language and writing classes helped them meet the literacy demands of their disciplines and how they became initiated into the discourses of their disciplines. The data she drew on for her study were interviews and emails with the students, interviews with the students' instructors, documentation related to the students' course work (such as course syllabuses, class texts, writing assignments, drafts of papers and copies of exams), observations of classes, recordings of writing center sessions, and journals in which the students commented on the work they did during the semester and their responses to it. The main themes that emerged from her data were the academic, social and ideological issues that the students faced in relation to their writing experiences. Through her detailed discussion of each of her cases we see examples of the worlds these students live through and, importantly, how these students 'negotiate the complexities of the social, cultural, and academic and sociopolitical environments that surround them' (Leki 2007, p. 285).

Starfield's (2001, 2002, 2011, 2015) critical ethnographic research into undergraduate writing, in this case in a South African university, examined the experiences of black students in a former whites-only university. She collected her data over a year. Starfield attended classes, tutorial meetings, an academic support class, markers' meetings, tutor briefings, and took notes on conversations she had with students and their teachers. She formally interviewed students and their instructors as well as examined the students' written assignments. She also collected the course documentation that was given to students, the texts that they read as well as obtained information on the students' performance. She then connected her analysis of the students' disciplinary writing to what it meant, more broadly, for these students to become successful, the academic identities available to them, and their positioning in the unequal contexts of apartheid South Africa more generally. Johns and Makalela (2011), also in South Africa, examined students' undergraduate writing needs from both 'client' (Makalela) and 'consultant' (Johns) perspectives. Their critically reflective study shows how difficult it is for an outside consultant to understand the context of an educational setting of which they are not part and issues that can arise because of this.

Prior (1995, 1998) provides examples of ethnographic research into graduate student writing and professors' responses to this writing. His research involved classroom observations, the collection of course syllabi and class handouts, questionnaires, and semi-structured interviews with students and their professors, the collection of students' written texts with professors' comments and grades on them, and text-based interviews with the professors. Prior concludes from this study that writing in the academy is highly situated and that we cannot just teach generic academic writing tasks. We need, rather, to think about how we can facilitate students' development of the communicative flexibility they need to achieve academic communication in the situated and dynamic interactions in which they find themselves (Prior 1995). Casanave (2002) also examines the literacy experiences of graduate students from an ethnographic perspective, in this case in an MA TESOL/TFL (Teaching English to Speakers of Other Languages/Teaching Foreign Language) program in the US. Her case study students were Japanese (3), American (2), and Armenian (1). What she found was that, regardless of the students' backgrounds, none of them was prepared for the kinds of writing they needed to do in the program. One spoke of her change in academic vision due to the different kinds of writing she was doing. Commenting on the diversity of

writing tasks the students needed to do and the issues they faced in doing this, Casanave points out that generalized approaches to teaching writing for students in these kinds of programs is highly problematic and is not able to take account of the many written genres and subgenres students need to have a command of.

At the doctoral level, Paltridge et al. (2012a, 2012b), Ravelli et al. (2013) and Starfield, Paltridge and Ravelli (2012, 2014) describe a study that examined dissertations that students in the visual and performing arts submit for examination at the conclusion of their studies. This new variant on the doctoral dissertation differs from many other areas of study in that students in these disciplines are typically required to create (or perform) a creative work as part of the examination process, as well as to submit a written dissertation. This study was prompted by advisor and student reports of difficulty experienced with the written component, and aimed to examine not just what these written texts typically looked like but also why there were written as they were. The methodology used for the study was a textography (Swales 1998a, 1998b), an approach to genre analysis which combines elements of text analysis with ethnographic techniques in order to examine what texts are like, and why. Data collected for the study included a nation-wide survey, 36 dissertations, 36 supervisor questionnaires, 15 student interviews, 15 supervisor interviews, university prospectuses, information given to students in relation to their candidature, published research on doctoral research and examination in these areas of study, in-house art school publications, discussion papers as well as attendance at roundtable discussions and exhibition openings. The study found that there was a range of ways in which students could write their texts as well as reasons for this range, some of which were institutional, and some of which were due to the influence of key figures in the field, rather than the particular disciplines. The textography, thus, provided insights into the production and meanings of the students' texts that would not have been gained had the texts, alone, been examined.

Lillis and Curry (2010) and Li (2006a, 2006b, 2007) are examples of ethnographic studies which examine the experiences of multilingual scholars seeking to publish their work in English (see J. Flowerdew 2013 for an overview of research in this area). In their book *Academic writing in a global context*, Lillis and Curry (2010) employ text analysis, interviews, observations, document analysis, analysis of written correspondence, and reviewers' and editors' comments to examine these experiences. Their later (Curry & Lillis 2013) book draws on this research to propose strategies that multilingual writers can adopt to enhance their chances of getting published, as well as how other people can support these writers in this endeavor. Li (2006a) examines a computer science student's research writing in Chinese and English while Li (2006b) examines issues faced by a physics student wanting to publish in English. In her (2007) paper, Li examined a chemistry student's process logs, drafts of his writing, email exchanges she had with the student, and interview data to examine how he went about writing for publication and the engagement he had with others as he did this.

Speaking in academic settings

In her study of in-class presentations by undergraduate architecture students, Morton (2009) employs observations and semi-structured interviews with students and their instructor to understand what is important in these presentations. Morton concludes that it is not enough for students to explain their design to their audience and to walk their audience through their building or site. They also need to have something in their presentations, such as particular types of images and the use of a narrative style in the presentation, that creates rapport with

the audience and that will convey the richness and complexity of their design, as well as help the audience visualize the design. Her research shows the importance of investigating the nature of seemingly everyday genres such as academic presentations in the particular settings in which they occur to see what is valued in those settings, and what the features of effective presentations are from the perspective of different disciplines.

Participation in academic seminars is examined by Nakane (2007) at the undergraduate level and Lee (2009) at the postgraduate level. Nakane's interest was in Japanese students' silence in seminars in English-medium universities and what the reasons for this might be. She looked at the Japanese students' spoken interactions in the classrooms, and also examined the other students' and lecturers' perceptions of the Japanese students' interactions. She carried out a conversation analysis of the interactions and combined this with individual interviews, focus group discussions, and a questionnaire in order to obtain multiple perspectives on the issue she wanted to explore. Nakane found that the Japanese students' silence was indeed a problem in the classrooms. She also found that gaps in assumptions about classroom communication between the Japanese students, fellow English-speaking students, and their lecturers contributed to the students' silence. She found, further, that there was a conflict between the lecturers' view of the Japanese students' personalities (for example, as being shy) when this was not the case outside of the classroom. The students' silence in class was interpreted, she found, as evidence of a negative attitude and lack of commitment to their studies where, in fact, for one of the students she examined, this was not at all the case (see Ellwood & Nakane 2009 for a study which compares Japanese students' spoken participation in mainstream university and EAP classrooms).

Lee's (2009) study of Korean students' participation in masters and doctoral degree classes in the US employed classroom observations and formal and informal interview data. She found that the students' proficiency in English, sociocultural and educational differences between Korea and the US, individual differences, and the classroom environment were all interconnected and both singly and together influenced the students' participation in the classes. She found, further, that regardless of their length of stay in the US, all the students found it a challenge to take part in whole-of-class discussions. This differed, however, with small group discussions where the students' participation varied greatly. The key observation she makes is that it is not just language proficiency (as is commonly believed) that is the main issue for English as a second language (ESL) students' lack of participation in classroom discussions but other factors as well, all of which are interwoven with each other and that influence students' participation.

Chang and Kanno (2010) carried out research into the value placed on linguistic proficiency (in particular, speaking) for doctoral students in different academic disciplines in the US. They carried out interviews, shadowing observations, collected information from departmental websites and student handbooks, and obtained samples of the students' writing. Their conclusion was that the importance of language competence varies across disciplinary communities, community practices, and different community members. The students' advisors, further, did not think that the students suffered major disadvantages due to their non-native speaker status and the students saw themselves as no less legitimate as beginning researchers than their native speaker peers.

Nakane, Lee, and Chang and Kanno's studies, then, show the value of going beyond common assumptions about issues that face non-native speaker students in the academy and aiming for insiders' perspectives on issues that relate to them in order to gain deeper understandings of these issues, as well as provide a firmer base for responding to them (see Feak 2013 for an overview of research into speaking in academic settings more broadly;

Morita 2002 for a study which looks at discourse socialization through oral academic presentations; Seloni 2012 for a study which examines academic literacy socialisation through spoken interactions, also in the US).

Reading in academic settings

Less ethnographically-oriented research has been carried out into reading in academic settings compared to speaking and, particularly, writing. Atai and Fatahi-Majd (2014), however, have taken an ethnographic perspective in their examination of teaching reading comprehension and teachers' beliefs about this in Iranian classrooms. They observed three ELT teachers and three subject area teachers in a medical university for eight sessions using an observation checklist based on a framework proposed by Grabe and Stoller (2002). They also carried out interviews with both sets of teachers. There were considerable inconsistencies, they found, among the subject area teachers compared with the ELT teachers, as well as marked differences between the two groups in terms of what they did in their classrooms and the beliefs they held about this.

Medina (2010) and Pacheco (2010) have carried out ethnographic studies which focus on reading in elementary school classrooms. Medina took fieldnotes of students' and teachers' literacy activities over a period of a year to investigate Latino/a immigrant children's engagement with bilingual literature in a classroom in the Midwestern United States. She took video and audio tapes of classroom discussions, wrote a reflective journal, collected writing samples, and conducted informal interviews with the students. Pacheco carried out participant observation, teacher and administrator interviews, made video recordings of reading lessons, and collected student work samples and school and district documents to examine reading activities in two Californian bilingual classrooms. What these studies show is the high value that can be obtained from this level of engagement in classrooms activities and what research of this kind can reveal about how learners (in this case bilingual children) engage in reading activities in their classrooms.

Listening in academic settings

Ethnographically-oriented research into academic listening includes the work of Benson (1989), Flowerdew and Miller (1995), Miller (2002a, 2002b, 2009), Mendelsohn (2002), and Northcott (2001). Benson (1989) followed a Saudi ESL student enrolled in a masters degree at a US university over an academic semester, focusing on his listening activities during academic lectures. The data included recordings of the lectures, the student's notes and interviews with the student. Benson found that the activities the student engaged in during the lectures had very little resemblance to anything he had done in the intensive English program he had attended prior to starting on his masters degree. The student realised he needed to focus not just on new facts but also on the teacher's attitudes, preferences, and opinions as these would have implications for how the teacher graded the student's work. The student had to, he discovered, listen to learn rather than listen to comprehend as he had done in the intensive English course.

Flowerdew and Miller (1995) and Miller's (2002a, 2002b, 2009) research was an ethnographic study of 17 engineering students' listening to lectures at a university in Hong Kong over a period of three years. Data included student and lecturer journals, focus group discussions, questionnaires, student life histories, participant observations, participants' verifications, and semi-structured interviews. Miller (2002a, 2002b) found problems arose

for students when lecturers did not use the standard local accent and pronunciation of English, when scientific text was delivered as spoken text, when lecturers deviated from the handouts they had given students such as when they made an aside, and when lecturers used visual material such as computer simulations to support their lectures. To help resolve these issues the students formed a very close community of learners but had little sense that they might, in the future, enter into the wider community of engineering practice.

Mendelsohn (2002) examined how 12 first-year ESL students coped with lectures over a period of two semesters in an economics program at a North American university. The students were paired with 'lecture buddies', native speaker students who were also studying economics at the university. Data included copies of lecture notes, lecture buddies' journals and notes from the weekly meetings they held with the students, student interviews, and reports written by the buddies at the end of the project. While the data did not include observations (or recordings) of the lectures, the findings of the study have important implications for ESL students' listening to academic lectures and their preparation in pre-university programs for this. Strategies that students used that were successful included reading the textbook before or after the lecture, asking the lecture buddy (or a native speaker student in the class) clarification questions on the lecture, attending an additional (or repeat) lecture if this was possible, and using note-taking strategies such as making a note in the margins on the handout of anything, or any word, that was not clear to ask someone about after the lecture. Similar to Miller's (2002a, 2002b) study, students found it difficult when lecturers deviated from the set text. Students also found gaps in their vocabulary a major problem, suggesting that this is something content lecturers could spend more time on than they do. They also found the reading load for lectures heavy, suggesting this is also something lecturers could give attention to.

In an examination of the listening demands of MBA classrooms for ESL students in the UK, Northcott (2001) observed and transcribed a sample of lectures over two semesters, as well as took fieldnotes in order to identify particular characteristics of the lectures and issues these might present for ESP students. She also spoke to and sent questionnaires to students who had undertaken language classes in the university's language center prior to commencing on the MBA to find out about the usefulness of these classes in preparing them for their studies. This was done in preparation for writing a new EAP course to be taught by the university's language center that students would undertake prior to embarking on their MBA studies. Studies such as these show the value of carrying out needs analyses (Brown 2016; L. Flowerdew 2013) of this kind when preparing to write new EAP courses rather than assuming that 'one size fits all' in these kinds of programs.

Teaching and learning English for academic purposes

Research that has examined the teaching and learning of English for academic purposes from an ethnographic perspective includes Chun (2015), Giroir (2014), and Grey (2009) who have investigated EAP classrooms, and Cheng (2006, 2007, 2008a, 2008b, 2011a) and Tardy (2005, 2009) who have researched the teaching and learning of postgraduate writing.

Chun (2015) carried out a critical classroom ethnography of a pre-university EAP class in Canada. For his study, Chun observed the class over a period of nine months, as well as examined the textbook and other curriculum materials used by the teacher. He also took fieldnotes of his classroom observations and the meetings he had with the teacher, carried out semi-structured interviews with the teacher and her students, collected students' written assignments and photos the students had taken of their literacy practices outside of

the classroom, as well as taking his own photos of the classroom interiors. Chun considers the findings of study in relation to theoretical discussions of critical literacy and how these are taken up in actual practice, including what counts as 'critical' (and 'uncritical') in EAP classrooms and why this matters. He then proposes what an alternative EAP curriculum might look like based on the findings of his study.

Giroir's (2014) study of two Saudi students in an intensive English program in the US employs narrative enquiry (Barkhuizen 2015) as well as notes taken from classroom observations, individual interviews, and student-designed L2 photo narratives. Giroir discusses how the students participated in communities outside the classroom in the context of post-9/11 discourses that marginalize them in powerful ways. The study examines issues of identity and race, showing how discourses of exclusion impact on learners who identify as Muslim, especially in their broader participation in English-speaking societies. While the experiences of each student were not always the same, the study does point to ways in which othering of such students in terms such as race, relation, and ethnic identity can create obstacles for them which go well beyond language in their goal to participate more fully in society, beyond the walls of the classroom (see Barkhuizen 2015 for a review of this study).

Grey (2009) reports on a study she carried out with international students enrolled in a business degree who were carrying out a project which examined diversity in the university in which they were studying. The students were encouraged to become 'nomadic ethnographers' (p. 121) as they wandered around the campus using digital cameras, mobile phones, and pen and paper to make records of diversity they observed. They brought this material back to the classroom where Grey made videos of their interactions, as well examined journals the students had written, and visual images they had created such as drawings, photographs, and posters. Through the subversive use of visual images in their posters, she found, the students resisted more conventional forms of knowledge 'in order to create hybrid forms of their own' (p. 131). In doing this, they found alternative (and powerful) ways of describing themselves and others. Grey encourages EAP teachers to take the kind of risk she took with her students, arguing that the worst that can happen is that the students (and the teacher) 'will encounter something unexpected and soar on a line of flight into something new, that is, difference' (p. 131).

A common teaching strategy in genre-based writing teaching is what is termed 'metacommunicating' (Flowerdew 1993; Swales and Lindemann 2002); that is, the explicit analysis of examples of particular genres used in the classroom as a tool to heighten learners' awareness of genre-specific language features, rhetorical organization, and communicative purposes (Cheng 2011b). Cheng's (2006, 2007, 2008a 2008b, 2011a) ethnographic classroom-based research of postgraduate writing employed participant observation, as well as student-teacher conference transcripts and students' written assignments to examine the use of genre as a way of teaching academic writing. Dressen-Hammouda's (2008) eight-year study of a geology student's writing experiences employed data such as literacy narratives, text-based interviews, conversations about disciplinary and writing practices, focus group discussions, as well as the analysis of artefacts such as fieldnotes, drawings, field reports, conference abstracts, research articles, dissertation chapters, and lecture notes. Dressen-Hammouda shows how the student benefited from a focus on genre, especially in relation to the acquisition of disciplinary identity. She argues that the teaching of written academic genres should include more than just linguistic and rhetorical features of genres. It should also focus on the disciplinary community's ways of perceiving, interpreting, and behaving; that is, the 'ways of being, seeing and acting' (p. 238) that are particular to the student's disciplinary community. Tardy (2009, p. 287), similarly, observes that 'despite its problematic

normalizing effects ... writing and writers are tied to genre, even as they purposefully break generic conventions'. As she concludes, the dynamic, contextual, and sociorhetorical nature of genres can make them difficult to address in ESP classrooms, yet at the same time, these are issues that need to be brought to learners' attention. The use of ethnographically-oriented approaches to classroom research is one way in which we can see how these sorts of issues can be dealt with in the classroom.

Recommendations for practice and future research

What the studies we have outlined in this chapter reveal has implications for how we go about what we do in EAP classrooms. This research provides a way of unpacking the knowledge, skills, and ways of doing things that are necessary for students to become successful members of their academic communities (Johns 1997), as well as how we might focus on these issues in our classrooms. This kind of research, we believe, can provide a fuller and more explanatory perspective on what we do, and what we need to do, that might not otherwise be obtained.

In our book *Ethnographic perspectives on academic writing* (Paltridge, Starfield & Tardy 2016), we suggest areas of research that could be further explored that apply not just to academic writing but to English for academic purposes research more broadly. This includes the need for more EAP research in elementary schools (as in the work of Costley 2010; Kibler 2009), secondary schools (e.g. Cruickshank 2006; de Oliveira & Silva 2013), and transitions from secondary school to college and university (e.g. Harklau 2000, 2001; Roberge, Siegal & Harklau 2009). The ways in which people learn to become EAP teachers also needs further investigation (Belcher 2013), as do EAP teachers' beliefs and cognitions (Borg 2003, 2006, 2015; Barnard & Burns 2012) about their teaching. The use of digital literacies (Hafner, Chik & Jones 2013) and multimodality (Lotherington & Jenson 2011; Prior 2013) in EAP classrooms also needs further ethnographic investigation.

Further reading

Duff (2016); Paltridge, Starfield & Tardy (2016); Starfield (2015)

Related chapters

- 12 Dialogic interaction
- 27 PhD adviser and student interactions as a spoken academic genre
- 28 PhD defences and vivas

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18

INTERTEXTUALITY AND PLAGIARISM

Diane Pecorari

Introduction

Intertextuality is a feature of all discourse and is particularly salient in most academic genres. Aspects of intertextuality have been extensively researched within the English for academic purposes (EAP) literature and are mainstays of the EAP classroom. Plagiarism, a specific form of intertextuality, is a topic of concern across the academic community.

The purpose of this chapter is to describe the current state of knowledge about intertextuality and to outline the implications for the EAP practitioner. The chapter begins with a discussion of intertextuality, with particular reference to its manifestations in academic discourse. It then moves on to situate plagiarism within the broader spectrum of intertextuality, and to outline the sizeable body of research which has investigated the topic.

Because intertextuality is so prominent in academic discourse, and because plagiarism can have serious repercussions, EAP teachers need to know how to work with these concepts. Translating what we know about them into what we do about them is the subject of the penultimate section of this chapter. The final section will outline directions for future work.

Intertextuality

Intertextuality is a relationship between a given text and one or more earlier texts which have influenced it. Because texts are not produced in a discursive vacuum but are socially constructed, it would be difficult to conceive of one which did not contain such relationships; practically speaking, intertextuality is a feature of all texts. However, intertextual relationships vary greatly in terms of how directly visible the influences of the earlier texts are. Fairclough (1992: 104) adopts a distinction made by Authier-Revuz (1982), and Maingueneau (1976) between manifest and constitutive intertextuality (though Fairclough prefers the term ‘interdiscursivity’ for the latter).

The relationship involved in manifest intertextuality is both direct and, as the name implies, visible. When a newspaper article includes a quotation from a source, it is made prominent both by linguistic features such as reporting phrases (e.g., ‘According to a Whitehall source’) and by paralinguistic features such as quotation marks. These devices make the relationship with the earlier text (in this case, the journalist’s interview with an informant) visible to the reader.

However, a newspaper article is influenced by earlier texts in less direct and immediately obvious ways as well. It has a headline and it may have a by-line identifying the journalist who wrote the article. If it is published in a broadsheet, it will be relatively formal in its choice of words, while avoiding overly technical or academic language; or, if in a tabloid, it will be decidedly less formal in word choice. All of these features, which are part of a common and widely shared set of expectations for the genre ‘newspaper article’, or the subgenre ‘tabloid newspaper article’ or ‘broadsheet newspaper article’, are conventional precisely because they *are* expected. Previous newspaper articles have had those features, so journalists and editors do not have an entirely free choice in these matters. Rather, they are constrained by what they know about the characteristics of earlier exemplars of the same genre. From that they know, or at least try to deduce, what their readers will expect.

In this way, the choices a writer makes about a new text are influenced by the writer’s awareness of what earlier, similar texts were like, and so the earlier texts exert an influence on the later. The influence is indirect; that is, the inspiration to put a headline on a newspaper article cannot be traced back to any other single, earlier article. It is also a less salient influence in that there are no signals to draw the reader’s attention to the relationship, as ‘according to’ does in the case of quotation. This less direct, less visible relationship is constitutive intertextuality, or interdiscursivity.

Interdiscursivity in EAP

Academic genres tend to be highly conventional (although subject to variation across academic disciplines). In other words, the effects of interdiscursivity are significant. The principal impetus behind EAP research has been to produce descriptions of academic discourse in order to provide teachers and learners with an agenda. In practice, this has meant that, in describing the conventional features of academic genres, researchers have simultaneously documented interdiscursive relationships.

Perhaps the most prominent example of this is John Swales’ Create a Research Space (CARS) model. Across various iterations (Swales 1990; Swales & Feak 2004) the CARS model has described a relatively stable series of ‘moves’ which authors use in the introductions of research articles (RAs) to contextualise the findings to be presented. Authors define the research area; describe a smaller ‘niche’ within it; and announce their intentions to occupy that niche. Each of these moves can be achieved by means of one or more from a menu of ‘steps’. For example, a niche can be identified by naming a gap in the existing research. Moves and steps may be associated with phraseological chunks, such as in (1) below.

- (1) However, to date little attention has been paid to the question of ...

The existence of regular patterns in structure, phraseology and other features is evidence of interdiscursivity at work. More precisely, these patterns demonstrate that the idea to structure RA introductions in a given way, including reviewing the literature and describing an unresearched question, a gap, is not the original invention of any given author. Authors choose to do it this way so that their RA will be a homogeneous addition to the body of scholarship on a topic. There is thus an intertextual relationship between the new work and earlier ones, but the source of the relationship is not that writers (ordinarily) adopt the idea of a CARS structure or a phrase like ‘to date, little attention has been paid’ from a particular text. Rather, by virtue of having read a large number of contributions to their scholarly literature, writers become aware of what features are conventional. Assuming the same awareness

on the part of their readers, adopting the same features is a means of accommodating the anticipated readers' expectations. (In principle, of course, the writer could defy conventions, thus challenging readers' expectations. This is uncommon in academic discourse, and more to the point, regardless of whether they are met or flouted, the expectations themselves are evidence of interdiscursivity.)

The interdiscursivity of EAP has also been documented by investigations of rhetorical structures in genres as diverse as abstracts (e.g., Lorés 2004; Okamura & Shaw 2014), titles of RAs (e.g., Soler 2011), acknowledgements in theses (Hyland 2004b; Hyland & Tse 2004), and the closing portion of academic lectures (Cheng 2012). In addition, interdiscursivity can be seen at work in other features; for example, word choice in titles (Anthony 2001) or phraseology in lecture closings (Cheng 2012). (See Part III of this volume for a review of several academic genres.)

Manifest intertextuality in EAP

Like interdiscursivity, manifest intertextuality is a prevalent feature of academic discourse. Scholarly activity is incremental in nature, with new work building upon the findings of existing research. It is therefore fundamental to the nature of scholarly texts that they are influenced by earlier ones. This dependence on earlier works should be acknowledged; as Groom notes, 'it is a conventional expectation among readers of all but the most playfully postmodern of Anglophone academic texts that it will be clear at any given point whose "voice" is "speaking"' (2000: 15). This is accomplished in academic texts by means of a reference, or citation, to the source as well as a number of other devices which indicate the nature of the relationship.

Writers have a number of choices open to them in citing sources, and these have been the subject of extensive investigation. The first is whether to include a citation at all, and writers choose to do so for various reasons, including to structure an argument, provide information for readers, position ideas in the literature in relationship to each other and forestall accusations of plagiarism (Harwood 2009). This last is an important function: by providing a citation, the writer announces that some portion of the credit and responsibility for a given proposition is due the source author. If no citation is present, the reader will assume that the proposition is one for which the writer is prepared to take exclusive responsibility, and for which the writer would like exclusive credit. Tadros (1993) called these functions attribution and averral, respectively.

If a writer believes that intertextual influences should be acknowledged, then the next choices are how to include the proposition and the reference into the new text. The basic choice for incorporating content from a source is whether or not to use the source author's own wording, i.e., to quote. The alternative is to paraphrase, that is to reformulate the idea so that the content is conveyed accurately but expressed differently. Some researchers have further refined this distinction. For example, Hyland (2004a) distinguishes between block (longer) quotations and shorter quotations integrated into the running text, and between summary (a paraphrased account from one source) and generalisation (a restatement of an idea which can be found in and is attributed to more than one source).

References can be more or less visible in the new text as well. Swales (1990) noted that some references make the source author a constituent of the reporting sentence (as in (2) and (3) below), while others (4) relegate the source to parentheses, a footnote, etc. Swales termed the former 'integral citation' and the latter 'non-integral' (or, more recently, 'parenthetical'; see Swales 2014). By means of making the name of the source more prominent, integral

citations can easily have the effect of enhancing the influence and authority of the source, potentially at the expense of the writer's authority.

- (2) Cheddar (1997) argues that the moon is made of green cheese.
- (3) Stilton (2002) notes that there are questions about the composition of the moon.¹
- (4) The moon is made of green cheese (Cheddar 1997).

The language of referencing has been of interest to EAP researchers virtually since the inception of the field, with the reporting verb (the verb used to introduce an account of content from a source) coming in for early and thorough scrutiny. The semantics of the reporting verb give the writer scope to signal meaning of various types. In their landmark typology, Thompson and Ye (1991) classified reporting verbs in several ways, including according to what they say about how the original source author and the writer of the citing work regard the proposition in question. Thus, in (2), 'argues' suggests that Cheddar agrees with the proposition that the moon is made of green cheese, but does not signal whether the writer citing Cheddar concurs. 'Argues' thus indicates positive author stance but non-factive writer stance. In (3), 'notes' suggests that the writer agrees with the source author, making the writer's stance factive.

Formal aspects of the verb phrase, like tense and voice, have been investigated and specialised usages (i.e., distinct from patterns of verb form usage described in general grammars) have been found (e.g., Oster 1981; Tarone et al. 1998). Importantly, formal choices in the reporting verb phrase are not isolated or arbitrary. Rather, they are bound to contextual and evaluative factors such as supporting overall textual cohesion, whether the writer sees the cited proposition as currently valid, and how the writer wishes to position him/herself within the discourse community (Charles 2006; Pecorari 2013a; Shaw 1992).

Like many other aspects of academic discourse, citation varies greatly across academic disciplines. Differences can be seen in features such as the frequency of citations, choice of reporting verb and verb form, types of source cited and the use of quotation (Charles 2006; Hyland 2004a; Pecorari 2006). Significantly, the differences are not arbitrary, but can be traced to aspects of knowledge construction in the disciplines. Thus, there is an overwhelming tendency in the natural sciences and technical fields to avoid quotation while it is a routine if minority form of reference in most of the social sciences and humanities (Hyland 2004a; Pecorari 2006). A reasonable explanation for this phenomenon is that quotation is not often needed in the relatively objective world of the 'hard' subjects, while the subjective nature of the 'soft' subjects can make it important to avoid the risk of distorting a source by paraphrasing. (For a more detailed description of cross-disciplinary practices with regard to citation, see Hyland 2004a.)

As the above review suggests, aspects of manifest intertextuality have been investigated primarily in written texts and this may reflect a greater propensity toward intertextual references in written academic discourse. Ädel (2008) found fewer references to experts in university lectures than in written academic discourse. Shaw et al. (2010) also studied university lectures and found that nearly half of all references were to a text which was itself the topic of the lecture, and many of the remainder related to classroom management. There was, therefore, little reference to external authorities, a result which is compatible with Biber's (2006) findings. Thus, while there is too little research on intertextuality in spoken academic genres to draw firm conclusions, it would appear that manifest intertextuality is not as strongly salient in spoken as in written academic discourse.

Plagiarism in EAP

Plagiarism is typically defined as the reappropriation of portions of an earlier text by a more recent one, and as such is a form of intertextuality. However, unlike most forms of intertextuality, plagiarism is unconventional, unauthorised and highly stigmatising.

Definitions of plagiarism in academic contexts are frequently written for regulatory purposes and intended to close loopholes, to prevent an accusation of plagiarism being rebuffed with the response ‘I didn’t know I couldn’t do that’. Consequently, academic definitions often contain long enumerations of the many kinds of texts which can be the object of plagiarism, as (5) below illustrates. Ideas or words can be plagiarised, as can figures, tables, diagrams, drawings, music, computer code, etc. In short, any intellectual contribution and/or form of expression of an intellectual contribution can be plagiarised.

(5) Example definition of plagiarism

What is plagiarism?

‘Plagiarism’ means using the words or ideas of another without giving appropriate credit. Even if the student paraphrases the ideas in his/her own words, the source must be cited. If exact words are used, the student must put the words in quotation marks and cite the source. Students are responsible for knowing what plagiarism is and avoiding it. Be particularly careful about copying and pasting information from the Internet—materials used from Internet sources must be quoted and cited just like information from other sources. Students must also be aware that copying or adapting pictures, charts, computer programs or code, music, or data without citing sources and indicating that the material has been copied or adapted is plagiarism. It may also be copyright infringement.

(From the University of California)

It is worth noting that all of these sorts of texts can also be the object of conventional and appropriate re-use. The conditions under which re-use is appropriate vary, but include at a minimum acknowledgement of the source and the nature of the re-use. Thus, the criteria which indicate plagiarism are negative, in the sense that it is not the intertextual relationship *per se* which breaks norms but the absence of a signal revealing that relationship.

Plagiarism, then, is an intertextual relationship which is non-normative because it is not transparent: the reader is not offered the chance to understand the relationship because the usual and conventional signals, like citations and quotation marks, are missing. Further, plagiarism is widely held to be deceptive: the influences from earlier texts are hidden from the reader because the writer deliberately set out to conceal them. While some would dissent and claim that plagiarism can be unintentional, including many university policies and definitions which seek to close off ‘I didn’t mean to’ as a line of defence, there is ample evidence to support the view that intention to deceive is part of the prototypical understanding of plagiarism.

Plagiarism is usually named in university policies as a form of cheating; the extract in (5), for example, comes from the website of the Student Judicial Affairs office at a US university, and the rest of the page concerns itself with other aspects of cheating and the disciplinary procedures which are invoked to respond to it. Cheating is by its nature a deliberate act of dishonesty, and, to the extent that people who behave dishonestly generally wish to escape detection, one which usually entails an effort to deceive. Explanations of why plagiarism is wrong frequently invoke other kinds of dishonesty as metaphors. The

university web page cited above links to a document written in a less legalistic and more informative vein which undertakes to explain why students should not plagiarise: 'because it misrepresents the work of another as your own'; because 'it is taking unfair advantage' and because 'it is wrong to take or use property'. The last suggests a metaphor which many policies explicitly draw for plagiarism: theft. All of this points to a received understanding that 'plagiarism' is applied to relationships which are believed to be the result of a deliberate breaking of rules rather than misunderstanding or some other, less malignant nature.

As an act of wrongdoing, plagiarism is treated seriously. Although penalties vary, the consequences can be severe. In countries like the US, the UK and Australia, a failing grade or suspension are common punishments. When plagiarism is discovered after a student has been awarded a degree, it may be revoked. Consequences can be equally serious in countries outside the traditionally English-speaking world. In Sweden, where an increasing number of students take courses with English as the medium of instruction (EMI), plagiarism is treated as one form of cheating and a typical punishment is suspension ranging from several weeks to months (Sutherland-Smith & Pecorari 2010). EAP students who travel abroad to EMI contexts should thus be aware that plagiarism has the potential to disrupt their careers as students.

Plagiarism in student work even has the ability to haunt the writer with repercussions much later. Plagiarism from decades earlier in the student writing of Martin Luther King Jr. attracted considerable negative attention when it was discovered after his death, and was responsible for a serious contender for the US presidency having to withdraw from the contest in the 1980s (Pecorari 2008). More recently, prominent German politicians have been forced out of office following the discovery of plagiarism in their doctoral theses (Weber-Wulff 2014).

When plagiarism is the result of a conscious attempt to circumvent rules in order to attain unearned credit, this strong reaction is not surprising. However, a substantial body of research has demonstrated that some intertextual relationships which risk being labelled as plagiarism have other causes than deception (e.g., Abasi & Graves 2008; Currie 1998; Pecorari 2003; Petrić 2004). It is, thus, necessary in the remainder of this section to be able to refer to an act which *risks* being labelled plagiarism, despite the fact that the label would be disputed by some. The term *textual plagiarism* will be used here to indicate writing which bears an inappropriate, unsignalled relationship to a source text, regardless of the writer's intentions. *Prototypical plagiarism* will be used here to refer to a subcategory of textual plagiarism, that which involves intention to deceive.

A number of explanations for non-deceptive plagiarism have been put forth. One is a lack of understanding on the part of some writers that they are expected to cite their sources, and that inappropriately reproducing language from a source can be regarded as plagiarism (e.g., Crocker & Shaw 2002). That in turn raises the question of why some writers might not share the decidedly condemnatory reactions with which plagiarism is frequently met. One explanation is that a range of views exists about which intertextual practices are acceptable, and that these differences conform to boundaries of subject areas. Much as there is cross-disciplinary variation in citation practices, there is also variation in which practices are labelled as plagiarism (Borg 2009; Jamieson 2008; Pecorari 2006).

Other differences have been asserted to exist across cultural boundaries. Claims include the idea that in some cultures citation implies the reader is unfamiliar with work in the field; or a collectivist orientation causes writers to view the language of published works as being in the public domain; or elegance of expression is valued over originality. Claims that cultural differences are responsible for plagiarism have, however, been challenged in

accounts from cultural insiders (e.g., Le Ha 2006) and researchers (e.g., Wheeler 2009). As Bloch (2012) demonstrates, any relationship between culture and plagiarism is extremely complex.

There are, however, undeniably transnational differences in higher education, and many students who are required to write academic texts in English have not had the exposure to coursework and writing for assessment purposes which characterises the Anglophone university (see, for example, Timm 2013 for a description of the situation in India). Students whose educational backgrounds have provided them with few opportunities to practise academic writing are presumably less likely to be skilled in doing that which is necessary to avoid plagiarism: writing good academic texts autonomously.

This is not an issue exclusively affecting second-language writers; learning to write academic texts, even in the first language (L1), requires the acquisition of a new discourse. This observation, coupled with a need to explain the phenomenon of students reproducing parts of their sources, led Howard (1995, 1999) to describe a strategy she called 'patchwriting'. Students who patchwrite take language from their sources and use their own formulations to stitch these chunks into a coat of many colours, which they may then embroider by making superficial changes, such as the substitution of synonyms or the reordering of items in a list. Howard argues that inexperienced academic writers note the difference between the work they produce and the more confident, authoritative language they read. Patchwriting is an effort to bridge this gap.

If all writers, regardless of L1, must learn academic discourse, the learning curve for L2 writers is especially steep. As an explanation for textual plagiarism, then, patchwriting applies to all students but it is reasonable to think that L2 writers may make especially heavy use of it, and indeed there is some evidence that this is the case. In a recent study, Howard, Serviss and Rodrigue (2010) investigated work produced primarily by L1 writers. They found patchwriting similar to that produced by Pecorari's (2003) L2 writers, but the chunks of repeated language were shorter.

On the basis of this brief account of some of the causes of textual plagiarism, it is possible to conclude that there are many reasons why EAP writers may produce texts which can attract the label 'plagiarism' and along with it, severe consequences (Pecorari & Petrić 2014 give a more detailed review). The following section indicates how EAP teachers can address this and other intertextualities.

Recommendations for practice: working with intertextuality and plagiarism

As the above discussion has demonstrated, intertextuality in its broadest sense presents a diverse set of challenges for the L2 writer. The pervasive nature of intertextuality across academic genres makes it essential for writers to have the full panoply of resources for grounding their texts in existing work. Avoiding intertextual relationships simply is not an option. At the same time, such relationships open up a risk of plagiarism, which cannot be avoided solely by dint of a determination not to cheat. Avoiding plagiarism also requires the ability to incorporate appropriate intertextual relationships in writing.

This means that the needs of the EAP student are twofold. To the extent that students may lack an awareness of the seriousness with which plagiarism is viewed in Anglophone academia, and/or an understanding of the sorts of acts which can be labelled plagiarism, they need to be supplied with the declarative knowledge about which source use practices are likely to be considered unacceptable in EAP contexts.

However, simply warning and informing is not sufficient, because producing good academic texts requires a set of skills—conditional knowledge—as well as the procedural knowledge about when to use them. Writing appropriately intertextual academic works requires, first of all, an ability to read and understand academic writing, in order to be able to grasp the context in which the new work is situated. In this sense, reading is an essential skill for writing (see Hirvela 2004).

Reporting the ideas and insights gleaned from reading requires a sufficiently large vocabulary to be able to express complex topics in academic register. Doing this involves both the ability to substantially reformulate an idea without distorting its meaning and, at least for writers in disciplines in which quotation is conventional, the surprisingly challenging skill of incorporating a quotation into a new setting in such a way that the flow of the text is not disrupted. If an integral reference to the source is chosen, it too must be smoothly integrated into the larger text.

Many conventional phraseological chunks (such as ‘as X correctly notes’ and ‘the first comprehensive study of Y’) can be taught and learned. EAP textbooks include some of these and two sources, Graff and Birkenstein (2014) and Morley’s Academic Phrasebank provide a particularly large selection. Resources like these—in essence, vocabulary lists consisting of multi-word units rather than single orthographic words—serve a real need for students, but at the same time highlight a lack of thoughtfulness in guidance on plagiarism by demonstrating that the prohibition on using words from a source without quotation marks is not intended to be applied universally and without exception.

Another essential skill is knowing how to make the intertextual relationships transparent (i.e., visible) to the reader. In advice on avoiding plagiarism, this is typically covered by an admonition to give a reference for every source which is used. However, the task is actually more complex than such instructions indicate, and there are many potential pitfalls. Inexperienced writers frequently provide a reference but position it in such a way that it is not seen clearly to apply to all of the content which comes from the source. The complex authorship and editorship patterns of academic texts mean that it may not be easy for an inexperienced academic reader to work out which author should be cited. In short, there is a set of skills to identifying the way sources have influenced a work which must be learned.

Writers also need to know what plagiarism is, and to understand the sorts of source use which can trigger an accusation of plagiarism. In part, this means an awareness that for many gatekeepers there is no middle ground between quotation and fully proficient paraphrases. A patchwriting strategy which involves superficial changes to an original is not only likely to be considered plagiarism by many teachers, the changes will be seen by some as an aggravating factor, evidence that the writer tried to ‘file off the serial number’ to escape detection. Equipping EAP writers to understand how their texts may be received is not easy; beyond the contextual variation found across national and disciplinary cultures and reviewed above, there is also evidence that individual teachers have idiosyncratic perceptions of what is appropriate (Pecorari & Shaw 2012). However, given the devastating consequences which can attend an accusation of plagiarism, the only safe position for an EAP writer is to be beyond reproach.

These are some of the minimum conditions for a text to be considered free of plagiarism, but to be successful, EAP students also need to know how to make the sources they use work effectively to support the overall objectives of the text. It is important to remember in this connection that academic writing is a skill. Aspects of declarative knowledge can be useful, but like any other skill, this one can only be learned through practice and feedback.

Feedback, however, is greatly complicated by the fact that many aspects of inappropriate source use can be difficult to diagnose.

Because of the difficulties in diagnosing how students have used sources, text-matching software has become widely used. Also known as ‘plagiarism detection’ tools, text-matching services try to find wording in student writing which matches wording in various sources: work submitted by other students, texts available on the open internet and, in some cases, a limited selection of databases. It is important to remember in taking a decision whether to use text-matching software that it can return both false negatives and false positives, and the results can only indicate the extent of overlap between two texts, not whether that overlap is acceptable. Teachers who choose to use such tools must be aware that they can only be a complement to other efforts to diagnose problems with source use, and not a complete solution in themselves.

The catalogue of knowledge and skills which EAP students need to exploit intertextuality appropriate and to good effect is a long one, which means that the brief for the EAP teacher is a challenging one (for a fuller treatment of issues related to teaching to address plagiarism, see Pecorari 2013b). There is a need for both pedagogical development and research advances to support the work of teachers and students in this area. The final section identifies some of these areas of need.

Future directions

The previous section related approaches to addressing the issues implicated in intertextual relationships in the EAP classroom. Because the issues dealt with in this chapter are practical ones which impact all academic writers and because they have been the object of considerable research, it is in the area of applications that the greatest need, moving forward, exists.

As noted above, there is a great deal of unevenness in what is known and believed about the kinds of intertextuality which are inappropriate. In particular, there is evidence to suggest that textual plagiarism is accepted in some disciplinary cultures, but certainly not in all. This inconsistency places EAP writers in a difficult position: an act called plagiarism has the ability to end academic careers, but nobody can say with authority which acts fall—or more importantly, categorically do not fall—under that heading.

Since disciplinary policies are typically written and enforced at an institutional level, cross-curricular differences may not be ideal, but there are precedents for working around them. However, that would require an open acknowledgement of the differences and a discussion about how to handle them. Most university teachers are experts primarily on their own subjects and less aware of cross-curricular inconsistencies. EAP teachers, on the other hand, typically meet students from across the university and reflect a great deal on what constitutes good writing, and as a result are perfectly placed to initiate and sustain such a discussion.

The issue is particularly important from an EAP perspective because English is the *lingua franca* of academic activity (see Mauranen, Hynninen & Ranta, this volume) and the playing field is not level for English L2 users. If writers in the sciences are prepared to exercise a greater degree of tolerance for source-dependent writing, writers for whom English is an L2 have an especially great incentive to use the strategies that tolerance makes possible. If gatekeepers in other fields show less tolerance and insist on more complex and nuanced intertextual networks and a greater autonomy of expression, then the burden to produce texts which reach this more exacting standard will weigh most heavily on English L2 users. This means that the issue of intertextuality and plagiarism is fundamentally one of equality. Perhaps paradoxically, the issues of inequality which have been caused by the rise of English

as a lingua franca have been better rehearsed in the English applied linguistics literature than anywhere else. Bringing this debate to a wider public and connecting it to the very language-specific issue of intertextuality would be a worthwhile contribution for future work in EAP to make.

A similar contribution could potentially be made with regard to some of the root causes of inappropriate intertextuality. The higher education landscape is rapidly changing and two of the sources of change—internationalisation and the expansion of the sector—present universities with significant challenges. As larger swathes of the population go to university, the proportion who have a non-academic background and/or a linguistic background in something other than the language of instruction is also growing. International mobility continues to increase, and an enabler of that increase is the trend toward offering courses taught in English in countries which are not part of the traditionally English-speaking world. This not only provides more countries of destination for international students, it means that an increasing number of students who pursue university study in their own country do it through the medium of English as a second language.

As seen earlier in this chapter, the skills needed to produce successful academic writing without textual plagiarism are many and complex. Writers who must work through a second language are bound to find them especially challenging. To ensure that all students have reasonable chances of success on their courses, universities might be thought to have a responsibility to admit only those who have an adequate level of language proficiency to make success a likely outcome, and to give them the necessary support during their courses. Instead, the reality in many countries is that university budgets are increasingly squeezed, and filling seats in the classroom (particularly with fee-paying international students) is seen as one remedy and precisely the opposite effect is created: students are admitted to some institutions with low-proficiency levels, and the resources are not available to provide them the insessional support they need.

This sets the stage for students to feel strongly incentivised to adopt textual plagiarism as a strategy for producing written work. Indeed, many universities have had unwanted publicity over perceptions that plagiarism is widespread and have experienced reputational damage as a result. In 2011, a parliamentary report from the Victorian (Australia) ombudsman into the treatment of international students considered the incidence of plagiarism among other kinds of misconduct and concluded that more needed to be done, noting that ‘universities need to accept that not taking action on these types of issues heightens the risk to their integrity and reputation’ (Taylor 2011: 9). Yet, policy decisions in these matters are frequently taken by educational administrators who lack sufficient insights into the implications of studying at university level through the medium of English as L2.

Since its inception forty or so years ago, the field of EAP has produced a substantial body of research describing the characteristics of academic English in its various manifestations. A literature on methods and pedagogical approaches is also growing (e.g., Charles 2012). A meaningful development in EAP with direct impact on intertextuality and plagiarism would be if EAP teachers’ knowledge were used as a resource and were to inform decisions made by admissions offices, study support centres, disciplinary boards and in curriculum meetings across the university, where decisions are made which shape the EAP student experience.

Further reading

Hirvela (2004); Hyland (2004a); Pecorari (2013b)

Related chapters

- 10 Academic reading into writing
- 11 Language and L2 writing
- 19 Genre analysis
- Part VII: Pedagogic contexts

Note

- 1 I, like others, follow Swales (1990) in adopting this cheesy tradition of exemplifying citation forms.

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19

GENRE ANALYSIS

Philip Shaw

Introduction

The term *genre* is widely used in the humanities to discuss the ways in which texts and works of art are structured by their creators and received by readers and viewers (Paltridge 1997; Frow 2005). *Genre analysis*, however, is more strongly associated with particular disciplines, among them applied linguistics (classically Swales 1990; see Tardy 2011a, 2011b and Paltridge 2012), and there are good reasons for this. Neither expert nor novice writers of academic prose typically have explicit knowledge of (or a metalanguage for) the rhetorical, and particularly the formal, features of their disciplinary genres. Their discussion is usually focussed on the thematic features: the content. Consequently, the English for academic purposes (EAP) expert's contribution is rhetorical genre analysis. Genre analysis aims to make genre knowledge available to those outside the circle of expert producers of the texts, for use in whatever way they wish, in teaching or translation, for example. The description is formulated like this to exclude from this chapter two other possible uses of genre analysis within EAP: research studies of how genres are acquired by learners (cf Bawarshi and Reiff 2010: 116); and the use of analysis of genre as a learning activity where people who are not trained in EAP – experts or learners within a particular discipline – learn to analyse their 'own' genres (Swales and Feak 2000; Cheng, e.g. 2007; Negretti and Kuteeva 2011).

There is an overwhelming quantity of research aiming to make the features of academic genres explicit, much of it discussed in other chapters in this volume. Here only three issues will be taken up very schematically: first, the nature of genres themselves; second, patterns of relationship among genres in a variety of dimensions; and third, methods for investigating genre in EAP. These will be approached in an eclectic way, mentioning observations which appear to be illuminating in applied contexts even though they derive from research done in the three different paradigms discussed by Hyon (1996): 'EAP' (Swales 2004; Hyland 2004), composition studies (Tardy and Jwa, this volume) and systemic functional linguistics (Hood, this volume). These traditions have, in any case, learned from one another and come closer over the years.

The nature of genres

Because the development of language for specific purposes (LSP)-oriented genre analysis since the 1980s and 1990s is part of an earlier general increased interest in genre, it is useful to look at the characteristics of genres as established outside applied linguistics before looking at how EAP researchers have viewed the concept.

One thing that all writers on genre seem agreed on is that the relationship of a genre to a text on paper or on the screen is not simply that of a class to one of its members (e.g. Hymes 1974; Frow 2005). Derrida (1980: 65) says 'every text participates in one or several genres, there is no genreless text; there is always a genre and genres, yet such participation never amounts to belonging'. Texts do not realize genre like speech sounds realize phonemes, or instantiate them as a mouse instantiates the species *mouse*. The relation between texts and genres differs from that between species and individual or class and instantiation in at least three ways. One is that a text affects its genre. Innovations in a text change the definition of the genre, and as innovations accumulate the genre changes. Another is that texts do not have to draw on a single genre; genres can be mixed and texts can have features of several genres. In fact, writers often speak of drawing on generic resources rather than producing a genre. Third, a text can be more or less prototypical of its genre (Swales 1990; Paltridge 1997). Texts perform or draw on genres rather than instantiating them, so many will have the most frequent characteristics, but some will not.

Frow (2005: 9) gives a set of 'structural dimensions' of genres from a literary perspective (my numbering) :

- 1 a set of formal features (layout, rhyme scheme, syntactic patterns, vocabulary)
- 2 a thematic structure (typical content)
- 3 a situation of address (medium, writer–reader relations)
- 4 a structure of implication (shared background and assumptions with the reader)
- 5 a rhetorical function ('the text is structured in such a way as to achieve certain pragmatic effects')
- 6 a regulative frame which directs us to read the text as a member of a given genre.

This list can be compared with Flowerdew's succinct definition: 'Genres are staged, structured, communicative events, motivated by various communicative purposes, and performed by members of specific discourse communities' (2011: 140) which represents the areas agreed among applied researchers (Swales 1990, 2004; Bhatia 1993, 2004; Hyland, e.g. 2004; Martin and Rose 2008; Bawarshi and Reiff 2010). The emphasis in both characterizations on situatedness and function or purpose reflects another general observation among writers: that genre is a 'form of social action' (Miller 1984). A genre is often said to be basically characterized by 'the action it is used to accomplish' rather than 'the substance or the form of discourse' (Miller 1984: 151). Frow's points 1 and partly 2 correspond to Flowerdew's 'staged' and 'structured', while 3 and partly 4 characterize the 'discourse community' that performs the genre; it has a social structure and shared cognitive characteristics. By 'generic content', Frow means that an important characteristic of an aesthetic genre like epic or Western film is what it is about and what we are supposed to know to understand it. Similarly, there are certain things that can be said and others everyone is supposed to know in a chemistry article, but because EAP researchers are not chemists, it is the province of content experts rather than EAP experts to know what they are. This is a difficult area in EAP because there are some things about specific disciplines

which are more easily articulated by discourse analysts than by disciplinary insiders (Hyland 2004). Frow's point 5 refers to pragmatic effects in the plural, corresponding to Flowerdew's 'various communicative purposes', and underlining that texts have a variety of purposes, which may not be obvious to the analyst (Askehave and Swales 2001).

Frow's conceptualization of frame (see Paltridge 1997, his source) as separate from situation of address is useful: we recognize genres partly by the context we meet them in and the form they present in that context. Frow is thinking of how framing a text as a poem affects the way we read it, but the notion of a reading-directing frame is relevant in EAP as well. For example, we read a dissertation submitted for examination in a different way from the same text as a monograph.

Of course, the concept of genre underlying much work in EAP differs from that in literary studies in several ways. Most importantly, Frow is very relaxed about the concepts of register and genre, saying that Halliday's concept of register (he cites Halliday 1978) is 'roughly similar to that of genre' (2005: 16), although applied linguists generally want to make a clear distinction between them. Within systemic functional linguistics, register and genre are technical terms (Hood, this volume), but a generally accepted distinction would be that made by Biber and Conrad (2009): register relates the situation of use of a text variety to its linguistic features on the level of lexis and grammar (giving us, for example, the register of chemistry lectures), while genre relates this situation of use to 'the conventional structures used to construct a complete text within the variety' (p. 2); that is the functional structures at various levels like the introduction or the research gap.

Four clines for classifying EAP genres

The concept of genre is, thus, anchored in function and situation. Therefore, when texts that can be assigned to a certain genre are analyzed within EAP, attention must be paid to more than just text, and specifically to particularities of function and situation. We can start to understand EAP genres and the ways they can be investigated by considering them as having been classified in four ways.

The first classificatory space is subdomain, with three poles: educational (learner and instructional), research-process and institutional. EAP texts are either prototypically in one of these subdomains, or somewhere in between. Berkenkotter and Huckin (1995: 151) refer to curriculum, pedagogical or classroom genres. We can regard textbooks (Bondi, this volume) or lectures (Crawford-Camicciottoli, this volume) as prototypical instructional genres at tertiary level, and student assignments (Nesi, this volume) or presentations as prototypical learner genres. Research articles are the prototypes of research genres, and perhaps university prospectuses (Askehave 2007) or homepages (Hyland 2012; Osman 2008) are prototypical institutional genres (Biber 2006).

Other genres can be placed among these three poles. Doctoral dissertations are the final learner genre and also an important research genre (Swales 2004). There is a cline from clearly pedagogic genres like high-school reports to doctoral dissertations as primarily research genres. Official course guidelines or national (exam) syllabuses are institutional documents approved by management organs but they have direct influence on texts and on interactions in classroom genres. Research proposals, that is bids for funding for research (Connor and Mauranen 1999), are necessary parts of the research processes but they are defined by institutional needs.

Not only genres but also particular instances of texts are located at different points in these continua. Secondary-school textbooks represent a (prototypical) educational genre,

but textbooks aimed at postgraduates might well be close to research monographs, and vice versa. Some dissertations are more learner-like, others more research-like.

A second way of classifying genres is in terms of occlusion (Swales 1996). One end of this cline is occupied by public genres, which are freely available for consultation for those wanting to write them, and usually familiar from other uses as well. Several have been mentioned above: textbooks, university prospectuses, homepages and academic articles. An occluded genre is one which is not usually made public, often leaving those who wish to use the genre without models. Prototypical examples are submission letters (Swales 1996), personal statements, and tenure and promotion evaluations (Hyon 2008). Degrees of occlusion vary: cover letters are just not of much general interest, while evaluations are protected because of their confidentiality. Ding's (2007) investigation of the potentially occluded genre of personal statements was based on published examples of good practice whose existence shows that users of the genre want to reduce its occlusion.

A third dimension is independence, related to what Yang (personal communication) calls nuclear and peripheral. This characterizes genres in relation to an asymmetric relation of dependence, where the genres appear simultaneously. Thus, it is useful to use the label dependent for minor public genres like author bio statements (Hyland and Tse 2012), thesis acknowledgements (Hyland 2011) or book blurbs (Gea Valor 2005). While research articles may well occur without bios or highlights, theses without acknowledgements, and books without blurbs, the minor genres cannot occur without a 'nucleus'.

The fourth dimension is degree of standardization or generification. Theorists lay emphasis on the point that all texts have some kind of genre affiliation but the degree of constraint that genre requirements place on texts varies considerably. Research grant proposals, official course descriptions and lab reports, for example, are likely to have predetermined headings and sections, while monographs and student essays are at least not usually subject to official structure requirements and may vary more widely in actual structure. Even within genres, there is considerable variation in standardization. In computer science and the humanities, academic articles have no standard set of headings (Lin and Evans 2012), whereas in many hard sciences the introduction-method-results-discussion format is more or less obligatory. Ease of information retrieval pushes genres in some fields towards standardization. The pressure may be strongest in the case of abstracts, where official standards exist (NISO 1996), and some fields require standardized 'structured abstracts' (Nakayama et al. 2005).

Intergeneric relations

Since the work of Kristeva (e.g. 1980) and Bakhtin (1986), intertextuality, the idea that texts are made of other texts, has been a commonplace. Fairclough (1992: 271) identifies a specific type of intertextuality which he calls constitutive; that is, similarities among texts at the generic level. Genres do not exist in isolation either within the individual's store of genre knowledge or within a community's communication patterns. Each genre stands in various types of relation to other genres; that is, texts assignable to a certain genre have a consistent and describable relation to texts assigned to some other genres. All the applied linguistics schools of genre studies have studied the ways in which genres relate to one another (Bawarshi and Reiff 2010; Martin and Rose 2008; Swales 2004; Flowerdew 2011), and in this section I attempt to catalogue these interrelations. I also impose a system on them, and the word *impose* reflects the fact that, in the interests of comprehensibility and insight, the system is likely to be tidier than reality. I mainly describe relations across genres, even though similar relations may exist among individual texts. It will be clear also that in some

cases similar patterns of relation exist among variants of the same genre, and anyway there is no consensus on whether a particular group of texts should be regarded as constituting a genre or a subsection of some larger genre.

Diachronic relations

A new genre shares features of form and purpose with antecedent genres. This is particularly interesting at a moment like the present when electronic media enable the creation of new genres which must necessarily draw on knowledge of predecessors. Thus, blogs draw on generic knowledge about technical logs, commonplace books and clipping services, homepages, diaries, and newspaper columns (Miller and Shepherd 2004; Myers 2010) and, in the longer run, seventeenth-century scientific letters metamorphosed into twentieth-century scientific articles (Atkinson 1992; Banks 2005; Valle 2006). More generally, of course, as noted above, genres are in constant development, and to add a text to the body of texts grouped under a genre is to change the genre. The implication is that texts in a given genre are constrained not only by the needs of the present situation but also by the historic establishment of the genre, which may change rather slowly.

Intrapersonal relations

Synchronic relations can be divided into relations between the genres known by an individual ('intrapersonal'), genres in different domains with similar functions ('paradigmatic'), and relations between genres with different functions in the same domain ('hierarchical', 'metageneric' and 'syntagmatic').

I use the term 'intrapersonal' for genres which are related by the simple fact that the same person has knowledge of them. Because in writing (or speaking etc.) we draw on all our knowledge of genres, production in one genre is likely to be influenced to a lesser or greater extent by other genres we know ('antecedent genres'), and this may affect our approach to the target, or, to put it differently, enable us to develop the genre in a new way. Rounsaville et al. (2008) asked 'What genres (written, oral, digital) do students already know when they arrive in FYW [first-year writing] courses?' They distinguished between high-road transfer, metacognitively aware use of antecedent genre resources and low-road transfer, automatic application of strategies from other genres. Their informants reported having written in more than thirty genres each, yet in their first university task they mainly drew on school genres. The notion 'drew on' means that there were similarities among texts at the generic level (constitutive intertextuality). The promotional discourse universities now adopt in staff, and student recruitment (Askehave 2007; Osman 2008) is said to spread to applications for promotion (Fairclough 1993) and personal homepages (Hyland 2012), and this may be because academics have simply become accustomed to it in other genres. This is one aspect of what Bhatia (2004: 100) calls the colonization of genres by one another; Bhatia's formulation seems to suggest that it is the genres that have agency rather than the writers, and this might imply that colonization can be 'low-road' unintentional transfer.

Paradigmatic relations

Paradigmatic relations are highlighted by Bhatia (2004) in the English for specific purposes (ESP) tradition, and by the Sydney school (cf Martin and Rose 2008). Bhatia (2004: 66) argues for a category of super-genres or genre colonies, groupings 'of closely related genres,

which to a large extent share their individual communicative purposes, although most of them will be different in a number of other respects, contexts of use and exploitations'. This is exemplified by the colony of reporting genres, of which 'company report' is a central member, along with technical, scientific and medical reports (and many others). Bhatia distinguishes genres in the report colony largely by domain and subject matter. While these genres exist in different domains and have somewhat different structures, they are characterized by a common purpose and therefore some common features. More marginal members of the 'colony' are likely to include a variety of discourses because they serve a variety of purposes. Hence, they are what Bhatia calls 'mixed genres', although as he also notes business genres often have promotional and regulative sections with sharply distinct discourses, and this is not typical of academic genres, even proposals.

The term 'colony' in this context appears to be a metaphor from zoology ('termite colony', 'colonial insect') but a related political metaphor is also used for a type of transfer within paradigmatic 'colonies' (Fairclough 1993; Bhatia 2004: 95). Promotional genres such as academic job advertisements and applications for promotion within the university (Fairclough 1993) have always aimed to promote the interests of the text producer, but in the last thirty years they have tended more and more also to use a promotional discourse. This discourse seems to have spread from other members of the promotional colony of genres, and Fairclough (1993) regards this as part of a process of marketization in which promotional discourse 'colonizes' other genres.

The Sydney school (cf. Martin and Rose 2008) has a different definition of genre within a more rigorous theory. It is a structural part of the theory that genres occur in paradigmatic assemblages. The school has paid a great deal of attention to educational genres, and in particular to learner writing at school level. Relying on structural and formal features of the texts within the genres, they construct 'families' of genres within which more delicate groupings occur, differentiated by family-specific criteria of form and representations of cognitive processes. Thus Martin and Rose (2008) identify major families such as stories, histories, reports, explanations, procedures (which tell us what to do) and procedural recounts (which recount what has been done). Science is said to make use of the last four of these families. An example of the way family members are articulated is the family of reports. This contains descriptive reports which 'classify a phenomenon and then describe its features', classifying reports which 'subclassify a number of phenomena with respect to a given set of criteria' and compositional reports which 'describe the components of an entity' (Martin and Rose 2008: 142; Nesi and Gardner 2012). Procedural recounts include technical notes (in industrial research, for example), research articles and experiment reports, and these can be shown to have similar staging due to their similar aims.

These paradigmatic groupings of functionally similar units may concern units that are smaller than conventional genre. Because genres can have multiple purposes, it may only be aspects of a genre which share in a particular paradigmatic relation with a particular colony of genres, and other aspects may be shared with another colony. Bhatia notes that academic introductions (regarded as a genre) are often marginal members of the promotional colony as well as central members of some other grouping. This recalls Hyland's (2011) characterization of thesis acknowledgements as a genre. What at one level is a genre may be composed of units which can themselves be characterized as genres.

Hierarchy

The remaining types of relations draw together genres with different aims or functions but within the same field. These are genres used by people with shared specialist and genre knowledge and practices, what are often called ‘discourse communities’. Swales (1990) envisaged discourse communities as using a number of genres to communicate with one another, with all members in principle equally using all genres. Research communities are structured like this, though of course there are central, more powerful individuals using more of some genres than less powerful individuals. Alternatively genres may be produced by different parties with in principle very little overlap between them, as in the case of educational genres where learners and teachers produce different (but corresponding) genres. In fact, genres may be associated with a wide variety of more or less cohesive social groupings (Devitt 2004).

One relation between genres used by the same discourse community is the one called ‘hierarchical’ by Swales (2004). Some genres are more highly valued than others within their immediate fields. This is partly (crassly) because external judges give more credit to some genres for promotion and tenure, but it derives from ‘community’ consensus as well. In most academic disciplines, journal articles are more prestigious than textbooks or popularizations, but their status in relation to monographs, ‘letters’ and conference presentation varies with the discipline. Thus, Grudin (2013) says that in the field of computer science, in the US at least, papers from selective conferences, published in advance of the oral presentation, are the most prestigious genre (see also Räisänen 2002). By contrast, in fields like history and literary studies, and perhaps the humanities in general, monograph books still retain a high status. Hierarchy derives from the ‘culture’ of the community that genre users belong to. For example, trade conference presentations may be highly valued among practitioners but much less so among academics, and a user who is a member of two communities (applied researcher and practitioner, for example) may be guided by two different hierarchies (Shaw 2010).

Syntagmatic relations

The other relations between genres within fields are characterized by the concept of uptake. Freedman (e.g. 2002) adapts the term and concept from speech-act theory to refer to the relation between a genre and one that responds to it in some way. A conference proposal abstract takes up a call for papers, and a letter of acceptance or rejection takes up a conference proposal abstract. Texts in the uptaking genre respond to previous texts in a preceding genre, and by doing so they validate the genre status of both sets of texts. Here, there is likely to be what Fairclough (1992: 271) calls manifest intertextuality – actual re-use of words or phrases, explicit reference or even quotation. Many writers of exam essays, for example, take care to use the wording and structure of the question prominently in their answer. Freedman, and particularly Maurer (2009), note that wielders of the uptaking genre have the power to define the genre of the text they are ‘receiving’. For example, a journal review or a promotion committee can ascribe the status ‘popularization’ or ‘textbook’ to something whose author thought of it as a monograph. Thus, discussion of uptaking genres deals not just with relationships between text in different genres, but with the structure and meaning potentials in whole social groups.

One possible type of relation within a field involving uptake is that between genre and metagenre (Giltrow 2002). A metagenre is one that gives (insightful or misleading)

instructions on how to produce a particular genre. Examples include instructions as to how to write learner genres (essays) such as guidelines, plagiarism warnings, grading criteria, etc. Giltrow suggests that we must analyze the metageneric atmosphere of a classroom: the types of metageneric support available in it. A whole hierarchy of metagenres can in fact be observed in university teaching. The generic activity in the class is prescribed by the professor's course description, which is itself metagenERICALLY regulated by departmental or university requirements. At least in Europe, these metagenres defining course descriptions are influenced or determined by the EU norms known as the Bologna process. Rather little research attention has been directed in EAP at the metagenres directing or misdirecting research genres: handbooks, journals' 'instructions to authors', textbooks like Swales and Feak (2012), even standards (NISO 1996). Okamura and Shaw (2014) found that the abstracts appearing in some journals frequently failed to conform to the metagenERIC instructions in the journals' instructions to authors, and Paltridge (2002) showed that thesis-writing handbooks misrepresented the variety of forms these could take.

In the metagenERIC relation between a thesis-writing guide and a thesis, any trace of the guide in the thesis will be uptake. But uptake is more often discussed in relation to syntagmatic relations among genres. Perhaps the simplest of these, and the one to which the term *syntagmatic* is most obviously applicable, is the chain (Swales 2004) or sequence (Devitt 2004). Räisänen (2002) illustrates this concept in the series of open and occluded genres which includes a conference paper on a field (crash engineering) where it is the top genre in the hierarchy, and thus subject to rather strict quality control:

1. Call for abstracts > 2. Conference abstract > 3. Review process [acceptance] >
4. Instructions > 5. Conference paper draft > 6. Review process [acceptance] >
7. Revised conference paper > 8. Review process > 9. Published conference paper >
10. Oral presentation.

Chains are not necessarily linear and can be expected to branch and merge, but in most cases successive members of a chain show uptake of the previous one, and this is often in the form of manifest intertextuality. Appropriate use of this intertextuality is part of the genre knowledge that must be acquired by learners. The essence of a chain is an element of dialogue, often between members of different parties, as when inventors apply to patent authorities (Bazerman 1994) or in the teacher–learner interaction in the prompt–essay–feedback sequence.

There is some terminological disagreement around other constellations of genres within communities (see also Flowerdew 2011). Adopting the terms used by Devitt (2004), we can speak of the *context of genres*, the sum of all genres in the society (of which the intrapersonally known genres are an unorganized subset). Within this context, each field has a *set* of intertextually related genres. Thus, in the domain covered by EAP, there are links of register, authorship and even direct reference among research proposals, research papers, textbooks, student writing, course descriptions and syllabuses. All the genres examined in EAP can be taken as members of the same set, though not members of the same chain by any means. Within the set, Devitt uses the term *genre system* (see also Bazerman 1994) for the genres 'interacting to achieve an overarching function within an activity system' (Devitt 2004: 56). We can see PhD regulations, metagenERIC texts, supervisions, thesis texts, defences and grade registration documents (for example) as forming a genre system functioning to grant a PhD degree. Similarly, within the general concept of set, Devitt identifies *genre repertoires* (Orlikowski and Yates 1994) as 'the set of genres that a group owns, acting through which a

group achieves all its purposes, not just those connected to a particular activity' (2004: 57). Swales (1998) introduced the term *textography* for a detailed ethnographic account of the genre repertoire of the community constituted by a university department. The list of genres in the PhD-award system above includes some which might be part of the repertoire of teachers, some of academics, some of PhD students, etc.

From an EAP point of view, the whole academic world has a set of genres and it is these that EAP investigates. In doing so, attention has to be paid to the surrounding context of non-academic genres which provide resources on which novice writers will draw. Particular activities, like getting promoted, running a course or publishing an article involve systems of genres. Particular roles, such as researchers, students, teachers or administrators, require proficiency in a particular genre repertoire.

Methods: metagenres, corpora, textual analysis, interviews and observation

A variety of methods and sources can be used to analyze genres and the groups that provide the frames within which they are meaningful (Tardy 2011a, 2011b). Summing up cursorily, four sources can be mentioned: metagenres and background reading; a corpus of texts; informant interviews or questionnaires; and observation. A general method for taking account of these factors in analyzing new genre is proposed by Bhatia (1993, 2004: 189–193). His approach involves seven steps, and a striking feature is that five of these involve metagenres and background reading, interviewing informants and observation of work processes. Only steps 4 and 5 involve examining texts: 4, selecting the corpus, by defining the genre precisely and deciding how much material will be needed; and 5, investigating texts at the levels of lexicogrammar, text patterning, discourse structuring and intertextuality.

Metagenres

It is natural to start the analysis by reading previous research on related genres and other descriptions of the 'community' in which the target genres are written. Ding (2007) analyzed personal statements in applications to university courses and started by reading (metageneric) recommendations in writing guides and websites, which suggested possible moves for his analysis. This preliminary reading may affect the design of the investigation: Graves et al. (2014) intended at first to restrict their study to either pure or applied mathematics, but background reading in the target domain suggested that the distinction was unworkable.

Corpora

If a corpus is used, its content can in principle be completely random. This is the case with automatic genre identification, in which a computer program is used to identify the genre of internet texts. The procedure goes from surface features identifiable by the computer to genre (Crowston 2010). Automatic analyses of this kind are from 75 per cent accurate upwards at identifying rather broad 'genres' (Lim et al. 2005, 1267). However, the genres studied (and taught) in EAP require a much higher level of discrimination.

Discriminating at this level calls for a selected corpus. The analyst has to choose a number of texts from a target domain, defined in terms of the discipline(s) and date(s) of the texts, and possibly also in terms of writer characteristics such as first language, gender or position in the community hierarchy. Often the aim will be to include only high-quality work because the

aim of a description within EAP studies is to facilitate learners' production of good-quality texts within the genre. The aim could be to have a representative sample of texts in the genre, as it was for Graves et al. (2014). To ensure quality, they chose the journals with the highest status. Within these journals they selected thirty articles. To ensure that these articles were representative of contemporary publication in mathematics, they selected a recent time period and chose articles from six different issues of each journal, ensuring that they were by different authors. Alternatively, however, the aim may be a thicker description of a case which is typical rather than statistically representative. Kuteeva and McGrath (2015) chose four or five articles by each of five authors, aiming at the depth of investigation afforded by co-operation with the authors themselves.

Textual analysis

If a corpus is used, it can be analyzed manually for repeated 'moves' and 'steps' (Swales 1990, 2004; Bhatia 1993, 2004) and these can then be examined for their lexico-grammatical features, manually or with concordancing software. There is often a certain unacknowledged circularity here, in that the lexico-grammar signals the moves and steps, and the frequent claim that the researcher has based the move-step analysis on segment function rather than form may be suspect. This can be avoided by conscious analytic procedures. Yang (2015) used 'discourse markers' such as connectors, section boundaries, paragraph divisions and sub-headings to identify potential moves. He then coded the tentative moves found (with co-workers for intersubjective validation) as obligatory or optional, and then used the keyword function in concordance software to identify words particularly characteristic of the genre, which assisted in identifying and classifying moves. He then consulted experts to confirm and expand the analysis.

Interviews and observation

The textual analysis is often at the heart of the process in that a common ultimate aim is to enable learners to produce acceptable products conforming to the features of the model. But it is not a necessary procedure. The last two sources of information mentioned above, informant interviews and observation, could stand by themselves, particularly if the focus is on genre systems or repertoires. Observation is less common and less useful for written genres but a prime source of information for oral ones, particularly in the classroom. Kibler et al. (2014) studied the learner genre of student presentations (called *exhibitions* in the context they observed). They followed three high-school students over four years, using data 'gathered from video recordings, field notes, observations and informal interviews'.

EAP research still focusses on written genres, though, and here some kind of text examination is often deepened by interviews and discussion with informants. Rounsaville (2014: 337) was interested in what I have called the intrapersonal relations of the genres known by a single informant, a university student. She says that she 'conducted structured and unstructured interviews' with the informant, and 'collected in-school and out-of-school writing, and held discourse-based interviews on selected writings'. Graves et al. (2014) used expert informants to identify appropriate texts. Yang (2015) consulted expert informants 'to help confirm the generic structure and to identify missing moves and steps'. Kuteeva and McGrath (2015) did a preliminary move-step analysis of two papers from their corpus together with an expert informant, then analyzed the rest of the corpus. Then they discussed the analysis and other issues in wide-ranging interviews with the authors.

The purpose of EAP may be to help learners produce texts which will be effective in the intended community, and so both textual analysis and investigation of the role of the genres and their components in their specific disciplinary community are necessary.

Implications

Intergeneric relations are often described as constitutive of the activity of discourse communities. However, investigations of academic genres often examine them more or less in isolation. It might be more illuminating for both teaching and research to pay greater attention to the relation of genre features to the features of related genres. For example, how do successful conference proposals make use of the wording of the call for papers? How do students make intertextual references in on-line writing and in academic writing? Which sections of articles in a given discipline are typically targeted by reviewers, and where are most changes made in response? Which sections of promotion applications are taken up by reviewers, and how? These are questions which both researchers and learners could usefully ask.

Further reading

Bawarshi and Reiff (2010); Bruce (2008); Paltridge (2012); Tardy (2011b)

Related chapters

- 2 General and specific EAP
- 5 Composition studies and EAP
- 11 Language and L2 writing
- 15 Systemic functional linguistics and EAP
- 31 Research articles

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20

MULTIMODAL APPROACHES TO ENGLISH FOR ACADEMIC PURPOSES

Kay L. O'Halloran, Sabine Tan and Bradley A. Smith

Introduction

As the field of English for academic purposes (EAP) has grown and expanded, one important development, identified by Hyland (2009), has been the inclusion of multimodal perspectives. Changes in higher education, especially in the use of digital technology, have revolutionised traditional academic practices, with an increasing recognition of the need for students and teachers to develop multimodal competencies across a range of communicative platforms:

while in the past the main vehicles of academic discourse were written texts, now a broad range of modalities and presentation forms confront and challenge students' communicative competence. They must learn rapidly to negotiate a complex web of disciplinary-specific text types, assessment tasks and presentational modes (both face-to-face and online) in order first to graduate, and then to operate effectively in the workplace.

(Hyland 2006: 3).

The study of multimodality, as Jewitt (2014: 1) explains, 'approaches representation, communication and interaction as something more than language', extending the study of the social interpretation of language to the whole domain of meanings which are made through visual, sonic and other semiotic resources (e.g. image and symbolism, gesture, gaze, proxemics, sounds) and their interactions in multimodal texts and events. Together, these clusters or configurations of meanings constitute domains of cultural activity (e.g. casual conversation, news reporting, academic discourse). The study and practice of academic discourse requires a theoretically informed approach for understanding how language, images and other resources work together to create meaning within and across different multimodal genres.

In this chapter, we explore the implications of a multimodal approach (e.g. Jewitt 2014) for the various aspects of EAP, which is conceived as academic discourse in the broadest possible sense (Hyland 2006). The multimodal approach has significance for learning about the nature of academic discourse in the interactions of (spoken and written) language with

other modalities, for enhancing students' capacities for understanding and producing texts that employ and integrate a range of modalities and for developing pedagogical practices that facilitate these competencies.

Historical perspectives

The study of multimodal phenomena can be traced back to early studies of semiotics, the science 'that studies the life of signs within society' envisaged by de Saussure (1916/1983: 16), and of course has been a key focus for disciplines such as visual and performing arts, architecture and design. Recent decades have seen the emergence of a field of multimodal studies (O'Halloran & Smith 2011), with a dominant influence from Michael Halliday's social semiotic theory of language (1978), known as systemic functional linguistics (SFL) (Halliday & Matthiessen 2014). A social semiotic approach seeks to understand the meaning of texts (see Jewitt, Bezemer & O'Halloran 2015 in press), which are seen as the outcome of choices within systems that have functions within their social contexts; the latter of which in turn are seen to shape 'the resources available for meaning-making and how these are selected and designed' (Jewitt 2014: 33).

SFL approaches to academic discourse have primarily been concerned with the close analysis of spoken and written text in educational contexts (e.g. Chang & Schleppegrell 2011; Coffin & Donohue 2012; Gardner 2012; Martin 2012), often with a focus on literacy requirements in specific subject areas, e.g. mathematics, science and English (e.g. Christie & Maton 2011; Dreyfus, Hood & Stenglin 2011). Social semiotic theory has, however, also been extended to the analysis of a range of domains, including paintings, architecture, sculpture by O'Toole (2011), and visual art, advertising, websites, toys and games by Kress and van Leeuwen (2006). These pioneering works paved the way for research on the interaction of multimodal resources in educational contexts (e.g. Unsworth 2008), including science and mathematics (Lemke 1998; O'Halloran 2005), spatial semiotics (Ravelli & Stenglin 2008), film (Bateman & Schmidt 2012) and music (van Leeuwen 1999). Social semiotic theory was a key influence in the development of the 'multiliteracies' approach by The New London Group (1996), a leading tradition seeking to deal with contemporary forms of representation that are 'increasingly multimodal, with linguistic, visual, audio, gestural and spatial modes of meaning becoming increasingly integrated in everyday media and cultural practices' (Cope & Kalantzis 2009: 166). Scholars within this tradition draw on work by Kress and colleagues to examine the impact of multimodality on literacy skills and practices (e.g. Böck & Pachler 2013).

Other approaches to multimodality include multimodal interactional analysis (e.g. Norris 2011), which is based on interactional sociology (e.g. Goffman 1967), sociolinguistics (e.g. Gumperz 1982; Tannen 2006) and mediated discourse analysis (Scollon 2001). This approach seeks to account for all social actions as meaningful and multimodally complex human interaction. Another approach which engages with the notion of multimodality from a broader sociolinguistic or 'sociocultural' perspective is the field of study referred to as academic literacy/ies (e.g. Lillis & Scott 2007) which is concerned with literacy requirements across different subject areas.

Critical issues and topics

Kress & van Leeuwen (2001: 1) note that the 'distinct preference for monomodality' which held sway for centuries across Western cultures shifted in the twentieth century towards the

use of 'an increasing variety of materials' in multimodal discourses. Multimodality has of course always been a part of academic discourse, for example in the use of gesture, gaze in face-to-face lectures and tutorials, in the use of images and symbols in textbooks and academic publications, as well as being an integral part of multimedia materials for distance learning (Kuomi 2006). The increasing range of semiotic resources enabled by digital platforms, including not only for learning and teaching but also in online publications and university websites (e.g. Zhang & O'Halloran 2014), has meant that multimodal communication is increasingly important within academic practice as in contemporary societies in general. The importance of oral communication skills for graduates entering the workforce has also been noted (e.g. Crosling & Ward 2002; Jackson 2014). The importance of multimodality within academic discourses thus problematises the somewhat peripheral status still accorded multimodal forms of communication within crucial areas, in particular assessment and publication.

Academic writing has always presented difficulties for students to master: it has been characterised as dense and abstract, with a high level of organisation and an authoritative stance (Schleppegrell 2006), features which are largely derived from scientific language (Halliday & Martin 1993; Halliday 2006). Multimodal discourse offers alternatives to the constraints of the written mode and access to new 'meaning potentials' (Halliday 1978). As Lemke (1999) shows, different modes bring with them differing affordances and constraints, as in the distinction between the typological meaning characteristic of language and the topological meaning characteristic of images, a complementarity exploited to great effect in mathematics discourse (O'Halloran 2005).

The key challenge for educators, therefore, is to design approaches to learning and teaching with technology (e.g. Laurillard 2012) that enhance students' capacities for understanding and producing texts that employ and integrate a range of modalities across media platforms. This multimodal approach to learning design requires an understanding of the affordances of different media and modes of discourse, and the integration of semiotic resources in multimodal discourse. However, issues of complexity and scale continue to present significant difficulties for the study of multimodality. Even a single text can present a multitude of system choices from many different semiotic resources; and each semiotic resource has its own characteristics presenting different analytical challenges. As a result, the development of integrated perspectives on multimodal meaning across texts and corpora presents theoretical and methodological challenges, as scholars struggle to define concepts and develop integrated frameworks capable of application both to multimodal analysis (e.g. Bateman 2011b; Kress 2009) and to practice.

Current contributions, research and practice worldwide

Current multimodal approaches to EAP are – amongst other things – concerned with developing (a) students' capacities for understanding and producing texts that employ and integrate a range of modalities in different contexts and disciplines; (b) pedagogic practices for fostering awareness of multimodality; and (c) understanding of multimodal discourse within other professional discourse genres and domains (e.g. plenaries, conference presentations, institutional and public academic discourses). In the following, we discuss the contributions of select studies that address these issues, with implications for pedagogies, assessment, teaching and learning, as well as research practices.

Enhancing students' capacities for understanding and producing complex multimodal texts in different contexts and disciplines

Archer (2006: 451) posits that the 'increasing multiplicity and integration of modes of meaning-making, including the audio, the spatial, and the behavioural' needs to be taken into account in order to enhance students' competencies for creating and understanding producing multimodal texts and genres. In her explorations of the influence and incorporation of the visual domain in first-year engineering and humanities students' writing practices, comprising both written reports and team-produced posters, Archer (2006, 2010) argues for a multimodal approach that addresses the complexities that confront L2 learners when engaging in multimodal academic practices (see also Archer & Newfield 2014).

Building on the work of Thesen (2001), Archer claims that multimodal genres require students to draw upon four kinds of 'language' resources: (1) the English language system; (2) academic discourse; (3) mode-specific language associated with the analysis of the visual; and (4) a metalanguage for critical analysis. Archer (2010: 210–211) finds that having access to these resources 'freed up' academic discourse practices for the students who participated in the research projects in profound ways. According to Archer (2006: 455), scientific discourse has the proclivity to create a 'disjunction between everyday commonsense knowledge and the systematised knowledge of the discipline', particularly for L2 students, whose written reports tended to reflect a certain 'lexico-grammatical awkwardness'. Knowledge of the visual design principles of posters, such as the use of images and colour, and non-linear spatial design logics pertaining to the presentation of information such as non-hierarchical bullet-point form and part-whole relationships, allowed students to present scientific discourse in ways that more closely aligned with everyday perceptions of the world (Archer 2006: 455–456).

O'Halloran (2015a) proposes a multimodal approach to mathematics 'where language is considered as one resource, often a secondary one, which operates in conjunction with mathematical symbolism and images to create meaning in mathematics'. O'Halloran's approach (see also Lemke 1998) has extended the study of the linguistic features of scientific discourse (Halliday & Martin 1993) to the study of the grammatical features of mathematical symbolism and images, revealing how the three resources (i.e. linguistic, symbolic and visual) have evolved to fulfil specific functions in mathematical discourse:

Language is used to reason about the mathematical results in a discourse of argumentation in which mathematical processes are related to each other and interpreted. To achieve this goal, scientific English operates to foreground and background concepts which are related to each other through technical taxonomies and relational processes to form chains of reasoning. Mathematical symbolism, on the other hand, is used to capture relations between mathematical entities and processes and derive results through a grammatical organization which retains participant and process configurations through the use of special symbols, specific conventions and deep levels of embedding. Meaning is encoded economically and unambiguously, resulting in a robust, flexible tool for reasoning about mathematical reality in a congruent, dynamic form, unlike scientific English, with its dense, metaphorical entities... Lastly, mathematical relations are visualized, opening up a vast potential for viewing the mathematical representation as a whole and the parts in relation to each other.

(O'Halloran 2015a)

The multimodal approach has revealed how expansions of meaning occur intersemiotically as mathematical processes and participants are reconstrued across language, symbolism and images at different ranks and scales (cf. O'Halloran 2008), demonstrating how the multiplication of meaning discussed by Lemke (1998) takes place in mathematics and scientific discourse.

Developing pedagogies that foster awareness about multimodal texts

The multimodal approaches to student learning by scholars such as Archer and O'Halloran address Jewitt's concern that students' proclivity to 'work across text, image, sound and moving image with equal fluency, exploiting each dimension separately and making connections between these historically discrete domains' (2003: 98) necessitates the expansion of conventional notions of academic literacy, with implications for both applied and research practice. As Archer concludes, student learning (about and through) multimodal discourse requires an explicit pedagogy that provides them with a 'systematic technical knowledge of the ways semiotic resources are deployed in meaning-making' (Archer 2010: 211); otherwise they will continue to 'battle with vague generalities rather than insightful analyses'.

Doering, Beach and O'Brien also point out that rather than approaching multimodal, interactive Web 2.0 tools such as blogs, wikis and social networking sites as 'an additional, but peripheral tack-on' (2007: 57–58), the use of technology in higher education requires a new pedagogy that is built upon redefined 'notions of reading, composing, and performing processes to infuse digital literacies' in students (Doering, Beach and O'Brien 2007: 42). To enable students to understand the application of their learning with regard to the consumption and creation of multimodal digital texts and genres, it is imperative that students learn to think both 'multimodally and semiotically' (Doering, Beach and O'Brien 2007: 43). This involves learning how to engage in the critical analysis of multimodal texts and videos, which in turn requires a detailed understanding of how such texts function to begin with.

To this end, the University of Minnesota's postgraduate English education programme for pre-service teachers requires students to create multimodal digital texts and genres such as websites, blogs and wikis etc. To perform their tasks successfully, students need the requisite skills and competencies in order to decide which media and modality (e.g. print, images, video, audio) to best use for presenting information. In addition, they need to possess a critical awareness of both visual design and rhetorical principles to effectively engage their audiences 'as well as to change their beliefs and attitudes' (Doering, Beach and O'Brien 2007: 43). At the same time, students, 'as critical readers in these virtual spaces', must be able to 'assess how visual design functions rhetorically through developing "visual arguments" that are evaluated in terms of their impact, coherence, visual salience, and organization' (Doering, Beach and O'Brien 2007: 43).

The need for new pedagogical and methodological approaches that both address and harness developments in e-learning and digital communication is also reflected in Ciekanski and Chanier's (2008) study of the writing process in synchronous online environments in an English for specific purposes (ESP) course for L2 distance graduate students. They argue that online writing should be perceived as both a collaborative social event as well as 'a complex and procedural activity' (2008: 163), where multimodal communication is understood as being co-constructed through the actions (e.g. the deployment of semiotic resources) and interactions between participants (2008: 164). They apply an integrative multimodal approach and methodology to gain a better understanding of how participants in online environments exploit combinations of different modes (e.g. written, spoken language,

graphic, iconic, spatial) and modalities (e.g. by using text-chat, conceptual map, whiteboard, word processor, audio, voting, leaving/entering a room, moving away for a moment, raising a hand and moving between rooms and documents) to accomplish their respective learning tasks individually and collaboratively (2008: 164).

Enhancing understanding of other academic discourse genres and domains

Advances in technology have, of course, led to the emergence of new multimodal discourse genres that transcend conventional academic discourse domains and practices. Aside from learning and teaching contexts, digitally-mediated and embodied discourses have become established practice across a range of other academic discourse domains, as evidenced in multimodal research on conference presentations, and representations of institutional discourses in the public domain.

Presentations as complex multimodal practice

Since the launch in 1990 of PowerPoint, presentation software has become an indispensable tool for multimodal communication in the spheres of business and academia alike. Over the past two decades, researchers have endeavoured to enhance our knowledge and understanding of the design, layout and composition of presentation software as a resource for meaning-making, and of the ways presenters use and combine multimodal resources, such as speech, gesture, gaze, body language and visual imagery to engage their audiences and express their identity in slideshow presentations, in both L1 and L2 contexts.

Hood and Forey (2005) use social semiotic theory to analyse the ways presenters create relationships of solidarity with their audiences in the introductory or 'set-up' stage of their plenary talks. This analysis reveals that there is considerable variation in how this stage is realised by different speakers, using combinations of attitudinal language, gesture and other kinetic features, such as head movements and facial expressions. They found that speakers may use gesture, facial expression and postural stance sequentially or synchronously to amplify positive and negative affect, to convey attitude and to encourage audiences to interpret content in a particular way.

Morell's (2014) study of presentations from the social and technical sciences at international conferences also shows that speakers at academic conferences use a variety of modes either simultaneously or consecutively to convey specific meanings. Morell (2014), who focuses on the interplay of speech (e.g. tone, intonation, pronunciation, stress on key words, volume, speed), body language (e.g. eye contact, gestures, hand movements, body position in relation to the talk and the audience), written text (e.g. contrast between background and lettering, font size) and non-verbal materials (e.g. graphs, charts, tables, diagrams, images), finds that presenters from the technical (or hard) sciences tended to use more non-verbal resources, whilst presenters from the social (or soft) sciences in her study were inclined towards the verbal mode. Morell (2014) further concludes that in terms of their generic conventions, social science presentations can be considered intercultural genres, whereas presentations from the technical sciences tend to be discipline-specific.

Tardy's (2005) investigation of the choices made by multilingual presenters in PowerPoint presentations similarly shows that presenters from the field of electrical engineering and computer sciences tend to adopt the disciplinary norms of organisation and disciplinary-specific terminology endemic to scientific discourse genres. Tardy observes that even the

visuals and slide-colour in her corpus tended to be field-specific, which she considers to be 'a sort of disciplinary short-hand', understandable only by a discourse community with a shared knowledge of these generic conventions (2005: 325), but cautions nevertheless that the choices made in presentation slides may be to some extent influenced by the availability of pre-set templates provided by the software program (Tardy 2005: 326).

Zhao, Djonov and van Leeuwen (2014), in turn, maintain that an analysis 'of slideshows alone cannot show how the design of the software privileges certain ways of using the semiotic resources it makes available (e.g., layout, texture, colour) and of composing and presenting slideshows' (Zhao, Djonov & van Leeuwen 2014: 352). They see PowerPoint presentations as a complex, multimodal practice that demands not only a critical awareness of the meaning-making potential of the slide layout, how it is presented within the software's interface and how it functions in various semiotic practices within the broader (academic) culture, but also requires 'intensive temporal coordination' between the various multimodal resources, such as speech, gesture, image, as well as a consideration of the physical setting, including the presenter's placement in relation to the screen, the lectern and the audience (Zhao, Djonov & van Leeuwen 2014: 364).

Multimodal representations of institutional discourses in the public domain

In the digital age, advances in technology have profoundly changed the ways in which knowledge and information are communicated and disseminated. Moreover, professional academic discourses are increasingly compelled to conform to the pressures of a global marketised academia, with significant implications for representations of academic discourses in the public domain (Zhang & O'Halloran 2013). For example, Hyland's (2011) analysis of the ways how academics from different fields such as the humanities and hard sciences use multimodal resources, such as text, images, visual design and hyperlinks, to construct professional identities on university homepages, reveals, for example, that they frequently do so within the constraints of corporate design principles, subjugated to a discourse of corporate branding:

The content of personal home pages, whether the text, design, visuals or links, draws on a palette of conventional paradigmatic elements which not only make information about subjects accessible to a potential world-wide audience, but which promote a version of them and their university to that audience. The fact that we find mainly professional biographies and references to research interests and publications; that the design reveals the uniform repetition of a university brand; that the visuals are restricted to cropped passport style portraits; and that links largely take us to places which reinforce the competent, accomplished academic, all reveal a genre which enhances the status of the author and subjugates him or her to its homogeneity.

(Hyland 2011: 296)

The crossing-over of corporate and public discourse practices into academic discourse domains is also revealed in Zhang and O'Halloran's (2014) study of representations of scientific research reports on institutional science news websites, such as Futurity (www.futurity.org/). Zhang and O'Halloran (2014) note, for instance, that the generic structure of scientific reports on this website is increasingly 'hypermodal' in character (i.e. having hyperlinks between pages and sites enabling non-linear, intertextual reading; cf. Lemke 2002).

These online science discourses are composed of short written texts, complete with a headline, news lead, attribution and striking images from image banks, as well as having hyperlinks for easy dissemination on social media sites (Zhang & O'Halloran 2014: 161). They maintain that in adopting the reporting style and practices from the domain of popular culture, publications of science news have moved 'beyond the popularisation of science' and morphed into a form of 'scifotainment', in an effort to cater to the changed information consumption style of the general public in the digital age (Zhang & O'Halloran 2014: 172).

Main research methods

Ethnographic approaches to multimodality

Many contemporary studies that approach EAP from a multimodal perspective are qualitative and interpretive in nature, often combining language-based frameworks and methodologies drawn from SFL and other disciplines with ethnographic methods (cf. Lea 2004). Harklau (2005: 179) defines ethnography as 'a range of diverse and ever-changing research approaches [...] originating in anthropological and sociological research and characterised by first-hand, naturalistic, sustained observation and participation in a particular social setting'. According to Harklau's (2005: 179) definition, the purpose of ethnography is primarily to 'come to a deeper understanding of how individuals view and participate in their own social and cultural worlds'.

According to Street, Pahl and Rowsell (2014: 227), multimodal approaches that apply ethnographic methods are similarly intent on taking 'equal account of where, how, and by whom a text is made as it does of the physical features of a text as signifiers of contextual meaning'. This dual focus on situated meaning-making and meaning as social practice resulted in the development of two complementary research methods: an approach that follows the tradition of New Literacy Studies in applying ethnographic methods for understanding academic discourse within the broader context of everyday social practice; and a multimodal approach that originates from within social semiotics and which perceives texts as multimodal constructs, 'imbued with intention and culturally shaped and constituted' (Street, Pahl and Rowsell 2014: 230). As Kress and Street (2006: ix, in Street, Pahl and Rowsell 2014: 233) observe, 'while both approaches look at broadly the same field', the former approach 'tries to understand what people acting together are doing', while the latter 'tries to understand about the tools with which these same people do what they are doing'.

For researchers adopting ethnographic research methods, this means studying and analysing multimodal texts and genres, text production and consumption practices, as well as taking into account participants' motivations and values surrounding these practices – a methodology conceptualised as 'textography' (Paltridge et al. 2012). This may involve collecting and analysing texts and documents, observing classroom sessions and interviewing students and instructors. Other methods employed by researchers from the field of multimodal studies are 'videoethnography' for studying group dynamics and participation (e.g. Norris 2014) and 'ethnopoetics' – originally used to describe oral narratives/folk art from 'other' cultures – for exploring sociocultural and sociohistorical meanings in students' academic practices (e.g. Scott 2013).

A push for empiricism and theoretical frameworks

Other recent approaches to multimodal analysis, particularly those within a social semiotic/systemic functional perspective, aim for an empirical foundation as the basis for the development of theoretical frameworks and methods. Bateman (2008, 2011a), for example, draws on a systemic functional approach to provide detailed analyses of page-based multimodal documents, including academic texts, as the foundation for developing and illustrating the genre and multimodality (GeM) model. In this model, genre theory provides the underlying framework for studying multimodal documents, and for comparing recurring patterns (e.g. in visual and verbal elements, layout, rhetorical and navigational structures) across a corpus of similar texts. According to Bateman (2008: 2), the model allows researchers and practitioners to 'attack' any multimodal document with a set of analytical tools that can generate 'reproducible, and therefore evaluable, analyses of what is involved in the multiplication of meanings discovered' and is 'sufficiently robust to advance theory empirically' (Bateman 2008: 8).

The 'multimodal digital humanities' approach developed by O'Halloran and colleagues (e.g. O'Halloran 2015b) involves the development and application of interactive software platforms¹ and methods for the detailed analysis of multimodal texts and videos, including from educational contexts (O'Halloran, Tan & E 2014), as well as utilising computational, mathematical and visualisation techniques for interpreting semantic patterns in multimodal discourse. The aim of this approach is to provide tools for systematically analysing multimodal phenomena, in order to develop a critical understanding and appreciation of the complex ways multimodal resources, such as language, text, images, gesture, body language and movement work together to create impact and achieve their respective communicative purposes in different contexts. Such an approach enables teachers, students and researchers alike to support their analytical processes with computational and statistical evidence derived from the annotations.

Thibault and King (in press), drawing on theories of distributed cognition, distributed language and multimodal interactivity, apply a multimodal event analysis (MMAE) framework to the analysis of video-taped university tutorials in a tertiary context, to show how learning is essentially an interactive process, involving embodied actions (such as touching, moving, pointing, visual scanning, talking, writing, reading, listening), and how these are realised in combination with higher-order cognitive processes such as problem solving, interpretation, evaluation and decision-making. For this purpose, Thibault and King (in press: 7) develop a learner–environment interaction system (LEIS) for investigating interactivity through visual scanning, haptic manipulation and exploration, sound and movement, with the aim of helping students develop more effective learning strategies.

The development of systematic multimodal methodologies that both critically address and harness the effects and affordances of digital technology are also the concern and aim of the MODE group at the National Centre for Research Methods (<http://mode.ioe.ac.uk>), which is tasked with developing multimodal methodologies (including seminars and courses) for social scientists to systematically investigate all forms of multimodal communication in digital environments, including a significant focus on educational contexts.

Recommendations for practice

The affordances, challenges and complexities of digitally-mediated multimodal discourse, outlined above, have implications for learning and teaching, and also for research. As Hamp-

Lyons (2011: 3) warns, 'it is clear that the potential of modern forms of electronically-mediated interaction is barely acknowledged in most EAP courses: this is a failure we may come to regret'. In order for students to become proficient in multimodal EAP, 'teaching needs to be supported by a well-formulated theory' (McCabe, O'Donnell & Whittaker 2007: 2), pointing to the need for the further development and application of frameworks for multimodal discourse analysis of academic contexts. Laurillard's (2012) conception of teaching as a 'design science' similarly underscores the need for a theoretically-derived, integrated approach to teaching and learning with technology. Advances in digital technology also offer new opportunities and prospects for the research and practice of an integrated multimodal literacy (e.g. O'Halloran, Tan & E 2014, 2015). Oviatt's (1999: 81) observations on multimodal interfaces have general relevance to the study and practice of EAP [*italics in original*]: 'the design of multimodal systems that blend input modes synergistically depends on *intimate knowledge of the properties of different modes ... and how multimodal input is integrated and synchronized*'.

In order to meet the demands of a rapidly evolving digital environment which continues to shape and transform conventional discourse practices in higher education, greater emphasis needs to be paid to emergent multimodal genres and practices. These are increasingly becoming important in academic discourses, for example: the dissemination of academic research through new media venues such as *TED Talks* (e.g. Friesen 2011); the impact of interactive and dynamic presentation tools such as Prezi (e.g. Perron & Stearns 2010); the use of computer and video games in educational contexts (e.g. Gee 2003); the application of social media tools for academic purposes (e.g. Neal 2012); and a broad range of existing and emerging technologies and practices such as MOOCs (massive open online courses), tablet and mobile computing and learning analytics (Johnson et al. 2013). These wider developments offer significant possibilities for EAP practitioners, and will no doubt continue to have an impact on the ways multimodal EAP is taught and studied in the future.

Future directions

In order to understand the evolving sphere of academic discourse, we need to understand the functions of individual semiotic resources (i.e. for language, image, sound) and their interactions in digitally enabled, multimodal texts. The issues of complexity, scale, methodology and theory, as well as the application of knowledge to practice, makes the study and practice of multimodal academic discourse an ongoing challenge, ultimately requiring interdisciplinary teams of researchers with prerequisite knowledge and skills for developing integrated, digital approaches to multimodal analysis and research. Yet the increasing use and mediation of multimodal discourse, including the wealth of material publicly available online and in databases, offers an unprecedented opportunity to study multimodal discourse and develop theoretical frameworks adapted for the teaching and practice of multimodal EAP, and makes such work imperative. The solutions will come not from research alone, within the field of EAP or elsewhere, but also from the self-reflective practice of innumerable practitioners, grappling with the challenges of negotiating their way through and mastering the range of media and modes of discourse available to them and their students.

Note

1. See: Multimodal Analysis Image (<http://multimodal-analysis.com/products/multimodal-analysis-image/>) and Multimodal Analysis Video (<http://multimodal-analysis.com/products/multimodal-analysis-video/>)

Further reading

Böck & Pachler (2013); Jewitt (2014); Kalantzis & Cope (2012)

Related chapters

- 2 General and specific EAP
- 3 Academic literacies
- 15 Systemic functional linguistics and EAP
- 17 Ethnographic perspectives on English for academic purposes research
- 30 The academic poster genre
- 32 Interpersonal meaning and audience engagement in academic presentations
- 33 Research blogs, wikis and tweets

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21

INTERCULTURAL RHETORIC

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Introduction

Intercultural rhetoric (IR) is “the study of written discourse between and among individuals with different cultural backgrounds” (Connor, 2011, p.1). IR examines the influences of first language, culture, and education on the production of texts with the aim of advancing intercultural communication research as well as informing writers, editors, translators, and language and composition instructors and learners, among other users and producers of text. This chapter outlines the history of IR from its contrastive rhetoric (CR) beginnings, briefly discusses IR’s conceptualization of culture, and describes current IR research methods. The grant proposal is used to illustrate how IR research methodology is particularly useful for the study of specific genres across cultures. Finally, special attention is paid to IR research as it applies to English for academic purposes (EAP) practice (in both English as a second language (ESL) and English as a foreign language (EFL) contexts). The chapter closes with a consideration of future directions for IR.

From “contrastive” to “intercultural”

As Diane Belcher puts it, “in the beginning was Kaplan” (2014, p.59). His “doodles” article (1966), though controversial and even misunderstood, remains a ground-breaking study of student writing because it initiated the systematic analysis of the thesis that one’s first language and culture influence the structure of discourse.

The idea that “cultural thought patterns” existed in L2 writing was provocative. Following in the footsteps of contrastive analysis (CA), which looked primarily at word- and sentence-level structures, Kaplan’s work was the first to consider the above-the-sentence rhetorical structure of texts. The 600 student essays he analyzed were not selected rigorously from the same genre or level of writer expertise. The 1966 article deviated from the scientific method in a number of ways, including material selection and interpretation (Belcher, 2014). However, its thesis gained traction. In fact, research that followed in the CR tradition confirmed Kaplan’s basic argument. For example, the work of Hinds (1990) further reinforced the existence of culturally-related preferences for organizing essays. He found that Japanese and Korean essay writers revealed their purpose for writing towards the end

of their essays, applying an inductive rhetorical pattern. In contrast, Anglo-American writers used a direct, overtly argumentative, deductive pattern.

In the 1990s, Xiaoming Li extended the examination of student writing into the area of assessment. Li (1996) showed that Chinese and American readers of student essays reacted quite differently to the same samples of writing. In Li's argument, the fact that the Chinese evaluators appreciated a student's emotional writing more than the American raters did illustrated the presence of culture-based differences in reader expectations, as well as implications for the assessment of writing. Recently, Abasi (2012), working with English-speaking learners of Persian, demonstrated that they not only perceived the structure of an Iranian editorial as less organized than an editorial translated from English, but also had more difficulties organizing their own summaries, took longer, and made more language errors when recounting the Iranian editorial. As Connor (2011, p.3) and Ferris (2009, p.22) point out, such work developed in the classic CR tradition has significant pedagogical implications in that it offers evidence that can raise instructors' awareness of students' diverse literacy and rhetorical preferences, as well as inform the choice and design of instructional materials.

A widely perceived weakness of early CR research was that it both represented a deterministic view of culture and overgeneralized findings based on the writing of learners (rather than experts) in static isolation from other developmental and socio-cultural factors that influence writing (Casanave, 2004; see Kubota, 2010). Additionally, some analyses of student writing produced results that did not align with Kaplan's descriptions. For example, Kubota (1998) and Hirose (2003) showed that Japanese students used, in fact, deductive features transferred from Japanese into their English writing. Based on such data, Kubota and Lehner (2004, in Connor, 2011, p.68) argued for a "critical contrastive rhetoric," one that is more nuanced in its interpretations. Ryuko Kubota continues to be critical of the idea of culture as monolithic or as a post-colonial hybrid that could become another monolith itself (2014).

Current understandings and uses of culture in IR research

The concept of culture and its transformations are at the centre of CR and the development of IR. In 2008, Connor proposed a multilayered model of IR consisting of three major tenets:

- 1 Texts need to be seen in their contexts with meaningful contextual and purposeful descriptions;
- 2 Culture needs to be complexified to include disciplinary cultures in addition to national/ethnic cultures, and
- 3 Dynamic, interactive patterns of communication are important to consider, which leads to convergences among cultural differences.

(Connor, 2008, pp. 299–316)

These tenets are based on a conceptualization of culture that is markedly different from earlier versions. Culture has long been a complex concept; it is probably one of the most contentious subjects in all humanities and sciences. It has been generally defined as the lifestyle of a group of people: values, beliefs, artifacts and behavior, and communication patterns. Mathews (2000, p.2) calls this traditional view "the way of life of the people." This definition has often led to understandings of culture in purely national terms—"US culture," "Chinese culture," and "Finnish culture," for example. Such a notion of culture came under increasing attack in the post-World War II period, and particularly in postmodernist

criticism. For example, Keesing (1994, p.301) regards culture as largely the invention of Western anthropologists who simply needed “a framework for [their] creation and evocation of radical diversity.” He believes that this essentialist notion of culture, which represented the view of early anthropologists studying rural and homogenous societies, infiltrated our everyday discourse and, over time, led many Westerners to understand culture as something defined by objects and rituals, usually as they related to a non-Western “other” (p.301). In other words, this notion allowed Westerners to define themselves by comparison to what they were not.

The ability to conceptualize culture as used in IR research is critical. Dwight Atkinson (2004) wrote about the need for CR to change its conceptualization from a “received” view of culture to an alternative view that takes into account the changing nature of global communication. The most useful concept in Atkinson’s discussion of new cultural concepts for IR was the distinction between “large cultures” and “small cultures” (Holliday, 1999). Legal culture, business culture, classroom culture, etc., can be analyzed using the parameters conventionally used for culture: norms, values, social practices, roles, hierarchies, and artifacts. We know from genre theory, for example, that various discourse communities have their own norms about genre characteristics and social practices about how to produce and consume these genres. Different norms for research papers often exist from discipline to discipline (Swales, 2004). For example, business executives in any given culture (national/ethnic and professional) know what a typical sales letter looks like, and they have a schema about how sales negotiations are expected to proceed.

Holliday’s discussion of small cultures in educational settings (1999) provides a productive distinction for IR research. Large cultures have ethnic, national, or international group features as essential components and tend to be normative and prescriptive. Small cultures, on the other hand, are non-essentialist and based on dynamic processes that relate to cohesive behaviors within social groupings. Small cultures avoid ethnic, national, and international stereotyping: “In cultural research, small cultures are thus a heuristic means in the process of interpreting group behaviour” (p.240). Small cultures are rooted in activities, and a specific discourse is one of the products of small culture. According to Holliday, “in many ways, the discourse community *is* a small culture” (p.252).

A complex notion of the interactions of different cultural forces emerges when one analyzes the small and large cultures present in a given situation. National culture overlaps with other, smaller cultures such as professional-academic culture, classroom culture, student culture, and youth culture. This is important for teachers of EAP writing to consider in both ESL and EFL situations, especially when the class includes students from such diverse disciplines as engineering, nursing, business, liberal arts, etc., in addition to diversity in terms of age, gender, and national and socio-economic backgrounds. Postmodern views see culture as “a dynamic, ongoing process which operates in changing circumstances to enable group members to make sense and meaningfully operate within those circumstances” (Holliday 1999, p.248). Thus, culture has become less and less a national consensus than “a consensus built on common ethnic, generational, ideological, occupational, or gender-related interests, within and across national boundaries” (Kramsch, 2002, p.276).

Particularly relevant to current EAP research and pedagogy is the notion of culture from the bottom up; that is, from the perspective of the individual. Atkinson and Sohn (2013) argue that people live “culturally” and propose the cultural study of the person. They aim to describe culture as represented in the lives of its individual users from their perspectives. Thus, they focus on *the cultural nature of the individual* (how socio-cultural influences contribute to individual identity) as well as on *the individual nature of the cultural* (how cultural material

is actively interpreted, appropriated, and (re)created by individuals). Case studies such as one conducted by Canagarajah (2006), for example, portray an individual's experience negotiating parallel linguistic, ethnic, and academic cultures.

We started our discussion by mentioning several classic classroom-oriented CR research. In the sections below, we highlight the newer IR research that overlays academic and disciplinary culture on top of linguistic/ethnic/national culture. Genre analysis and corpus-based research are explored as research approaches that have had major cumulative effects on the field of IR. Finally, studies of student academic writing will be considered for their pedagogical implications.

IR research in EAP: ESL and EFL contexts

The role of genre analysis

As the domain of writing in EAP expanded from the teaching of essay writing to other genres in academic contexts, genre analysis has provided IR researchers with methods of analysis that supplement the discourse analysis methods used in previous CR research. The development of genre analysis (Swales, 1990; Bhatia, 1993) was fundamental to IR research, as it forced researchers to compare textual and contextual features of comparable genres across cultures, whereas before the advent of genre analysis there was the danger that apples were being compared to oranges. In addition, the focus on the rhetorical analysis of specific genres led IR research to expand into many additional academic and professional genres.

The number of comparative empirical genre analyses has increased exponentially in the past two decades, not only in number but also in kind. Genre research significantly improves our understanding of the use of language for academic and specific purposes across cultures, both disciplinary and language-based. Published studies have compared the rhetorical moves and linguistic features of the research article in a number of disciplines in various countries (e.g. Ventola and Mauranen, 1991; Duszak, 1994; Moreno, 1998; Mur-Dueñas, 2008). Other genres that have been studied across cultures include the business letter request (Yli-Jokipii, 1996), the sales letter (Zhu, 1997), the grant proposal (Connor & Mauranen, 1999), the application letter (Upton & Connor, 2001), the letter of recommendation (Precht, 1998), web pages (McBride, 2008), and newspaper commentaries (Wang, 2008). Many of the studies use rhetorical moves analysis (e.g. Connor & Mauranen, 1999), but other linguistic analyses are also used to identify and explain cultural differences in writing for a specific genre. Mur-Dueñas (2008) uses metadiscourse analysis to examine Spanish–English contrasts in academic research articles, while Wang (2008) applies systemic-functional appraisal theory to evaluate newspaper commentaries in Chinese and English.

Genre analysis has come a long way from early paragraph-based CR analyses. Cumulatively, the focus and findings of genre studies, such as the ones above, underscore consideration to audience, purpose, and pragmatics. All those who teach writing, are learning to write, or use writing in their profession or occupation can benefit from understanding that the norms of discourse communities or communities of practice (disciplinary or otherwise) shape writing. IR-oriented genre analysis facilitates this type of understanding.

IR and research grant proposals

The grant proposal stands out as an essential academic genre that offers fertile territory for IR research, with implications across academic circles all over the world. Grant proposal

writing is a fundamental form of scientific writing: researchers must get money in the first place if they are to publish articles (Myers, 1990). Others acknowledge it as “a genre that all academics will have to come to terms with at some point of their career, usually the sooner the better” (Upton & Connor, 2001, p.235).

Most grant agencies give general advice for writing proposal sections, but such advice is often vague and ambiguous. For example, Connor (2012) pointed out that the National Institutes of Health (2010) gave suggestions such as the following for writing the “specific aims” section: “Don’t be overly ambitious. A small, focused project is generally better received than a diffuse, multifaceted project.” What is “overly ambitious”? How much ambition is enough? It was similar wording in European Union grant-writing guidelines that originally encouraged Connor and Finnish linguist colleagues in the 1990s to study the language of successful proposals. The research resulted in a description of EU grant proposal rhetorical moves (Connor et al., 1995). Connor and Mauranen (1999) is the first study that analyzed the functional components of the genre. Based on the move analysis developed by Swales (1990) and Bhatia (1993), they identified ten required moves:

- 1 establishing the *territory* of the proposed research
- 2 indicating a *gap* in the territory
- 3 stating the *goal* of the proposed study
- 4 specifying the *means* of how the goal will be achieved
- 5 reporting *previous research*
- 6 presenting anticipated *achievements*
- 7 describing *benefits* of the study
- 8 introducing the research team and making a *competence claim*
- 9 making an *importance claim* of the proposed research, and
- 10 making a *compliance claim* to indicate the relevance of the proposal to the objectives of the grant funder.

The above-mentioned moves have been subsequently applied in other studies on research and non-profit grant proposals (Connor & Wagner, 1998; Feng & Shi, 2004). Connor (2000) examined rhetorical variations in fourteen research grant proposals and confirmed her move identification by interviewing five grant writers, thus studying the social contexts of grant writing to supplement text analysis. In the course of the actual writing of the grant proposal text, social interactions are very important and constitute a key element of grant-proposal genre knowledge. Based on her own research on proposal writing, Christine Tardy (2003) writes,

Grant proposals function within a larger system of documents with which writers interact as they navigate through the grant-writing process. Documents such as letters of intent and grant-writing guidelines, as well as face-to-face interactions with program officers, are all interconnected genres within the grant-writing process.

(p.11)

Such studies further the knowledge we have about the relationships between texts and culture. Even when such studies analyze rhetorical organization of grant proposals without directly comparing across languages, the research accumulates—study by study, language by language—into a database of information that can be then used in IR-oriented research

and teaching. Grant proposal studies are an illustration of the manifestations of disciplinary cultural norms, and also capture their enactment across international contexts. This is a valuable contribution by virtue of corpus-based methodology utilized as well as the broad focus of the research.

Corpus-based IR research

Over the past decade, corpus linguistics has provided a powerful method of linguistic analysis for IR studies. In fact, a significant portion of the genre research mentioned above uses the tools and methods of corpus linguistics—large databases of texts selected on the basis of their pertinence to a specific research question, and computer-searchable with software for linguistic analysis (Biber et al., 1998). When applied in a contextually and culturally sensitive manner, corpus research can become a cornerstone of intercultural textual scholarship. Context-sensitive, quantitative textual analyses using corpus linguistics methods allow us to compare similar texts across languages, or texts written by proficient native speakers of a language and those written by L2 learners. Such studies provide potentially generalizable data about linguistic and rhetorical preferences across languages and cultures. They allow researchers and teachers to “understand more fully the specialized registers that students seek to master, as well as the differences from other registers that students are exposed to” (p.170). Language instructors, especially those in EFL situations who often teach groups of speakers of only one L1, benefit from knowing what may be difficult for L2 learners as a result of that specific L1.

There are two approaches to corpus-based research (Biber et al., 2007), both of which can be (and have been) productive for IR. By following a *top-down* approach, researchers look for the organizational patterns used by a discourse community. Studies developed in this vein include the seminal work on move analysis by Swales (1990). Researchers have used move analysis to determine the discourse organization of research articles in various disciplines (see chapters on corpus analysis and genre in this book). Connor and Mauranen (1999), Connor (2000), Upton and Connor (2001), and Upton and Cohen (2009) mainly used this approach to identify the moves in grant proposals and philanthropic fundraising letters.

On the other hand, *bottom-up* corpus research focuses on smaller linguistic units (such as lexical items like verbs and pronouns, or lexical bundles) to understand patterns of use characteristic of a specific genre. A valuable product of this approach is Coxhead’s 2000 Academic Word List (AWL), which has numerous pedagogical applications (Chen & Ge, 2007). Academic word lists now exist for other languages, such as French (Cobb & Horst, 2004); at the same time, discipline-specific academic word lists are being developed for English in order to avoid the over-generalizations in Coxhead’s AWL (Hyland & Tse, 2007).

The blending of critical and corpus-based approaches is a recent and meaningful approach to IR research. The Belcher and Nelson (2013) volume illustrates this very combination of approaches, applying it to the study of socio-political identities online (You, 2013) and in public media (Escamilla, 2013). Two chapters in the volume directly forward the IR agenda by comparatively analyzing written discourse. Cortes and Hardy (2013) compare English and Spanish history writing corpora to examine the semantic features of lexical bundles in their larger linguistic context in both languages by taking into consideration the affective meaning and co-occurrence of the lexical bundles in both languages. Temples and Nelson further innovate by focusing on cross-cultural interaction in asynchronous, computer-mediated communication, and finding distinctive patterns in the use of interpersonal pronouns by

Canadian, Mexican, and US students. Clearly, corpus studies benefit from considering not only the textual level but also the social situations and purposes of writing.

Aside from blending IR with corpus linguistics and critical discourse analysis, the studies in Belcher and Nelson also illustrate the importance of integrating an emic perspective and qualitative analyses into the textual analysis. Temples and Nelson, for example, take quantitative corpus analysis one step further by organizing the analysis into groups in which they examine, quantitatively and qualitatively, the language use of each study participant. This approach is in accord with Connor's (2013) observation that, while corpus linguistic methods are well developed for the analysis at the textual level, ethnographic annotations should be added to the corpus data for discursive and social-level analysis, to include information about the author, audience, and other important contextual matters. By collecting ethnographic background information about the writer and writing context, the researcher can complement the quantitative analyses facilitated by corpus tools with qualitative, in-depth analyses of an entire corpus or specific data subsets. After textual analysis, once trends have been revealed, the reasons for them and other crucial information are revealed by interviewing individual writers or focus groups. This approach was taken by Ene (2008) in her study of graduate native and non-native English speaking academic writers, in which the corpus-based linguistic analysis of the writers' texts was complemented by data from participant interviews. Her combined approach helped understand the corpus data not only as a reflection of linguistic interference, but also of social and personal factors such as age, socialization, and motivation.

IR and student EAP writing

In her discussions of contemporary IR, Connor (2011) emphasizes the importance of understanding that the rhetorical structure of writing is shaped under the influence of all of the small and large cultures—ethnic and otherwise—a writer belongs to simultaneously. As also indicated by the studies mentioned in the introduction to this chapter, the reality remains that L1 and L2 student writing across any combination of languages is likely to diverge in certain respects and to varying degrees in the use of linguistic structures and devices such as lexical and syntactic variety, coordination, subordination, and passivization (Hinkel, 2005); coherence and cohesion devices (Moreno, 1998); methods of presenting evidence and addressing reader expectations (Keck, 2014); and argumentation and sequencing (Hinds, 1990), at basic as well as near-native proficiency levels (Ene, 2008). Current IR research, working with an expanded definition of culture and varied methodologies, adds to this list some nuances of the complex relationships between cultural background and texts.

The contributions of authors such as Abasi (2012) and Akbari (2009) on the pedagogical value of IR and the ways it translates to instructional contexts illustrate “the negotiated nature of cross-cultural practices” (Abasi & Akbari, 2014, p.114). Xiaoye You has conducted rhetorical analyses that demonstrate the cross-pollination between traditional Confucian and Western rhetorical choices throughout the history of Chinese rhetoric (2005, 2010). Work such as his points at the dynamic nature of culture and the socio-political changes that affect the evolution of discourse practices. Towards the end of his book, You (2010) ponders the influence of English as a global language and China's exam-oriented culture on the spread of writing patterns that are both similar and dissimilar to the oversimplified US-based, five-paragraph essays required in standardized national exams. In a recent analysis of student writing in English by 40 Chinese undergraduate students, Ene (2014) presents findings that support You's observation that Chinese students' writing is increasingly Westernized but

still combines typical Chinese and Western (US-based) features. Most of her participants displayed strengths not found in previous studies, such as relatively strong theses and topic sentences. However, the participants' writing was also partly traditionally "Chinese" in that it provided vague support for main ideas and refrained from forefronting writers' selves via personal opinions or reflections from a personal point of view. You (2010) and Ene (2014) are examples of research that shows that inter-cultural rhetorical features evolve with the contexts around them. This is, in Abasi and Akbari's (2014, p.114) words, "the negotiated nature of cross-cultural practices." The continued re-examination of writing practices in context is necessary if we want to accurately describe rhetorical norms for the benefit of students.

Research on EFL writing has produced ample evidence that the writing of EFL learners needs to be understood not only in terms of linguistic forms—below or above sentence-level—but also in the context of the local as well as the global environment. For one, writing is often not the most important skill one needs to develop in EFL contexts (Ene, 2013, 2014). Additionally, such contexts are often constrained by a lack of financial resources, an exam-driven culture, inhumane workloads, and political instability resulting in frequent and confusing policy changes (Ene, 2013; Reichelt, 2009). This conglomerate of factors creates the conditions for EFL writing to either adhere to or diverge from the norms of traditional Western rhetoric. The adherence may be related to the fact that some students want to study or work abroad, while the divergence may result from the fact that writing is exchanged in ELF or EIL contexts, where English is everyone's and no one's language, and local nuances infuse discourses in English. Adherence can therefore simply result from the demands of national policy, while divergence may come from diversity in approaches to teacher education. In some cases instructors themselves can be ideologically opposed to teaching traditional English writing conventions when they see the English language as a colonizing power that is incompatible with the writing practices of local cultures (Casanave, 2009; You, 2010).

As a culturally grounded writing practice, source documentation (especially the culturally-informed distinction between "proper" documentation and plagiarism) has been a productive area of study in IR/EAP. Much has been written that finds ties between cultural values such as collectivism and the minimal use of citations in the work of, for example, East Asian students (Rinnert & Kobayashi, 2005; Shi, 2006; Liu, 2008). However, more recently Keck (2014) points out that developmental factors are involved in the use of citation techniques to a greater extent than culture. Both L1 and L2 novice writers in Keck's study identified the same excerpts as important to refer to, and then copied more from source texts instead of paraphrasing or citing, while the more advanced student writers were more likely to use paraphrasing and citations.

Future directions

Recent work in IR indicates that the field will continue to evolve alongside the idea of culture. It has long moved away from equating culture with nationality or ethnicity without necessarily taking these out of the equation. IR now accommodates conceptualizations of culture ranging from the individual as a culture (Atkinson & Sohn, 2013), to global culture (Baker, 2013), to digital culture (Belcher, 2014, p.62). While this in theory widens the research territory and potential impact of IR research, it can also potentially weaken it. The expansion of the definition of culture has led to too many possible operationalizations. This in turn dilutes the concept, as culture can be too many things rather than a concentrated

something. IR is so intrinsically blended into almost any study that considers culture as a variable that its individuality is at risk. However, we argue that culture, no matter how we define it, always influences communication, and therefore research in applied linguistics and related fields should continue the IR tradition.

The integrity of the IR field can be preserved by continuing to focus on the original pedagogical goal of CR: to reveal rhetorical patterns in order to be able to explain them to students of writing. Some recent instruction-oriented IR studies, for example, have explored the role of technology in teaching IR. Xing et al. (2008) showed that their Chinese learners who had access to an e-course on IR were able to make their writing more like that of native English writers than those who did not. Walker (2011) commends their approach as one of several ways in which rhetorically-oriented teaching can be effective at improving student writing in a target language. Walker also supports engaging the students as ethnographers who analyze and compare texts, allowing the use of the L1 (especially at lower levels of proficiency) to support fluency and confidence, and using teacher conferences and peer responses as an opportunity to discuss rhetorical features.

Contextualized text analysis continues to be as important as the new definitions of culture for consolidating the basis for a new theory of IR, in which three relevant components are overlaid: (1) texts in contexts; (2) culture as a complex interaction of small and large cultures (Holliday, 1999); and (3) texts in intercultural interactions (Connor, 2011, p.2). In light of this framework and to summarize what has been said so far, IR assumes that (1) the study of writing is not limited to texts but needs to consider the surrounding social contexts and practices; (2) national cultures interact with disciplinary and other cultures in complex ways; and (3) intercultural discourse encounters—spoken and written—entail interaction among interlocutors and require negotiation and accommodation.

Methodologically, much of the recent analysis of EAP writing contexts through the IR lens has been in depth and qualitative. Despite the current emphasis on qualitative analyses of writing contexts, we need to continue conducting quantitatively-oriented textual analyses that compare similar texts in writers' L1 and L2. Such studies provide explicit, generalizable examples about different linguistic and rhetorical preferences across languages and cultures. In order to effectively explore intercultural rhetoric, studies should continue to consider both the textual level and the social situations and purposes of writing. Corpus linguistic methods complemented by ethnographic methods can facilitate deep analyses, both quantitative and qualitative.

The scope of IR has already expanded beyond written interaction and texts other than the academic essay or research paper. We see now research on classroom chats that draws attention to chatroom text as a genre in its own right (Temples & Nelson, 2013) or studies of teacher education and professional development (Ene, 2013; Reichelt, 2009), taking into account not only the writing product but many surrounding socio-political aspects that affect intercultural communication. The widening of IR's scope to encompass the writing process, multimedia/digital discourse, and policy, among other factors, is inevitable and desirable. At the same time, more pedagogically-oriented IR research, especially in EFL contexts, is necessary in order to counterbalance the skewed orientation towards English (Abasi, 2012; Abasi & Akbari, 2014).

Conclusion

This chapter has discussed IR research and applications in linguistics, with particular attention to EAP instruction. We have reviewed its historical development in modern applied

linguistics over the past 50 years and considered its major theoretical, methodological, and practical contributions. We have focused on the significant expansion of IR in scope, from student writing as its object of analysis to its many contributions to various other EAP and ESP situations. However, we need to underscore the fact that the impetus for Kaplan's (1966) CR was to support international students in US universities as they wrote for their new native English-speaking audiences. The goal to provide relevant language teaching in a variety of second- and foreign-language situations should continue to be central to IR. Comparing texts in the students' native language with texts in the target language (cross-cultural text linguistics) is needed, and we now have good, reliable methods to do that in ways that lead to generalizable findings that can be translated into relevant instruction. In other words, IR today encompasses two major areas of research and instruction: cross-cultural studies of texts and intercultural studies of interactions. Both are needed.

Further reading

Abasi & Akbari (2014); Atkinson (2004); Atkinson & Sohn (2013); Belcher (2014); Belcher & Nelson (2013); Connor (2011)

Related chapters

- 4 English as the academic lingua franca
- 7 EAP in multilingual English-dominant contexts
- 8 EAP at the tertiary level in China: challenges and possibilities
- 9 EAP in Latin America
- 11 Language and L2 writing: learning to write and writing to learn in academic contexts
- 16 Corpus studies in EAP
- 19 Genre analysis

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CRITICAL PERSPECTIVES

Christopher J. Macallister

Introduction: why a critical perspective matters

In the 1980s and 1990s, EAP took a ‘critical turn’, following parallel developments in the wider English language training (ELT) community as writers and practitioners in the field of English language teaching increasingly began to consider the overall political and social implications of their profession. For example, Phillipson (1992) and Crystal (1998) explored the impact of English as a world language and the role the English language teaching industry played in its spread, while other writers explored the question of the English as a foreign language (EFL) teacher’s identity, and the question whether native or non-native speakers would be the most effective English language teachers (Medgyes, 1992). Critical EAP (CEAP) broadened this investigation to include theories (and practices) that develop a social science of EAP teaching by revealing its hidden politics. Critical perspectives provide the EAP profession with space to reflect on the wider social and political implications of what happens in classrooms, thus enabling greater self-awareness for the practitioner and their role in the academy and society as a whole.

Until the late 1980s, EAP was seen by many of its practitioners as an essentially neutral and a-political field of practice (Benesch, 1993). According to Hyland and Hamp-Lyons (2002), EAP was largely focussed on responding to the needs of academic disciplines and had not concerned itself with the wider socio-cultural implications of how EAP was implemented and for what ends. CEAP instead sought to challenge mainstream EAP and what it saw as an ‘accommodationist’ position that EAP had fallen into; that is, one that was value neutral, pragmatic and accommodating of existing power relations in the classroom, academia and society overall (Benesch, 1993, p. 714). CEAP, thus, emerged as a coherent and effective critique of mainstream EAP during the 1990s, as Pennycook (1997, 1999) and Benesch (1993, 1996, 2001) made a highly persuasive case that EAP was a political field of practice, whether ‘accommodationist’ practitioners were aware of it or not. Thus, the core contribution of CEAP to the EAP profession was to encourage and at times provoke teachers, writers and managers to engage with the wider consequences of their practice.

However, despite its critical stance, CEAP avoided any serious critique of its own beliefs and practices. In this, CEAP mirrored the wider critical pedagogy movement, which also seemed reluctant to subject itself to the forms of critical engagement ‘to which it subjects

others' (Usher & Edwards, 1994, p. 220). This potentially creates problems for EAP professionals who want to be reflective and politically engaged in their practice.

This chapter will start by providing an outline of CEAP's development, from critical pedagogy to Benesch's adaptation of this to EAP, which I term 'first wave' CEAP. In doing so, I set out the political history of EAP as it moved from a false neutrality to an appreciation of its highly political role. I will then consider the crisis of first wave CEAP and its failure to recognise its own potential for (ideological) hegemony, which presents significant dilemmas for EAP professionals. The chapter will conclude with a discussion of the potential for a CEAP revival in a 'second wave' that relocates CEAP within local practices.

The ideological evolution of CEAP: from critical theory to critical EAP

CEAP believes the teaching of EAP to be inextricably bound up with questions of power, ideology and social justice. Indeed, the critical perspective is a transformative one that sees the classroom as a place where hegemonic power can, and should, be challenged by both teachers and students. CEAP shares these concerns with the wider critical pedagogy movement, which it grew out of. Critical pedagogy has in turn been heavily influenced by critical theory, which emerged as an intellectual approach in the first half of the twentieth century.

Critical theory developed out of the work of the Frankfurt School led by German academics Adorno, Horkheimer and, later, Habermas. The Frankfurt School drew on orthodox Marxist thought to develop its own critique of capitalism, which argued that the conventional Marxist critique, with its focus on the material world and its dismissal of ideas as mere superstructure, was insufficient (Giroux, 2009, p. 37). For critical theorists, the realms of ideas and culture were of vital importance as they had become the means by which twentieth-century capitalism exercised power and control (Giroux, 2009, p. 37). Gramsci's work on how capitalism exercised hegemony through the transmission of a dominant ideology further contributed to the emergence of a critical approach, which argued that capitalist oppression could also be *resisted* through the realm of ideas and culture (Gramsci, 1992). Thus, for critical theorists like Habermas, education has a 'critical potential' to become a route to emancipation from oppression rooted in the capitalist system (Young, 1989, p. 45).

In the 1960s, the work and writings of Paulo Freire gave coherence and momentum to what would later be termed critical pedagogy (Darder et al., 2009). Freire, a Brazilian educator and intellectual, rose to prominence in the early 1960s with literacy programmes he initiated while part of the faculty of Recife University (Weiler, 1996, pp. 358–359). Among adherents to critical pedagogy, Freire continues to be regarded as the 'most influential educational philosopher' (Darder et al., 2009, p.5).

For critical pedagogues like Freire, the classroom and curriculum are more than just a place and programme of study; rather, they are sites where power is exercised and students prepared for their roles in a capitalist society (McLaren, 2009, pp. 74–75). Freire (1994) criticises a transmission approach in which the teacher merely 'deposits' ideas without communicating with students. Students, who may be able to 'read' letters and words, may not understand the meaning of what they read. For example, critical pedagogy notes that ELT materials are products of commercial publishers operating in a liberal capitalist system. These materials celebrate but do not challenge its values, such as individualism, economic success¹ and a globalised outlook. The non-critical teacher has no space to consider the social and political implications of the material (e.g. the implications for

workers in the developed world due to the relocation of companies to the developing world, and the implications for workers in the developing world, including precarious, underpaid and dangerous working conditions). Instead, the teacher focusses on language, disregarding that grammar and vocabulary are choices of meaning, and that language is, therefore, fundamentally political.

Critical pedagogy argues, therefore, that there is a 'hidden curriculum' that serves to reproduce and reinforce existing power relationships in society (McLaren, 2009, p. 75). Thus, the dominant hegemonic ideology of liberal capitalism is supported through the education system. However, while the classroom is a site of domination, it is also a place of potential liberation. Critical pedagogy is ultimately a 'pedagogy of hope' (Freire, 1994) where students can be made conscious of their oppression, and where they can be enabled to challenge the hegemonic ideology (McLaren, 2009). Thus, for critical pedagogues, schooling *must be partisan*, challenging the existing hegemony and working towards a 'society based on non-exploitative relations and social justice' (McLaren, 2009, p. 62). It is this focus on a 'pedagogy of hope' where the classroom is a place of potential liberation, that has had a direct influence on CEAP, in particular Benesch (2001) and the generation of CEAP scholars influenced by her work (see Grey, 2009; Chun, 2009; Le Ha, 2009; Morgan, 2009; Appleby 2009). Like the wider critical pedagogy movement, the 'dream' of critical EAP is that critical practices in the classroom can lead to 'reforms in academic institutions' and improved 'conditions in the workplace and community' (Benesch, 2001, p. xviii).

From EAP's alleged neutrality to CEAP's critical intervention and the politics of resistance

CEAP developed when writers and practitioners began to apply the ideas of critical pedagogy to the teaching of English for academic purposes on university campuses. The application of a critical perspective to EAP initially drew on critical approaches to the teaching of English to immigrants in the US, and composition writing in American high schools and colleges. Benesch, perhaps the most prominent CEAP writer, emphasised that, like other areas of pedagogy, English language teaching is not a politically neutral activity (Benesch, 1993), and that EAP professionals needed to 'recognise the ideological forces at work' in their 'institutional sites' and 'pedagogies' (1989, quoted in Benesch, 1993, p. 708). According to Benesch (1993), the EAP curriculum, as traditionally conceived, was highly political: in not questioning existing power structures, it was implicated in supporting and maintaining the status quo. EAP tutors who avoided discussing or acknowledging the presence of ideology were not neutral. Indeed, Benesch accused EAP practitioners who ignored the political implications of their work of adopting an 'accommodationist ideology' (1993, p. 711) that accepted the status quo as correct.

In her call for a critical approach to EAP, Benesch thus challenged Santos' claim that L2 instruction and writing is pragmatic and non-ideological (Santos, 1992). Santos had argued that as a branch of applied linguistics research into L2 composition is primarily descriptive and quantitative in nature, and thus it is above the politics of language (1992, p. 8). According to Santos, the primary goal of EAP – preparing students for a course in higher education – meant that teaching EAP was a pragmatic, non-political exercise (1992, p. 9). The focus is on learning language (i.e. words and grammar), not the understanding and questioning of content. Benesch instead argued that EAP instruction involves choices over what to teach and how to teach it, and in this process decisions will invariably be made that either challenge or support the status quo (Benesch, 1993, p. 714).

As the decade progressed, Benesch sought to develop CEAP as a coherent and practical approach to EAP teaching. The key move was to set out how CEAP could be implemented through the curriculum and in the classroom. Benesch argued that CEAP had to move from a needs analysis approach to what she termed a 'rights analysis' approach (Benesch, 1999, p. 313). Benesch noted that the problem with the traditional needs analysis is that it focusses on what the institution, and wider capitalist society, wants from the student, making student needs 'subordinate' (Benesch, 1996, p. 724), and therefore accepting of the status quo. For example, while the non-critical, accommodationist teacher would use a marketing text to teach language and text formats used in marketing without questioning the ethics of marketing, the critical teacher would use the same material to lead students to question the text's assumptions and consider alternative views to those presented in the material. Benesch, thus, used a critical needs analysis, or rights analysis, which starts from the position that students typically 'are entitled to more power than they have', and that students need to be given the means to question and challenge existing power relationships within their institution and discipline. Therefore, students are not merely passive subjects to be shaped to meet the needs of the academy; rather, they are reconstructed as 'potentially active participants' (Benesch, 1999, p. 315).

Central to Benesch's (1996) approach was to connect the classroom and curriculum to the wider social and political world her students inhabited, shaping the course to the needs of the student. With the cooperation of a colleague teaching psychology, Benesch sought to develop a more critical approach to her students' subjects and how they were taught. In connecting her EAP classroom to the wider political and social world her students lived in, she discussed issues such as anorexia and domestic violence in her psychology preparation class. Benesch invited students to share their own experiences of anorexia and domestic violence, allowing them to expose both their own vulnerabilities, their own (moral) positions on these issues, as well as considering the implications of these issues in broader social terms. Her goal was to challenge assumptions and prejudices held by students, guiding discussion with her expertise.

Following Benesch's development of CEAP's theory and practice, a debate between Pennycook and Allison regarding CEAP's ideological foundation was another key intervention in the development of CEAP during the 1990s. Allison had attempted a rearguard action on behalf of EAP's claims to neutrality. He agreed that EAP teachers should be politically aware but that a pragmatic approach that would not distract from the business of actually teaching EAP should take priority (1998, p. 314). Pennycook countered Allison's (like Santos') argument that many EAP practitioners were already engaged with the wider social world, stating that it was insufficient to provide students with the *critical* education they needed if EAP were not to become another means of reinforcing the status quo (Pennycook, 1997, p. 256). Pennycook rejected the idea that EAP is, or should be, a 'neutral service industry' (1997, p. 263). Instead, he widened the attack on the alleged neutrality of EAP to argue that neither universities nor the English language itself were neutral (Pennycook, 1997, pp. 257–261). Thus, Pennycook argued that higher education institutions, and indeed EAP programmes, are themselves political sites where hegemonic ideologies are either reproduced and reinforced or resisted (Pennycook, 1997, p. 262).²

This process of research, reflection and publication led by Benesch and Pennycook culminated at the start of the next decade in Benesch's book *Critical English for Academic Purposes: Theory, Politics, and Practice* (2001). After providing a critical history of EAP and reaffirming the emancipatory goals of CEAP, Benesch more fully set out the ideological inspiration for CEAP. Benesch (2001, pp. 49–60) claimed Freire as her main influence,

with important contributions from Foucault and feminist authors such as Weiler. The book restated the need for EAP units to assert themselves within the academy, and gave further examples of how a critical approach to EAP could be implemented in the classroom. The book served to consolidate and give coherence to the previous decade's developments, and became an important starting point for critical researchers and practitioners (see Edge, 2006; Grey, 2009; Chun, 2009 and Le Ha, 2009).

Therefore, by the start of the new millennium, CEAP had emerged as another evolution of the critical pedagogy movement, engaging with the particular context of teaching English for academic purposes. This first wave of CEAP had, thus, opened up space for teachers, materials writers and researchers to be ever more reflective as to the 'why' of what they did. Following this, between 2001 and 2009, CEAP took a much more political turn, away from a focus on pedagogy. This was a time of heightened activism and a full-blooded engagement with a politics of resistance to the status quo as CEAP writers and practitioners responded to wider political events such as the American-led war on terror, the Iraq War and the advance of globalised capitalism. These events seemed to intensify the need for a critical approach, and made CEAP writers even more overtly political than before. CEAP's ideological foundation in critical theory and the Frankfurt School's engagement with Marxist analysis emphasised that CEAP was not merely a theory of pedagogy but a social science of teaching in which the classroom exists as part of society.

For Edge (2006, p. xiii), and other CEAP writers, the 2003 Iraq invasion by US President George Bush was a 'catalytic defining moment' that was a reminder that the politics of English language teaching – the language of the powerful, here the allies that invaded Iraq – cannot be ignored. It renewed and intensified the concerns of CEAP that the practice of EAP, and ELT in general, played a key role as a 'support for the status quo' and the 'dominance of the US and its allies' (Edge, 2006, p. xiii). Edge was even more direct when he argued that ELT served now to 'facilitate the policies the tanks were sent in to impose' (2004, p. 718).

Kumaravadivelu (2006) argued that there was a colonial dimension to English language instruction and that it helped to facilitate consent for American-led capitalism. This neo-imperialism is also linked to globalisation and its negative consequences as it reinforces the dominant position of the US and the forces of capitalism. According to Kumaravadivelu, English language teaching is fully implicated in this process. Indeed, by the end of the decade globalisation and its negative consequences had become central to much of the CEAP movement. Benesch argued that in fact globalisation had become the very 'rationale for critical EAP' (2009, p. 81). Globalisation was such 'fertile ground' for CEAP because it increased inequalities and widened the gap between those who had power and those who did not (Benesch, 2009). This came into increasingly sharp focus as the internationalisation of campuses increased significantly during this time, and EAP classrooms expanded in numbers as well as changing in their student body.

The strong teleological sense of mission that critical EAP possessed was thus intensified with Edge (2006) and others asking 'what is to be done?' in response to events like these. For some EAP advocates, the answer was to take an overtly party political stance that saw them oppose particular administrations. Edge (2004) critiqued the Bush, Blair and Howard governments' war on terror, while Benesch's answer was to actively seek to counter US military recruitment on her campus in New York State (see below). Thus, the twin influences of neo-liberal globalisation and the neo-conservative foreign policy of the Bush presidency further helped to build a coherent critical identity and give advocates of CEAP a clear sense of mission.

The crisis of first wave CEAP: the need for a critique of the critical?

By 2009, Benesch and other advocates of CEAP had established a clear counter narrative to the accommodationist status quo. This was an alternative politics of EAP based on a critique of liberal capitalism that sought to advance goals of social justice and emancipation. Though the end of the Bush presidency had seemed to take some of the urgency out of CEAP's message, globalisation as negative force remained as the core *raison d'être* for CEAP (Benesch, 2009). However, this clash of ideological positions between the so-called accommodationist mainstream and CEAP was very much a 'top down' dialectic as critical theorists, pedagogues and advocates of CEAP developed intellectual weapons to challenge the status quo. Despite the emancipatory goals of both critical pedagogy and critical EAP, the voices of those in the classroom and their local contexts seemed to take second place.

According to postmodern critics of critical pedagogy, this top down dialectic is an inevitable result of the fact that both liberal capitalism and critical pedagogy's counterpoint are grand modernist narratives that set out a particular vision for how the world is or indeed should be. Foucault termed these narratives 'regimes of truth', ideological positions that assert certain beliefs and behaviours as true and correct, and others as untrue and incorrect (Foucault, 1986). Regimes of truth, which include academic disciplines and social practices, are reproduced and reinforced each time power is exercised through them. Foucault's position is that power is not fixed and is always in a state of flux. This fundamental instability as to what is oppressive and what is not means that no ideological position or regime of truth should be considered 'inherently liberating or oppressive' (Sawicki, 1988, p. 166). Foucault warns that every regime of truth is 'dangerous' (Foucault, 1983, pp. 231–232) and should be questioned. Thus, if critical pedagogy is simply another regime of truth, it cannot be considered as either inherently empowering or liberating, and thus neither should its direct ideological descendant CEAP.

Indeed, according to Gore (1993), critical pedagogy should be considered as an example of a regime of truth with its own beliefs and practices, its own progressive meta-narrative of what the world should look like. Indeed, Usher and Edwards note that critical pedagogy has the 'teleological certainty' (1994, p. 218) of any modernist project. This is also true of CEAP with its mission to bring about 'reforms' in 'academic institutions...the workplace and community' (Benesch, 2001, p. xviii), and its belief that globalisation and capitalism are largely oppressive forces that it should challenge (Benesch, 2009 and Chun, 2009). Consequently, from a Foucauldian position, critical pedagogy and CEAP are as 'dangerous' (Foucault, 1983, pp. 231–232) as any other modernist regimes of truth.

However, both critical pedagogy and CEAP have largely ignored Foucault's warning, and seem reluctant to consider the danger of oppression inherent in any regime of truth. Thus, it could be argued that CEAP is at risk of not being alive to the possibility that it could be a source of repression that imposes its own beliefs and practices on students. Benesch (2001) and Pennycook (1999) do acknowledge the need for CEAP to be critical and reflective of its own practice. Benesch raises this issue in her 2001 monograph when she states that CEAP should problematise its own practice, also urging (however briefly) reflection on the part of critical practitioners (Benesch, 2001, pp. 63–64). Yet, the call for self-criticality is never developed by Benesch or any later authors into a coherent and well-argued critique of the CEAP position. As Gore argued in relation to wider critical pedagogy, calls for reflection are never followed by actual 'self-examination' (1993, p. 104).

Of course, CEAP claims that its goals are emancipatory but the practitioner is faced with a dilemma: what happens if those in the classroom do not share CEAP's goals? As

Freedman argues (2007, p. 445) 'what gives critical educators the right [to teach a regime of truth that] could be foreign not only to the students [but also to their] community at large'? The problem perhaps is particularly acute when CEAP begins to engage with 'live' policies, politicians and institutions. For example, Benesch (1996) describes how in 1994 she encouraged her students to take a critical stance towards the policy by New York State gubernatorial candidate George Pataki to cut public spending on education. Students were encouraged to write letters to the candidate expressing their concern and opposition to his policies. In addition, some students took part in marches and demonstrations opposing future governor Pataki's position (Benesch, 1996). Benesch, however, does not suggest where contradictory positions and dissenting voices would fit within the regime of truth exercised in the classroom. It is not clear how students who may have come to the classroom in favour of Pataki's lower public spending and lower taxation platform would be able to find their autonomous voice. There appear to be no opportunities created to write to or demonstrate against Pataki's opponent, incumbent Governor Mario Cuomo.

Similarly, in the latter part of the Iraq War, Benesch (2010) used her classes to enable students to resist the efforts of US military recruiters operating on her institution's campus. Though her 2010 contribution to an edited volume described her objective as 'responding' (Benesch, 2010, p. 109) to military recruitment, an earlier version of her work perhaps more accurately described her goal as one of 'countering' recruitment activities (Benesch, 2009, p. 85). Once again, there is little apparent space for any contradictory positions. Benesch does show an awareness of the risk of imposing an ideological agenda: she states that in the course of teaching her class, she moved from a position of opposing the presence of recruiters on campus to enabling students to formulate their own responses (Benesch, 2010, p. 114). However, in her account of her teaching, no space seems to be given to positions that support military recruitment on campus (Benesch, 2010). For example there is no evidence of a discussion of the argument that the US military has for several decades offered an important route of socio-economic advancement for immigrants and that many have welcomed this route (O'Sullivan, 2009, pp. 7–11). These two examples of classroom practice highlight the fact that without a sufficient element of self-awareness and self-critique, there is a real risk that the student's own position is marginalised.

The very real dilemmas of implementing critical pedagogy in the classroom were highlighted by Ellsworth in her 1989 paper, 'Why Doesn't This Feel Empowering? Working Through the Repressive Myths of Critical Pedagogy'. Ellsworth reflected upon her attempts to implement a critical approach during a series of classes exploring racism at the University of Wisconsin-Madison. Among Ellsworth's criticisms were that she felt there was an attempt to lead students towards a predestined goal, regardless of the varied views and positions the students brought to class with them. She argued that critical pedagogy seemed to want to ignore or marginalise 'contradictory subject positions' (Ellsworth, 1989, p. 315). Ellsworth's paper provoked considerable hostility from many critical educators (Usher & Edwards, 1994, p. 218), yet Freire's work highlighted a potential problem with the CEAP agenda. Freire argued that critical pedagogy should respond to students, who held too strongly to 'contradictory subject positions', and were therefore too resistant to the critical stance by excluding such students from the classroom (Shor & Freire, 1987, p. 94). While Benesch does not go so far as to contemplate the exclusion of students who disagree with the critical agenda, she does argue that ultimately the emancipatory goals of CEAP take precedence over 'the opposition of a few students' who should not be allowed to 'dominate the discourse' (Benesch, 2001, p. 85). Therefore, the implementation of a

CEAP curriculum includes a set of clear, political goals, and shows the dominance of an overall meta-narrative of how the world should be. This poses challenges for the practitioner who wishes to develop both a critical and inclusive classroom.

Critical EAP, a second wave: language and EAP as local practices?

In this final section, I suggest that there is the potential to develop a second wave critical approach that can move beyond top down narratives and can re-centre the politics of EAP on to students' own local contexts. Thus, the EAP practitioner would have the space to question and challenge what they do, while not losing sight of their students' beliefs and values.

During the 1990s, and the first decade of the twenty-first century, the political 'high ground' of CEAP was dominated by grand narratives of resistance, liberation and social justice. Perhaps inevitably, as EAP developed a coherent political consciousness, and Pennycook and Benesch challenged the accommodationist status quo, these big questions took centre stage. However, there were already attempts to more closely link critical approaches to the classroom and move CEAP beyond a clash of ideologies. Canagarajah (1999), though very much a 'political' EAP thinker also concerned with questioning the status quo, focussed on how local-level resistance to domination takes place when students take ownership of English and use it for their own purposes. In effect, he sought to localise the critical approach and make CEAP less about the universal and more about the particular.

Another attempt to negotiate this tension between the universal and the local, i.e. a 'top down' regime of truth versus the 'bottom up' voices of students, came from Grande's (2004) research into critical pedagogy and Native American communities. In *Red Pedagogy*, Grande explored the initial responses from Native American educators and leaders to critical pedagogy as yet another 'white man's ideology' that consisted of universal top down claims that left little space for their own beliefs and practices. However, as an author sympathetic to the goals of critical education, Grande's approach was certainly not to discard the progressive aims of critical pedagogy. Instead, the starting point for the development of a new 'red pedagogy' were the beliefs and practices of Native American communities, not the universal Freirian narrative. For Grande, a truly emancipatory pedagogy was rooted in local practice working from the bottom up to seek common ground with the critical approach. Grande's pedagogy would create space for the history and experiences of students, asking how students respond to the material and specifically how Native American traditions and ideas would relate to the issues raised in the material.

Benesch's reformulation of the traditional needs analysis to a 'critical needs analysis' or 'rights analysis' (1996) did, of course, promise an opportunity to address local needs. A rights analysis, while still focussed on emancipatory goals, began with the students and what they should expect to get from their programme. As with Canagarajah (1999), the focus was on enabling students to take ownership of their language and their academic programme. Through her collaborative work with the psychology faculty, the critical approach embedded in a rights analysis also foreshadowed Grande's work as it sought to negotiate a critical path between the universal goals of a regime of truth, a psychology syllabus and the students own 'local' position. However, while the theoretical aspects of CEAP has been developed substantially, more research needs to be done to develop methodologies or frameworks that EAP practitioners can readily pick up, and implement such needs/rights analysis in order to enable the practitioner to navigate the space between the universal and the local, between the teacher's 'hegemony' and students own needs and thoughts, and avoid the potential pitfalls of first wave CEAP.

Despite moves to step beyond a clash of ideologies and begin with local contexts, first wave CEAP was dominated by the grand narratives of resistance and emancipation after 2001. It could be argued that the wider political debates created by the rise of globalisation and the Bush Presidency's neo-conservative foreign policy diverted CEAP away from its initial interest in EAP as a local practice and taking the students' own position and voice as its starting point. Thus, while Chun (2009) and Grey (2009) in the *Journal of EAP* special issue attempted to apply CEAP in new contexts, the traditional grand narratives of CEAP retained their pre-eminence. Despite this, Pennycook's 2010 monograph *Language as Local Practice* provided the intellectual resources to decisively shift how we engage with language, language teaching and, by extension, EAP.

Pennycook breaks with traditional understanding of the development of English as a global language, arguing that the English language is best understood as a social phenomenon that happens at multiple sites across the globe (2010). A local practice of English thus develops at each of these sites linking with and influencing the global. Thus, for Pennycook, attempts to understand language, language teaching and the practice of EAP need to focus on local contexts rather than universal narratives. Similarly, Crystal (1998) and Phillipson (1992) saw the global phenomenon of English as best understood as a centrifugal force that, for good or ill, influenced societies across the globe from its heartlands in the UK and North America. Seen through Pennycook's re-framing of world English(es), this is exactly what Canagarajah (1999), Grande (2004) and Benesch (1996), through her rights analysis, had previously attempted to do. In Benesch's rights analysis, reflective and critical EAP practitioners already have a means to move forward. Indeed, Helmer (2013), with her rediscovery of rights analysis, attempts to do exactly this.

Therefore, a 'second wave' Critical EAP should aim to re-centre itself on EAP as a local practice as it is enacted at differing institutions across the globe. This is not to suggest that questions of social justice and students' rights in the academy are less important, but that the starting point needs to be an engagement with the local positions of students rather than a universal critical narrative that risks imposing its own regime of truth upon the EAP classroom. As Grande (2004) suggests, it is through starting with local positions and negotiating any common ground between the critical and the local that a genuinely progressive agenda can be developed. Thus, a second wave EAP potentially offers the reflective EAP practitioner a way forward that avoids the marginalisation of his/her students' position(s), but is politically aware and seeks to question, challenge and even resist established narratives.

Conclusion: implications for the EAP practitioner

The core contribution of critical EAP has been to move beyond the political naivety of the accommodationist position and develop a space to reflect on the politics of the EAP profession. However, despite the emancipatory goals of first wave CEAP, its position as yet another top down 'regime of truth' without sufficient self-critique meant it was also a potentially oppressive approach that marginalised students and their particular cultural contexts. The only option first wave CEAP offers the EAP practitioner faced with the question of whether he or she should reject the accommodationist position is to embark on its own grand narrative of liberation. The politically reflective EAP professional may seek to avoid the critical approach taken by Benesch and Freire by deliberately teaching both sides of the argument. However, it is perhaps questionable as to how many real world issues come down to such binary divisions. The hypothetical EAP practitioner would though, as Benesch

argued (1993, p. 714), still have to make choices over which positions to teach, while also wondering whether they are sufficiently qualified to provide formal input with regard to complex social, political and economic issues. ELT teachers, of course, engage with such issues on a regular basis; they are the core material of many fluency tasks. However, in EAP, content is more than just a vehicle for language; it actually matters and content related to the student's future course of study needs to be delivered carefully.

Ultimately, however, there is a more intractable problem that is highlighted by Freedman (2007): if the teacher provides top down input, their voice will always have a unique position in the classroom. Freedman argues that it is difficult for the classroom to be a democratic environment where all voices are equal. He draws on the critical theory of Habermas to argue that the classroom may never achieve 'ideal speech conditions' because the voice of the teacher will always have a special kind of authority (Freedman, 2007, p. 450). Therefore, in both theory and practice, the EAP practitioner is caught between rival discourses. He/she can either wilfully ignore the political nature of his/her profession or embark on a 'first wave' critical approach that risks being as top down and hegemonic as the accommodationist position it challenges. In both scenarios, his/her voice as a teacher, his/her students' voices, and the local context in which he/she and her students teach and learn are at risk of being marginalised. By contrast, second wave CEAP is an attempt to bring introduce the political in the EAP classroom from the bottom up.

Further reading

Benesch (2001); Pennycook (1999, 2010)

Related chapters

- 3 Academic literacies
- 4 English as the academic lingua franca
- 7 EAP in multilingual English-dominant contexts

Notes

- 1 Entrepreneurs feature very strongly in ELT publications.
- 2 Pennycook's attempt to widen the neutrality debate also addressed arguments that suggest the English language is a neutral commodity to be purchased freely by individuals and nations (1997, p. 258). Instead, he argues that it also reveals the marketisation and neo-liberalisation of higher education, which is most definitely not a neutral activity (Pennycook, 1997, pp. 258–259).

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PART V

Pedagogic genres

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23

UNDERGRADUATE ASSIGNMENTS AND ESSAY EXAMS

Roger Graves and Stephanie White

Introduction and definitions

In our recent research into writing in over 35 departments at 12 universities, we have found that between 77 and 100 per cent of undergraduate courses at universities require some kind of writing assignment, and virtually every course requires an assignment, a written exam, or both. Across every field of study, students write assignments and exams for a host of reasons: to demonstrate their knowledge, synthesize ideas, or present new research. What gets written has changed across time and cultures, and today both L1 and L2 students face a wide variety of writing assignments as they move from one discipline of study to the next. As writing in one form or another has become more central to the contemporary academic experience, research on writing assignments has attracted more and more attention. To understand some of the motivations behind this surge of research, we begin with a history of writing assignments in university. We then highlight the critical issues affecting writing assignments and showcase recent developments in writing pedagogy.

Historical and cultural perspectives

Writing assignments have developed differently in different countries, based on a variety of factors, including academic cultures, student needs at different times, and purposes for higher education. The majority of assignments have roots in the classical Greek and Roman traditions that influenced eighteenth-century rhetorics; such rhetorics continued to dominate post-secondary education in the US in the nineteenth and twentieth centuries (Connors, 1997). Assignments in many undergraduate courses began within a tradition of oral rhetorical performance but gradually gave way to written assignments including literary analyses, personal experience papers, and term papers (Brereton, 1995). In the writing courses that flourished in the US between 1870 and 1900, the modes of discourse approach—an approach requiring students to write persuasive, narrative, descriptive, or argumentative essays—came to dominate the curriculum (Connors, 1997). However, this dominance was soon challenged by the German tradition that was imported along with the German model of research university at this time (Brereton, 1995).

In Germany, the “Hausarbeit” has been and continues to be the main genre of writing assignment required by students in disciplinary courses (Macgilchrist & Girgensohn, 2011). Students produce a major research paper, often developed over the semester but always completed over the post-semester break, that makes up the bulk of a student’s grade for the course. This approach rests on an expectation that students’ independent research and writing is the best reflection of their learning in the course. It also expects that students will arrive at university already in possession of the writing skills necessary to succeed in university—or that they will acquire these skills independently.

Russell (2002) describes the development of the term paper in the US context as an offshoot of the adoption of the German model of the university in the 1870s. While originally similar to the “Hausarbeit,” in the 1870–1910 period the term paper devolved into an arhetorical, easily plagiarized evaluation instrument. In the twentieth century, this genre gradually became a storehouse for knowledge and was therefore content-focused, a kind of knowledge display, rather than an intellectual investigation motivated by a real question or problem the student was attempting to solve. The popularity of term papers led to companies creating inventories of 16,000 term papers for students to purchase—demonstrating that the term paper assignment was clearly a widespread assignment (Russell, 2002).

About the time the German model was adopted in the 1870s, Harvard instituted a first-year writing course, often referred to as freshman composition in US contexts. The genres of writing assignments in upper-division courses (where the term paper dominated) and composition courses have remained distinct from the genres in other disciplines at post-secondary institutions with different mandates. Studies of assignments at teachers colleges in the early twentieth century, for example, reveal a move away from the term paper and towards assignments including editorials, magazine articles, and book reviews (Gold, 2008). Project themes in these schools rejected the term paper research perspective in favour of an active, problem-solution proposal argument genre that connected students with important public concerns (Gold, 2008). Studies of writing assignments in US women’s colleges in the early and mid-twentieth century reveal that the assignments given there created a social, critical, and publicly-oriented literacy (Gold & Hobbs, 2013).

However, this is a US tradition. The three kinds of courses—first-year composition courses, research (or term) paper courses, and writing-in-the-disciplines courses—that evolved in the latter part of the twentieth century in the US do not exist outside that culture. Most often students encounter assignments in course subjects and are helped in a learning centre (Deane & Ganobcsik-Williams, 2012). In British Commonwealth countries, for example, writing instruction and assignments have evolved quite differently. Since the early 1990s in the UK, there has been a movement away from the current-traditional approach to writing instruction (the modes of discourse) toward academic literacies (ways of knowing and participating) and writing-in-the-disciplines (genre features and social action) approaches (Ivanic & Lea, 2006; Lillis, 2006). In one engineering course that does have a writing component, for example, the academic literacies approach results in assignments that must respond to audiences and rhetorical imperatives (Ahearn, 2006). In the 1990s in Australia, the practice of “embedding” writing instruction in disciplinary courses emerged to lead students to write a broad range of writing assignments (Skillen, 2006). Instructors offer help in the form of workshops and consultations from learning centres, and some credit courses in academic departments are available (Purser, 2012). The assignments, though, come from the academic courses students enrol in across the disciplines.

Despite its close physical connection to the US, Canada did not adopt the first-year composition course widely. In Canada, the rapid expansion of the university system occurred somewhat earlier than in the UK and Australia, in the 1960s. French-Canadian universities offered the classical college curriculum similar to the nineteenth-century US curriculum—which emphasized belles lettres and rhetoric—into the 1960s, when the rapid expansion of the higher education system and cultural changes in Quebec led eventually to vastly different programs of instruction there (Graves, 1994). The assignments found in Quebec universities in the 1960s were similar to those offered in the US in the nineteenth century as part of the classical curriculum, which focused on literary critiques and spoken orations (Connors, 1997). The Anglo-Canadian traditions, in contrast, moved away from the classical curriculum at the start of the twentieth century and towards assignments that required students to analyze literature. That tradition of assignments dominated the teaching of writing throughout much of the twentieth century (Johnson, 1991; Hubert, 1994). In English Canada, the rapid expansion of enrolments from the 1960s onward led to writing courses offered outside of English departments; technical and professional writing programs; and writing-in-the-disciplines programs (1970s onward) that focused on writing done in content area courses (Schryer & Steven, 1994; Smith, 2006). These courses often require a set of assignment genres specific to technical and professional writing (proposals, manuals, reports) or to a discipline or profession.

Critical issues and topics

University writing assignments vary tremendously across the academic disciplines, requiring cognitive tasks from basic summary to analysis and synthesis of conceptual material to development of original ideas. Key issues in university writing assignments include the connection between critical thinking and writing; the variability of assignments across disciplines; the extent of the need for direct instruction on the part of instructors about the genres of writing they ask students to produce; the contrast between workplace and academic genres of assignments; the changing nature of assignments as instructors incorporate more digital and multimodal practices into their requirements; methods for providing productive feedback on writing; the specific challenges writing assignments present for multilingual writers; and written exams. Undergraduate assignments vary principally across two continuums: those assigned in courses across the curriculum, and those assigned in writing-focused courses.

Research measuring how much time students spend on coursework and their interest in the material has shown that students are most engaged in writing assignments that require “meaning-making” (Anderson, Paine and Gonyea, 2009; Bean & Weimer, 2011). Such assignments move beyond summary of material and ask students to develop deep analysis, conduct original research, or apply course concepts to new situations. In other words, these assignments clearly connect critical thinking and writing, rather than seeing writing as the act of communicating already-existing facts. A key factor in meaning-making assignments is “transfer” (Artemeva & Fox, 2010; Counsell, 2011; Nowacek, 2011; Wardle, 2007, 2009). With a focus on transfer, instructors assign writing that teaches skills and knowledge that their students will be able to adapt and apply to other situations. For example, Wardle’s (2009) argument that introductory academic writing classes should be focused on “writing about writing” emphasizes helping students think critically about what kinds of genres may be required of them in their later classes. Such an approach, she argues, leads to students being better able to adapt to the many different writing tasks required of

them in the academic disciplines they will encounter during their undergraduate careers. In courses beyond first-year writing, writing assignments that emphasize transfer can help students understand how genres in one course can be adapted or used in later academic, workplace, or personal situations. Researchers on transfer have used interviews, text-based interviews, focus groups, composing-aloud protocols, and classroom observations to analyze how students experience transfer of writing knowledge from first-year or other writing courses to academic, workplace, and community contexts (Moore, 2012). Researchers also analyze student texts to understand how writing skills shift in different contexts (Moore, 2012). Findings from transfer research indicate that students struggle to make use of their antecedent genre knowledge when asked to write in new genres (Artemeva & Fox, 2010; Reiff & Bawarshi, 2011). These findings suggest that direct instruction about new genres, as well as coaching students to directly adapt their antecedent genre knowledge, is productive for students writing university assignments.

The concept of transfer has been critiqued, however, especially in contexts where students do not take first-year composition courses. In Canada, for example, where most students do not take a writing course at all, students instead must gain what knowledge they have of writing from their high school and content courses. Brent (2012) argues that transfer is the wrong term in such cases; instead, he suggests that students must *transform* the knowledge of writing they obtain from assignments and re-shape it to fit the new contexts they encounter. He posits that students' rhetorical knowledge most likely comes from the broad experience of attending university and from learning "to serve multiple rhetorical masters in reasonable ways" (p.589). While students transfer some specific skills from a writing course to their workplace contexts, they show a greater ability to transform what they had learned into a general disposition to make rhetorical judgments. Brent concludes that this general disposition to transform knowledge is the result of many repeated interactions with concepts and practices over an extended period.

Writing assignments in disciplinary courses must resonate or connect with writing assignments in first-year composition courses for students to connect these experiences in meaningful ways. Yet the variability of assignments across disciplines presents challenges for students. For example, while many introductory writing classes require students to write a research paper, it is well known that each discipline has its own conventions and requirements for research papers. Therefore, it is not possible to prepare students for all of the genres they will encounter in their university writing assignments. Indeed, a critical issue in writing assignment scholarship is the tensions between writing-specific courses, writing across the curriculum (WAC), and integration or writing in the disciplines.

While it is necessary for instructors in different disciplines to provide direct instruction about the genres of writing they ask students to produce, it is by designing writing assignments that ask students to make meaning out of material they are learning that instructors can engage students deeply in course content, while also teaching them the conventions and epistemologies of a particular discipline (Soliday, 2011). Soliday's study of the genres of academic writing focused on two aspects of writing assignments that students must respond to: stance, which was reinforced by teacher talk in class and readings; and the contextualization of what is being studied with the overall focus of the course. A key component of this work is the partnership between the writing fellows (graduate or senior undergraduate students who assist the main course instructor) and the course instructors who, between them, negotiate meaningful writing assignments.

In order to accomplish their goals, writing assignments can have built-in processes or sequences that model for students what effective writing processes look like. For example,

students might be required to submit sections or complete drafts of a major paper before the due date in order to receive feedback from their instructor (and often their classmates) before turning in the final draft. As White (2006) puts it, “the most effective writing assignments set up a continuum of drafting and revising that begins when the assignment is distributed and concludes at the end of the term—if then” (p.2). The final assignment for a writing course might be a “portfolio” that contains students’ drafts of assignments along with revised versions of what the student deems is their best work, an approach that allows students to show how their writing has developed over the semester, and that allows instructors to grade students on the process of writing, not simply the product. Assignments can also be scaffolded in order to teach and then build on new skills. For example, German instructors in content areas who require a Hausarbeit from students after the end of the semester may require and provide feedback on writing assignments throughout the semester in order to build up to the final project. Annotated bibliographies, research proposals, or portions of the Hausarbeit, such as an introduction or a literature review, break down the major task of a research project into smaller steps while also teaching necessary research and writing skills.

To further emphasize the meaning-making of assignments, as well as to develop the transferability of writing skills, writing studies scholars have begun to critique the separation between workplace and academic genres of assignments (Artemeva & Fox, 2010; Dias et al., 1999). Their questions have led to writing assignments that emphasize workplace writing (Garay & Bernhardt, 1998), teach technical writing (Poe et al., 2010), or move writing assignments beyond the classroom into the public (Wells, 1996). In many cases, these three purposes are intertwined (Bourelle, 2012; Kiefer & Leff, 2008; Miller, 2014). For example, in a biology class, students might create a technical report for a local community group instead of writing a traditional lab report; or they might write or revise a contribution to Wikipedia for a class assignment, shifting the audience for their writing beyond the instructor and their classmates. The move toward public writing is also linked to the move from textual to multimodal and digital writing assignments. Digital communication has led to writing’s visual nature being more emphasized in communication pieces, as well as leading to new developments in digital and multimodal writing. For that reason, many argue that it is necessary to make writing assignments more digital and visual (George, 2002; Selfe, 2007; Wysocki et al., 2004). This emphasis has led to writing assignments that include videos, pamphlets, websites or web writing, and more.

No matter what the design or learning goal of a writing assignment, a critical component of writing assignments is assessment—both during the writing process and at the end. In the US, the current-traditional rhetoric movement of the late nineteenth century led to an emphasis on assessing grammar, sentence-level editing, and even handwriting (Berlin, 1984). Furthermore, when it comes to teaching English as an additional language (EAL), grammar and sentence-level editing are still regarded as essential to instruction (Chanock, D’Cruz & Bisset, 2009). Yet, when the focus is not on EAL, researchers argue that too much emphasis on “sentence-level,” “local,” or “lower-order concerns” distracts from the teaching of “global” or “higher-order concerns” (Bean & Weimer, 2011). Instead, writing studies scholars argue, instructors should focus on giving feedback that engages students in the critical-thinking aspects of an assignment (Bean & Weimer, 2011) by responding to students as co-participants in an academic endeavour (Sommers, 2006).

At the same time, multilingual writers continue to face specific challenges in writing assignments. Students for whom English is a second, third, or fourth language might struggle with grammar, with organization, with style, or with citation styles. While many

native English speakers certainly will struggle with the same concerns, multilingual writers are more likely to have cultural or lingual backgrounds that increase their challenges. For that reason, scaffolding assignments, providing direct instruction on genres, and providing feedback that addresses both global and local concerns are essential components of writing assignments for multilingual writers.

Written exams

Written exams have been criticized in writing studies scholarship because they violate, or appear to violate, findings from writing process research: that students need to prewrite, draft, and revise their work. Indeed, writing instructors are often “suspicious” of such an assessment device (White, 2006, p.25). As Bizzell and Singleton (1988) put it, “the problem with essay exams is that they ask students to produce text under the worst possible conditions” (p.177). However, research shows that, even in essay exams, students do follow these steps of the writing process (Worden, 2009). At the same time, essay exams can put multilingual writers at a distinct disadvantage due to time constraints, which allow little time for sentence-level editing.

When the choice is between multiple-choice exams and essay exams, essay exams have many benefits (Sundberg, 2006; White, 2006). Further, essay exams challenge students to write about course material in an on-the-spot and succinct manner. Bizzell and Singleton (1988) argue that writing responses to short essay exams is like answering questions after a lecture—it challenges students to consider perspectives or connections they haven’t before and to formulate answers quickly that draw on their knowledge in new ways. Indeed, well-designed essay tests allow students to demonstrate deeper knowledge than multiple-choice tests, and to do so in a way that demonstrates their writing abilities and process. Essay tests also offer pragmatic advantages: they can be graded more quickly than longer essays, and the risk of academic dishonesty is nearly entirely mitigated (White, 2006).

Research on outcomes of written exams shows mixed results, but is conclusive in determining that integrating and embedding exam activities into the course itself is crucial in helping students learn to write this genre. Well-designed and clear essay questions are crucial to students’ having the opportunity to demonstrate their knowledge accurately. In order to design clear essay tests, White (2006) recommends using clear directions and terms (pp.28–30), discussing the exam instructions in class (p.29), ensuring that the instructor has a clear sense of what kind of response she or he is looking for (p.30), teaching students to dissect exam instructions (p.30), and teaching students to write in the kinds of modes (e.g. personal vs. expository) that they will be asked to write in for an exam (pp.30–31). Practice is indeed essential to students’ success with essay exams. Practicing short essay questions and participating in mock exams can not only help students better understand material they will be tested on (Dotson, Sheldon & Sherman, 2010), but also, we argue, familiarize students with genre expectations and constraints.

Current contributions, research, and practice worldwide

Research on writing assignments identifies the genres and tasks undergraduates write across the academic disciplines (Applebee, 1984; Bridgeman & Carlson, 1984; Canseco & Byrd, 1989; Cooper & Bikowski, 2007; Graves, Hyland & Samuels, 2010; Melzer, 2014; Paltridge, 2002). This research provides practitioners with a rich picture of what kinds of writing assignments are commonly used and what makes these effective. Most of these

studies begin with surveys and the collection of course syllabi documents to identify the kinds of assignments required by instructors, but recent work also integrates interviews with instructors and sometimes with students (Tardy, 2009; Thaiss & Zawacki, 2006).

Until recently, much work about the nature of academic writing assignments relied on local, very specific sets of data around assignment genres. Tardy (2009), for example, in her study of genre and second language learners, notes the importance of the task or assignment and how it affects student writers. Assignments that require students to engage outside of the classroom provide the kind of opportunities needed to build genre awareness and disciplinary identity. Thaiss and Zawacki (2006) demonstrate that, while there may exist dominant genres in academia, there are often alternative or emerging genres also present. They identify three characteristics of academic writing: evidence that students have studied the subject of the assignment in detail; a focus on reason over emotion in the written document students produce; and a reader who is logical, reading for content, and reading to respond to the document students write. This kind of writing, then, is distinct from alternatives to academic writing which are characterized by alternative formats, alternative organization, non-standard syntax and dialect, non-standard methodologies, and new media (p.12). Thaiss and Zawacki point out that disciplines and genres are not stable and homogenous; instead, they can be characterized as fluid and responsive to social change. The tendency to identify genres with academic departments can be misleading, since the departments may well be administrative conveniences rather than coherent knowledge areas. The most pertinent conclusion from this study of assignment genres is the elasticity, ambiguity, or tension apparent in any attempt to characterize genres of academic writing.

Tardy and Thais and Zawacki rely on a limited set of interviews and qualitative data to arrive at their conclusions. A new trend, however, is emerging that seeks to use larger data sets to answer questions about writing in disciplinary contexts. Some of the most extensive, large-data information available about the writing tasks students encounter in university has come from Melzer's (2003, 2009, 2014) studies of writing assignments. Melzer's (2003) work focuses on WAC approaches, identifying courses that have a WAC focus, and using Britton et al.'s (1975) taxonomy of purposes or functions for writing (that is, expressive, poetic, and transactional). For Britton, expressive writing is for the self and is informal; poetic writing is imaginative and focused on the text; transactional writing is focused on the audience and attempts to persuade or inform. Melzer's assignments draw from 787 syllabi available online at 48 different institutions in the US. He categorizes the assignments he finds according to three broad criteria: aims/purpose (following Britton's categories), audiences (teacher, self, peers, broader), and genres. He finds that the vast majority of assignments can be categorized for function or purpose as "informative" (73 per cent), with exploratory (15 per cent) and persuasive (11 per cent) as the other significant purposes. The audience for student writing is the instructor 83 per cent of the time. The most popular genres are short-answer exams (23 per cent), journals (13 per cent), and term papers (6 per cent).

In his follow-ups to this study, Melzer (2009, 2014) expands his sample to 2,101 assignments from 400 courses equally sampled from natural and applied sciences, social sciences, business, and arts and humanities. His goals are similar: to identify the purpose, audiences, and genres of these assignments. Additionally, he examines variations between institutions, levels of courses, and WAC connections. He finds that "writing to inform" dominates all other purposes for writing (66 per cent); students overwhelmingly write for instructors as the audience (82 per cent); and, although instructors require students to write in a truly extensive list of genres, the term paper and the short-answer essay exam are most common. Melzer concludes that disciplinary courses would benefit from more

expressive and exploratory writing, as is common in composition courses. He also finds that the research paper assignment often fits well with Thaiss and Zawacki's "alternative assignments" because it possesses elements of creativity and exploration (p.46). Ultimately, he argues, WAC courses that set out to teach writing explicitly in the context of a discipline provide the best insights for students writing in that discipline, and they provide more opportunities for drafting, revising, and peer response (p.91).

In a similar vein, a Canadian research group (Graves, forthcoming) recently gathered and analyzed over 5,000 assignments from 36 curricular units at 12 universities in Canada. In contrast to Melzer's data (which were gathered from websites across the US), these assignments were complete data sets from curricular units in the department or faculty/college that housed the academic program. The goal of this work was local—to encourage departments to reflect on the genres of writing they require in their courses, and to consider how they might make those writing activities better. Such research responds to the call from Anson and Dannels (2009) to create program profiles of departments in an effort to map the writing demands of undergraduates onto the curriculums that they encounter. In an early study, Graves, Hyland and Samuels (2010) collected a complete sample of syllabi from a small liberal arts college. This study examined 179 syllabi and 485 assignments; unlike Melzer (2003, 2009, 2014), it did not include exam writing. Of the assignments, 31 per cent were classified by instructors as "essays" or "papers". The group also categorized the assignments into genres and identified 63 per cent of assignments as "essays/papers". This study found that instructors were idiosyncratic in the labels they used to identify the genre of document they wanted students to write. In addition, students wrote more at the second and third year levels than they did at the first and fourth year levels. Perhaps most interesting was the length of assignments: more than half of all assignments were four pages or shorter. The study also found that 44 per cent of all assignments were related to another assignment through nesting or connecting. For example, a proposal for an essay would be related to the essay itself; 70 per cent of assignments contained no reference to how they would be graded, and 86 per cent of assignments made no reference to any kind of feedback before grading.

The study has since been extended to 11 additional universities and to over 36 departments from across the curriculum (Graves, forthcoming). Results from this 5,000-assignment study show that 79 per cent of syllabi do not mention any kind of revision or feedback, and 78 per cent do not provide grading criteria for assignments. Genres are clustered around certain areas of study: nursing, for example, has a relatively small number of genres (13 over four years), and four of these genres require reflection as a primary purpose or aim. In engineering, students write an average of almost three written assignments per course (excluding exams), and the majority of these assignments do not require the advanced cognitive skills of analysis, synthesis, or evaluation (Parker, Marcynuk & Graves, 2014, p.3). This finding, among others, will almost certainly lead to curricular revision to ensure that higher order skills appear more frequently. Another finding, that engineering assignments are dominated by variants of the report with proposals a related genre, while unsurprising, helps focus the purpose and genre for engineering writing instruction. While "papers" and "essays" dominate assignments in the arts, in the social sciences these genres compete with presentations, lab reports, and proposals. Science disciplines are dominated by the lab report, with papers or essays as the next most prevalent genre. These are complemented by the presentation genres: posters, presentations, and critiques. In pharmacy, professional genres such as the care plan, consultation, and medical reconciliation join the list of dominant genres. In physical education and recreation, presentations become the dominant

genre in part because students are required to be able to demonstrate various techniques associated with sports and exercise. Ultimately, this study finds that assignments are very much related to the activities and purposes of the field of study.

Recommendations for practice

In every genre of writing assignment, best practices for designing effective writing assignments include assigning genres that are either relevant to future workplace writing or are standard practice for professionals in the field; sequencing assignments to introduce and build on new skills; embedding a scaffolded writing process into the course itself; and providing constructive feedback on drafts. As is clear from the range of approaches in different parts of the world, however, it is also vital to tailor practices specifically to institutions, types of programs, and students' needs in a particular culture. Bean and Weimer (2011) and Walvoord and Anderson (2009) provide reliable guides to designing and assessing student writing. A full understanding of assignments, though, rests upon knowledge of academic literacy, general and specific contexts for English for academic purposes (EAP), corpus analysis, genre, EAL instruction, and writing beyond academic contexts, among other factors. We highly recommend that readers read the related chapters in this volume to build a sense of the context that informs choices of what tasks instructors should set for their students.

Further reading

Bean & Weimer (2011); Melzer (2003); Soliday (2011); Thaiss et al. (2012); Walvoord & Anderson (2009)

Related chapters

- 2 General and specific EAP
- 3 Academic literacies
- 16 Corpus studies in EAP
- 19 Genre analysis
- 39 Writing centres and the turn toward multilingual and multiliteracy writing tutoring

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24

LECTURES

Belinda Crawford Camiciottoli and Mercedes Querol-Julián

The lecture as a teaching method

From the times of Aristotle, the lecture has enjoyed a privileged status as a channel through which experts impart knowledge to novices in instructional settings. Incidentally, we know that the Greek philosopher was the tutor of young Alexander the Great, a native speaker of Macedonian (Friedman, 2006), perhaps constituting a very early example of academic listening in a foreign language. Over the centuries, lectures have become the hallmark of higher education and are defined as “an educational talk to an audience, especially one of students in a university” (Gove, 2010, p. 1006). On a discursive level, lectures can be broadly characterized as a type of pedagogic discourse; that is, the set of specialized communicative practices that are involved in the transmission and acquisition of knowledge and skills (Bernstein, 1986).

Research has shown that, for the purpose of conveying information, lectures are as effective as any other method (Bligh, 2000). From an organizational perspective, the possibility of articulating information into a series of lectures allows instructors to structure and cover content efficiently. This also benefits learners who can then exploit the availability of streamlined information that they do not have to find for themselves. For these reasons, lectures continue to be a popular teaching method among instructors which is also appreciated by students (Clay & Breslow, 2006). Yet, generally speaking, lectures are not considered as effective as discussion-based methods when it comes to promoting critical thinking or problem-solving skills.

Particularly towards the end of the twentieth century, the lecture came under attack not only as an old-style method, but also as an ineffective one that is closely associated with passive learning; that is, surface learning which carries the risk of poor information retention. In addition, because a lecture consists of one person presenting information to a group of students, it cannot respond to individuals who may have different learning styles and needs. As DiPiro (2009, p. 1) critically comments, “lecturing assumes a one-size-fits all approach to learning.” Other problematic issues are that lecture content can become quickly outdated in today’s rapidly paced world, and that lectures may fall short in the area of professional development by failing to help students adequately prepare for the realities of the workplace (DiPiro, 2009). Nevertheless, despite these shortcomings, the much-maligned lecture

remains a core teaching genre of higher education. There are several reasons that come into play here. First of all, lectures are still the most practical way to teach the large classes of students typical of higher education around the world. While more interactive formats such as seminars and tutorials may be preferred by both instructors and students, and are often integrated into lecture-based courses, the sheer number of students enrolled in today's universities necessitates maintaining the lecture as the predominant teaching method. This is especially true in an increasingly competitive academic world where few universities can afford to offer only small interactive learning formats and abandon the lecture entirely (Parini, 2004). Indeed, higher education institutions are under constant pressure to increase enrolments to offset rising costs and cuts in state funding, while seeking to provide quality education and recruit the most talented students, all at the same time.

However, beyond the economic factors behind higher education's reliance on lectures, some scholars have recently offered new assessments of their unique pedagogical strengths. For example, Penson (2012) suggests that when lecturers compile information from a range of different sources and then present it synthetically to students in an accessible format, they inspire students to similarly construct their own understanding in ways that are most meaningful to them. Lee (2009) notes that lectures can do much more than introduce conceptual knowledge or integrate textbook information. They also provide an arena in which lecturers can express attitudes and evaluations in relation to content, and thus encourage students to reflect critically, rather than simply assimilate factual knowledge. Charlton (2006) maintains that the importance of lectures as a teaching method is often underestimated, arguing that their spoken and socially situated nature allows them to exploit the human psychological dimension that can, in turn, facilitate learning.

Further evidence that lectures are perhaps making a "comeback" is the proliferation of MOOCs (Massive Online Open Courses), and particularly Open CourseWare (OCW) platforms which allow free access to lectures in digital format by students, educators or self-learners who desire to advance their knowledge. Since the Massachusetts Institute of Technology first launched its pioneering OCW project in 2002, institutes of higher education worldwide have developed and implemented this new medium of learning in which digital video recordings of lectures are a core component (Vladoiu, 2011). In addition, the rise of online universities around the world offers opportunities to attend lectures via videoconferencing, and interact directly with professors and other students using chat features. In comparison with traditional lectures, such digital lectures allow for significant flexibility in terms of when, where and how often they can be viewed, thus helping learners to reconcile work and/or family life with studies. However, students do not necessarily favour them over live lectures. In fact, some research found that 94 per cent of students preferred classroom lectures over podcast versions which were seen mainly as supplemental resources (Bongey et al., 2006). Similarly, Copley's (2007) study found that a majority of students considered "real" lectures as indispensable to guarantee a well-structured learning experience with opportunities for interaction, even if they were appreciative of podcast lectures as a resource for study and review purposes.

From the above discussion, it seems clear that students will continue to attend lectures, whether "real" or "virtual" and, at least for the foreseeable future, lectures will remain a crucial component of higher education. This has important implications for the vast numbers of international students who attend lectures in English-medium universities. According to statistics from NAFSA: Association of International Educators, in the academic year 2013–2014, almost 900,000 international students were enrolled in US colleges and universities, a number which has been steadily rising over the last decade. The corresponding figure

for the UK was over 400,000 (UK Council for International Student Affairs), and for Australia it was over 200,000 (Australian Government Department of Education). To these figures, we must add significant numbers of international students enrolled in universities in other countries all over the world where English is increasingly adopted as the language of instruction within a process of internationalization aiming to respond to a globalized academic world (Coleman, 2006). Thus, students whose native language is not English (hereinafter L2/FL learners) attending lectures delivered in English around the world are faced with the challenging task of understanding academic content in a foreign language (cf. Crawford Camiciottoli, 2010). Some comprehension issues that arise during this process will be the focus of the next section.

Lectures and L2/FL listening comprehension

The cognitive and linguistic complexities of an academic lecture can cause significant difficulties for L2/FL listeners. The “academic load” that these learners are exposed to during a lecture is based on a combination of different factors. These include a high concentration of conceptual information to be assimilated, the necessity to process the verbal message in real time, and different approaches to lecturing; for example, an emphasis on classroom interaction that requires greater student input which is often a challenge for L2/FL learners (Lynch, 2011). These are some of the factors that contribute to rendering academic listening much more demanding for L2/FL learners with respect to their L1 counterparts, even those at relatively advanced proficiency levels (Mulligan & Kirkpatrick, 2000).

L2/FL listeners must be able to cope with phonological, lexico-syntactic, structural, pragmatic and cultural features that all come into play during a lecture, most of which are typically straightforward and unproblematic for native speakers of English. On a phonological level, it may be difficult for L2/FL listeners to distinguish boundaries between words, which plays a crucial role in successfully recognizing lexical items (Rost, 2002). Because lectures delivered in English by both native and non-native speakers may contain high numbers of dysfluencies such as hesitation fillers, false starts and back-tracking that are common in academic speech (Crawford Camiciottoli, 2007), L2/FL learners must be able to recognize them as such and filter them out during the listening process. The presence of potentially unfamiliar phonological reductions (e.g., *lotta*, *gotta*, *hafta*, *buncha*) in the speech of English mother-tongue lecturers may also cause comprehension difficulties for L2/FL learners, especially if they have had limited exposure to authentic natural-sounding speech (Norris, 1995).

On the lexico-syntactic level, academic lectures are becoming more conversation-like and informal as demonstrated by research based on the MICASE (Michigan Corpus of Academic Spoken English) corpus of academic spoken English (Swales, 2004, among others). At the same time, due to their instructional purpose, academic lectures typically introduce advanced vocabulary and technical terms used to explain theoretical concepts within disciplinary fields. Thus, this unique combination of formal and informal language may be disorienting for L2/FL learners.

In terms of overall structure, lectures are rarely organized into what could be described as *introduction*, *main body* and *conclusion* often found in written academic genres. The structuring of lecture discourse may also reflect disciplinary specificity. For example, Dudley-Evan’s (1994) study of analysis of the discourse patterns of English-language lectures revealed a problem–solution structure in a highway engineering lecture as compared to a theoretical point-driven structure in a plant biology lecture. Young (1994) found that discursive

patterning in economics lectures is characterized by conceptual knowledge followed by exemplifications in real or hypothetical worlds. Yet this author also showed that academic lectures usually have no distinctly recognizable sections, but instead contain a series of interweaving phases that do not appear in a particular order and can resurface throughout a lecture at any time. For example, a *content phase* may be followed by a *conclusion phase* to recap its key points, and then by a *discourse structuring phase* to shift to a new topic. While such non-linearity may not create difficulties for most native speakers, it may prove to be quite challenging for L2/FL listeners who must simultaneously cope with other language-related issues. Academic lectures are also characterized by various types of metadiscursive elements (e.g., *Today we're going to talk about*) that are used by speakers to structure the discourse as it unfolds, functioning as signposts that contribute to facilitating comprehension. Many of these devices are typical of L1 lectures and relatively unproblematic, but others may create difficulties for L2/FL learners (e.g., *Let's shift gears now*). Thus, these listeners need to be made aware of the wide range of metadiscursive elements that can be found in academic lectures so that they can learn to exploit them.

Features of lectures that perform pragmatic functions in the context of instructor–student interaction may also be unfamiliar to L2/FL listeners. More specifically, these are linguistic elements that reflect the ways in which lecturers attempt to position themselves on an interpersonal level in relation to their instructional role and to their student audience. For instance, as an expression of person deixis, the first person plural pronoun *we* can encode meanings that are inclusive or exclusive of the audience. It can be used by lecturers to establish a rapport with the audience in the immediate context of the instructional setting or, in contrast, to maintain a distance; for example, when used to refer to the lecturer as a member of a group of experts that excludes the audience. As pointed out by Fortanet (2004), the ability to distinguish between these meanings may depend on linguistic or extra-linguistic cues that are easily understood by native speakers of English, but can be difficult for non-native speakers. Another pragmatic strategy found in lectures is reflected in language used to mitigate the speaker's authority. For example, epistemic adverbs and modals may be used by lecturers to weaken the illocutionary force of assertives (e.g., *perhaps we can just stop here today*). Lecturers may also engage in mild forms of self-deprecation or self-mockery to downplay their authority and appear more egalitarian, also injecting some humour into the lecture. This seems to be a rather common approach to classroom interaction among lecturers in Western universities, but it may be quite perplexing to L2/FL learners who come from cultures that value clearly delineated authoritative roles based on age and hierarchical status.

Lectures often contain specific cultural references that may be unfamiliar to L2/FL learners. Miller (2002) articulates the role of culture in lecture comprehension on four different levels: *ethnic culture* (psycho-sociological features that are triggered when there is a mismatch between the cultural backgrounds of the lecturer and the students), *local culture* (aspects of the lecture that are linked to the local setting and may be unknown to students), *academic culture* (different practices in educational institutions with which students have little experience) and *disciplinary culture* (discipline-specific ways of presenting knowledge that students may not know). Clearly, all of these cultural dimensions can have an impact on whether or not L2/FL learners are able to adequately understand lectures, and therefore need to be taken into consideration by lecturers when speaking to L2/FL student audiences.

To conclude this discussion of the challenges faced by L2/FL listeners during academic lectures, we turn to what has now become a core component of the genre: visual aids that are used to integrate and reinforce the orally-delivered content of lectures. Today the most

common instrument used for this purpose is PowerPoint software. Unfortunately, there are apparently no overall statistics concerning the extent to which PowerPoint is used during academic lectures in universities. It would be interesting to know the percentage of lecturers using PowerPoint and how this usage may be evolving over time. However, it is beyond question that PowerPoint is ubiquitous in university classrooms. A survey conducted by James et al. (2006) found that both instructors and students perceive PowerPoint as having a positive impact, at least on certain aspects of lectures: emphasising key points, holding the audience's attention and helping students take better quality notes, for example. However, with particular reference to L2/FL academic listening contexts, there is a lack of empirical evidence to determine whether or not using PowerPoint slides actually improves lecture comprehension.

Another facet of the visual dimension of lectures that can have important implications for comprehension is how lecturers use non-verbal signals to accompany the flow of speech. For L2/FL listeners, gestures are helpful to clarify verbal meanings that they may not be able to grasp otherwise (Harris, 2003; Sueyoshi & Hardison, 2005). In addition, gestures may be used not only to replicate verbal meanings, but also to extend them and thus enrich the overall message. Thus, it is important to consider lecture comprehension from a multimodal perspective. In fact, lectures are perceived by learners both aurally and visually, and comprehension can be enhanced when information that is communicated through the two different modes is processed in a complementary way that benefits from both. In the next section, we expand on the notions discussed above by reviewing important empirically-oriented research that has advanced our understanding of the multi-faceted nature of lecture discourse.

Insights from research on lecture discourse

The approach to analysing lecture discourse has evolved over the years to study the language of teacher–student interaction and how it constructs identities in learning contexts, as well as the multimodal semiotics of classroom interaction (Jocuns, 2013). In fact, it is widely accepted that oral communication is multimodal in nature. The development of multimodal perspectives on teaching and learning is based on the understanding that “meanings are made (as well as distributed, interpreted, and remade) through many forms and resources of which language is but one – image, gesture, gaze, body posture, sound, writing, music, speech, and so on” (Jewitt, 2013, pp. 4109–4110). These complexities require students (both L1 and L2/FL) not only to acquire academic discourse skills in English, but also multimodal interactional skills (Jocuns, 2013) such as the ability to construct meaning from the interaction with different modes, now an imperative for today's multimodal academic learning environments.

In this selective review, we discuss important studies that have provided empirical evidence related to key features of authentic lecture discourse. We begin with some seminal works that used a variety of analytical techniques to investigate the speech of lecturers, and then look at research that highlights the multimodal aspects of lectures. These studies deal with a number of elements that are highly relevant for L2/FL learners and thus can inform the teaching of lecture comprehension in EAP (English for academic purposes) contexts. They have implemented a range of investigative tools and resources to analyze effects on listening comprehension, including students' notes, interviews and questionnaires, free-recall tests and cloze-recall tests, multiple-choice tests and true-false tests, as well as audio and/or video recordings.

In terms of delivery, the *speech rate* of lecturers is a crucial factor affecting L2/FL listening comprehension and has thus received a considerable amount of scholarly attention. Zhao's (1997, p. 49) review of empirical research on this topic foregrounded some contradictory results pertaining to the "common-sense belief that slower rates facilitate listening comprehension." This author also examined the issue from a different approach showing that when students take control of speech rate, comprehension improves when it is slowed down, in line with previous research on the relationship between speech rate and comprehension. Yet it seems that the issue is not so simple since what constitutes a "normal speed" has not been clearly defined: "Whether a speed is fast or slow is the result of the interaction between the pausological quality of the speech and listener-internal factors" (Zhao, 1997, p. 61). Interestingly, Derwing and Munro (2001) came to a different conclusion: Iranian L2 students' comprehension seemed to be enhanced when exposed to natural speech rates rather than artificially slowed ones.

Empirical studies on *lecturing style* support the beneficial effects of an interactional "conversational style" on academic listening. Morell (2004, 2007) showed evidence of interaction as a facilitator for Spanish students enrolled in an English Studies degree. Morell (2004) found that, unlike non-interactive or reading-style lectures, interactive lectures are characterized by personal pronouns to engage and include students (e.g., *you, your, we, us*), as well as interactional features that serve to create opportunities to check understanding and negotiate meaning (i.e., confirmation checks, comprehension checks and clarification requests). In addition, the results of a survey conducted with both lecturers and students brought to the fore the key role of lecturers, who can aid comprehension by encouraging students to participate through the use of interpersonal linguistic resources that serve to build a relationship (Morell, 2007). In this respect, even in larger lectures with hundreds of students, the interpersonal role of audience oriented questions which call for an answer was identified by Querol-Julián (2008); these are opportunities for students to provide "an actual verbal and non-verbal response" (Thompson, 1998, p.140). In this type of interaction, lectures foster participation, involve students in the learning process and eventually promote the establishment of a relationship with them.

On a discursive level, the analysis of the effects of *metadiscursive markers* on lecture comprehension has a relatively long tradition (cf. Chaudron & Richards, 1986; Flowerdew & Tauroza, 1995; Jung, 2006). These studies have shown how such devices help students recall content and guide them through the lecture, while pointing out that miscomprehension can be related to the lack of discourse markers (see Chapter 13 for a comprehensive discussion of the role of discourse markers in lecture listening). How lecturers make use of *metaphors* and how students interpret them has also been a topic of interest. Littlemore (2001) found that metaphor is a common resource in academic lectures, but may cause L2/FL learners to misunderstand important parts of the discourse and even the lecturer's viewpoint. Littlemore (2003, p. 273) points out that "metaphors are typically culturally-loaded expressions, whose meaning has to be inferred through reference to shared cultural knowledge." However, as noted above, cultural references may be unfamiliar to L2/FL students. Littlemore (2003) observed that Bangladeshi students in a British university seemed to interpret metaphors during lectures in terms of their own cultural values system, causing misunderstanding of the content and the lecturers' attitudes. Low et al. (2008) also examined the use of metaphors in three lectures from the BASE (British Academic Spoken English) corpus, two following a non-interactive style and one an interactive style. They found that the use of metaphors was quite frequent in all three lectures, although the interactive style lecture was the most metaphoric. This highlights the need not only to prepare L2/FL students to process meanings

at a metaphorical level, but also to encourage lecturers to develop self-awareness to avoid potentially problematic metaphors.

Humour in the classroom is another issue that has received scholarly attention in relation to comprehension. Nesi (2012) studied instances of lecturer-prompted laughter in the BASE corpus, the MICASE corpus and the ELC (Engineering Lecture Corpus), and found that it functioned to maintain social order, build rapport, relieve tension, and model academic and professional identities. Like Lee's (2006) study of laughter in the MICASE corpus, she also noticed how laughter episodes:

place particular demands on international students, both linguistically, if the lecturer makes puns or departs from the normal academic register, and culturally, if the lecturer draws on unfamiliar scripts, refers to taboo topics or alters the expected power and distance differentials.

(Nesi, 2012, pp. 87–88)

To accompany the verbal message, lecturers often exploit communicative strategies that involve semiotic systems other than speech (e.g., visuals, gestures and actions), which also help to enhance listening comprehension (Sharpe, 2006). The multimodal dimension of communication in academic contexts has been a prolific field of study, even if most research thus far has focused on lower educational levels rather than university settings (cf. Kress et al., 2001). In the remainder of this section, we discuss a selection of studies that have provided insights into the multimodal features of lectures, which can also be applied towards meeting L2/FL lecture comprehension needs.

The prominent role of *visuals* in lectures is now well recognized. From a functional perspective, according to Rowley-Jolivet (2002), visual images that accompany spoken academic events can be classified into four main types: *scriptural* (text-based), *figurative* (photos and images), *numerical* (equations, tables with figures, formulae) and *graphical* (charts, diagrams, maps). The first two are used mainly to structure discourse and to engage the audience, while the second two serve to represent abstract concepts. Even if this scheme was originally developed with reference to academic conference presentations, it is also useful to understand more about how visuals can be effectively integrated into classroom lectures.

However, as previously mentioned, the actual benefits of using visual instructional resources during lectures, specifically PowerPoint, are a topic of ongoing debate, and the impact on learning is not yet well understood, even in L1 learning contexts. For instance, Savoy et al. (2009) compared the effects on information recall after PowerPoint vs. traditional (i.e., chalk-and-talk) university lectures. Results indicated that the capacity to recall oral-only information was lower when PowerPoint was used, and there were no significant differences in recall when information was presented visually (graphs and alphanumeric content). When the lecturer's verbal explanation was supported with some visuals, there was no notable gain from using PowerPoint with simple graphics and alphanumeric information. However, better results were obtained when complex graphics were represented. The authors suggest that the students focused more attention on the slides than on the lecturer's speech. Wecker (2012) investigated the retention of information from three different presentation modes at university: without slides, with regular slides and with concise slides (only lists of the key points). The findings revealed that the regular slides had a negative effect on oral information retention due to a "dysfunctional allocation of attention" (Wecker, 2012, p. 260) among students who placed high subjective importance on slides, which could be avoided by using concise slides that create a better balance between oral and visual information. The issue of whether PowerPoint

slides have a positive or negative impact on lecture comprehension would seem to take on even greater importance in instructional contexts that involve L2/FL learners.

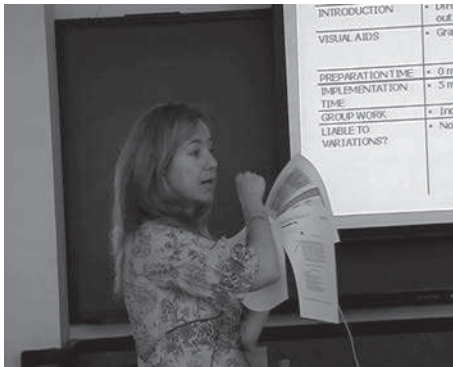
During lectures, one of the central features of the visual input is *gesture*. Gestures have been classified into four types: beats, deictic, iconic and metaphorical (McNeill, 1992). *Beats* are abstract interactional gestures that stress the discourse-pragmatic content of the utterances that they accompany. These gestures may be used by lecturers to focus attention and foster interaction; for example, when checking comprehension. *Deictic* gestures are pointing movements, commonly performed with the index finger or other body parts. In lectures, pointing is a recurrent gesture when interacting with the PowerPoint slides or other visual resources, and may also be done with a laser pointer. The referent of deictic gestures may be either concrete or abstract. *Iconic* gestures are closely linked to semantic content of the utterance, representing images of concrete objects or events. Similar to iconic gestures, *metaphoric* gestures are pictorial, but encode an abstract idea. Iconic and metaphoric gestures are widely used by lecturers to facilitate comprehension when introducing and explaining concepts. How gesturing contributes to the multimodal expression of meaning in L2/FL lectures is illustrated by the following excerpt from the MASC corpus (Multimodal Academic Spoken Language Corpus), compiled at Universitat Jaume I. Figure 24.1 illustrates a multimodal ensemble that incorporates visual aids (a projected PowerPoint slide and a handout), deictic gestures, and directed gaze, which all accompany an utterance in a lecture to undergraduate students of English Philology at a Spanish university.¹

In (1), while gazing directly at the students in order to keep eye contact and focus their attention, the lecturer uses a hand gesture to indicate the information introduced in the slide moments ago, and then to pick up the topic again. In (2) and (3), the lecturer looks at the slide to support her explanation of its written text, pointing at the two parts in which the information about “business English” (left side) and “technical English” (right side) is presented; in doing so, she is guiding the students to focus on the slide and helping them to better understand by visually recalling the previous explanation, and by highlighting the connection between the two types of English. Finally, in (4), the lecturer looks at the handout to find examples of how the adaptation she refers to was done, shifting to the content (text and images) of this resource; the lack of eye contact with the students here serves to encourage them to focus on the handout and follow the lecturer’s explanations.

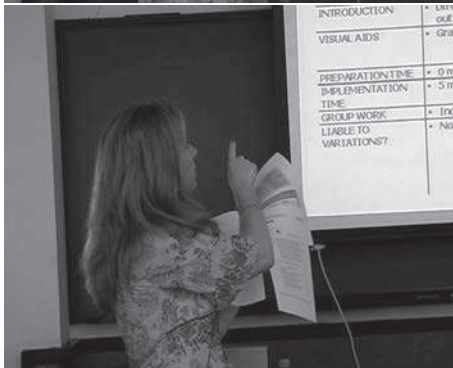
Studies relating to body language in L1 instructional contexts indicate that gestures can enhance learning, but they may also create comprehension difficulties when lecturers’ gestures are shifted temporally or conceptually in relation to the speech that they accompany (Roth and Bowen, 1999). As observed by Roth and Welzel (2001), gestures may also lead to misunderstandings when students interpret metaphoric gestures as iconic, especially when they refer to conceptual identities. Thus, it is important for lecturers to become more aware of the types and functions of the gestures they use in the classroom. The role of *body orientation* together with gestures in the construction of meaning in the classroom was examined by Pozzer-Ardenghi and Roth (2007). They identified up to eight different functions of gestures and body orientations that can help learners interpret photographs: representing, emphasizing, highlighting, pointing, outlining, adding, extending and positioning. These functions made it possible to fully exploit the visual aids and became crucial resources that allowed listeners to appropriately link photographs with speech. Similar functions could be expected with other visual resources such as PowerPoint slides in lectures. Clearly, if non-verbal input has a key impact on the comprehension of L1 learners, it is even more important in L2/FL settings as a way to boost understanding when language-related difficulties may be present.

Image

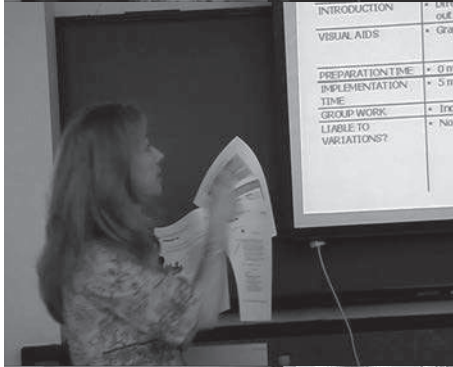
Speech



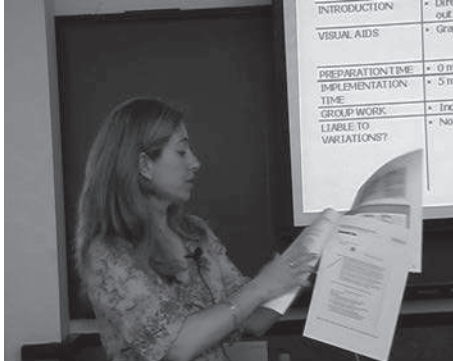
(1) [...] to adapt



(2) the business English



(3) to the technical English



(4) and what I've done is [...]

Figure 24.1 A multimodal ensemble of gestures, gaze, text, image and speech

When analyzing the multimodal aspects of lectures, it is also interesting to consider student perceptions of gesturing by lecturers. Sime's (2006) study set in an EFL (English as a foreign language) classroom revealed that students saw lecturers' gestures, and non-verbal behaviours in general, as an important aspect of learning process. They perceived gestures as accomplishing three different functions (i.e., cognitive, emotional and organizational), and utilized them to better understand and interact with the teacher. Finally, Sueyoshi and Hardison (2005) investigated the influence of gestures and *facial cues* on ESL (English as a second language) learners' listening comprehension. They determined that non-verbal cues played a key role in interaction to promote interlanguage development by facilitating negotiation, comprehension and output. They also observed how the L2/FL interactional experience of higher proficiency L2/FL students contributed to the awareness and use of visible speech cues as a listening strategy. Moreover, they concluded that if gestures and facial cues are not helpful, they can be a distraction for lower-proficiency learners, and may even lead to frustration.

To wrap up this review of empirical research dedicated to lecture discourse, we would like to suggest some particular areas that would merit further investigation. As we have seen, many important insights about the key linguistic and discursive features of lectures have emerged in studies carried out thus far. However, what are still lacking are in-depth analyses of lecture discourse with a particular disciplinary focus. When L2/FL learners listen to a lecture in the context of a given discipline, they must cope with verbal and non-verbal input that may be uniquely characteristic that academic subject (cf. Crawford Camiciottoli, 2007). These include not only discipline-specific lexical items, but also distinctive discursive and interactional features. In addition, lecturers from different disciplinary areas may use multimodal resources in distinctive ways. Therefore, the more we know about discipline-specific features of lectures, the better we are able to prepare L2/FL learners by incorporating activities that also target particular disciplines during EAP listening instruction.

Additional work is also needed on the multimodal dimension of lecture discourse, with particular attention to implications for L2/FL listening comprehension. There are relatively few studies that have targeted the non-verbal features that characterize university-level lectures. This type of knowledge would result in a full-circle understanding of the lecture experience, which can then be applied to design more authentic and effective materials and methods for EAP listening activities.

Recommendations to enhance EAP lecture comprehension

To conclude this chapter, we offer some practice-oriented recommendations to help L2/FL learners more successfully cope with lectures delivered in English. Many international students encounter considerable difficulties when attending these lectures, particularly at the beginning of a course, and the consequent negative impact on their overall experience is often underestimated. This is especially true when study abroad is limited in duration (e.g., a single semester) and/or does not provide EAP courses for arriving students that include academic listening skills. Thus, it is extremely important for these students to have opportunities to acquire and practise lecture comprehension skills before they attend content lectures delivered in English. Many universities offer intensive EAP courses to international students who intend to pursue degrees at their institutions. However, in the case of short-term experiences, some form of targeted instruction to help learners develop lecture comprehension skills should be routinely organized as part of pre-departure activities. In this way, the sense of inadequacy and disorientation that many students struggle with during

their initial impact with content lectures can be considerably attenuated, thus helping them to achieve maximum benefits from the very beginning of the course and avoid falling behind.

During preparatory instruction, it is crucial to expose L2/FL learners to authentic lecture discourse that contains the features discussed in the previous sections of this chapter. This is the type of language that they will have to contend with, so they need to learn to cope with its challenges and also exploit its unique features to improve comprehension at the linguistic and extra-linguistic levels. In recent years, materials developed specifically for lecture comprehension courses in EAP contexts have begun to incorporate activities based on real-life lectures. A good example is Salehzadeh's (2005) textbook which includes digital video recordings of both excerpts and full-length lectures from the MICASE corpus. The language that is presented is unedited and thus provides a rich source of natural lecture discourse. Activities are designed to increase awareness of characterizing aspects and provide practice with linguistic, discursive and pragmatic features, such as ellipsis, hedging and boosting, macro-organizational patterns, discourse markers, informal style, humour and digressions.

In addition to textbooks, lecture comprehension instruction can also make use of a myriad of free Internet resources. As mentioned previously, OCW lectures are now abundantly available. They can be utilized by EAP instructors for learning activities in the classroom and also accessed by students to practise listening to authentic lectures. OCW sites often contain additional resources such as summaries, handouts, even transcripts of lectures that are quite useful to both instructors and learners. Another resource that can be easily adapted for academic listening is TED Talks (TED = technology, entertainment, design), a digital platform with relatively short monologues (18 minutes or less) given by speakers from all over the world. They aim to disseminate scientific knowledge to a lay public, and cover a vast range of topics in different disciplinary areas from which users can freely choose. TED Talks digital videos are also accompanied by transcripts and subtitles, thus providing interesting options for various types of activities, depending on the listening proficiency levels of learners. Takaesu (2013) describes a study in which TED lectures were used to promote listening fluency among Japanese EAP students in the context of extensive listening activities. Self-reported feedback highlighted the students' perceptions of improved comprehension and increased motivation, as well as an appreciation of opportunities to become accustomed to different English accents.

Finally, it is important to find ways for L2/FL learners to continue practising academic listening skills beyond what they can experience in dedicated courses. Students should be encouraged to use online lecture resources on a regular basis as a form of self-directed e-learning that can help them to progressively improve their listening skills. In addition, L2/FL students can benefit from establishing contacts with students in their courses who are native speakers of English and who could act as mentors to support them in their learning. Mendelsohn (2002) experimented with a "lecture buddy" system which paired L2/FL learners with native speakers who were both enrolled in the same introductory economics course. The two students had weekly meetings for which they kept journals. At the end of the semester, interviews with the participants revealed that the mentoring project had a positive impact. The native speakers helped the L2/FL learners acquire more effective note-taking strategies (see Chapter 13 for a detailed discussion of this aspect). In addition, L2/FL learners were better able to cope with difficulties arising from unknown vocabulary since they were able to elicit additional explanations from their mentors of words that they had not understood during the lecture. The types of activities recommended above in which learners take responsibility for their own progress and engage extensively with native speakers of English can be particularly effective ways to enhance lecture comprehension.

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Further reading

Lynch (2011); Flowerdew (1994); Crawford Camiciottoli (2010)

Related chapters

- 3 Academic literacies
- 4 English as the academic lingua franca
- 6 EAP, EMI or CLIL?
- 13 Listening to lectures
- 20 Multimodal approaches to English for academic purposes

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25

TEXTBOOKS

Marina Bondi

Introduction

Textbooks play a special role in the context of knowledge construction and communication, as they provide access to specialized knowledge and help readers construct a mental representation of specific disciplinary knowledge. Their nature has been variously investigated by discourse analysts (Halliday & Martin 1993; Swales 1990, 1995; Altienza & van Dijk 2011) and historians of science (Kuhn 1970; Bazerman 1988; Klammer 1990). The key role they play in learning contexts – both in secondary (Bezemer & Kress 2008, 2009) and tertiary education (Myers 1992; Swales 1995; Hyland 1999; Richardson 2004; Biber 2006) – has influenced the way they have been described as a genre, as well as their changing fortunes as learning materials in English for Academic Purposes (EAP).

The instructional nature of textbooks makes them particularly useful in scaffolding learning, and the role they play in university instruction in many fields makes them clearly grounded in student reality and therefore typical examples of academic prose encountered by students of EAP. At the same time, their very instructional nature makes their information value usually rather low for university students after the first steps into academic life, while their value as realistic writing models remains almost non-existent. Their importance to novice university students is rather obvious, but their nature seems to determine important limitations for their use.

The chapter starts by looking at the role of disciplinary textbooks as materials for language study and practice, tracing how genre approaches have contributed to giving textbooks a limited but much more specific role as resources for learners and teachers. After focusing on the rhetorical nature of textbooks, influenced by disciplinary and educational discourse alike, the chapter deals with their role in the analysis of academic lexis and phraseology, and raises a few issues related to the notion of language and genre variation. The nature, function and structure of textbooks can indeed be shown to vary across disciplines, cultures and media/modes, based on factors such as the different role of interpretative or empirical methods in the discipline, the different cultural expectations as to the degree of scaffolding or textual interaction in academic materials, or a growing emphasis on the potential of integrated multimodal systems. The final section of the chapter draws implications and recommendations for practice.

Textbooks in the development of EAP

The description of varieties of language has played an increasingly important role in language studies, as well as in language education and in the teaching of languages for specific purposes (LSP). The impact of register studies on the development of ESP and EAP in particular has been highlighted by many (Swales 1985, 1990; Bhatia 1993: 3–12; Calle Martín & Miranda García 2010). In the sixties and seventies, British approaches to register studies focused on varieties associated with specialized subjects, and aimed at identifying the statistically significant lexico-grammatical features of a linguistic variety, while placing great emphasis on the role played by lexical items in identifying a certain register (Barber 1962; Halliday, MacIntosh & Strevens 1964; Crystal & Davy 1969). Accordingly, early work on ESP paid a lot of attention to specialized lexis and grammar, and teaching materials were often based on introductory textbooks, providing students with definitions of the basic terms and examples of language use.

Starting from the seventies, pragmatic approaches to language varieties extended the field to investigating the relationship between grammatical choice and rhetorical function (Selinker, Lackstrom & Trimble 1972, 1973; Trimble 1985; Swales 1985). The first implication of this new focus was the study of the most frequently adopted communicative procedures: definitions, examples, generalizations, etc. Moving beyond an interest in the single speech acts and their realizations, discourse analysis – as outlined for example in Sinclair and Coulthard (1975) – considered the role speech acts play in the whole communicative event, combining the description of linguistic forms with an investigation of the purposes or functions that those forms are designed to serve, of the kind of activity we engage in. Parallel to this shift in descriptive studies was a change in the methodology of teaching languages for specific purposes (LSP); that is, a shift from focus on content to focus on task (Hutchinson & Waters 1987), on study skills and on learning needs rather than just language skills (Dudley-Evans and St John 1998: 24–27). This obviously redefined the role of textbooks in the EAP curriculum, as they remained essential materials for reading purposes, but their role in a writing curriculum changed radically, especially as the study of communicative genres became central to EAP.

The study of genre in its social dimension has dominated recent approaches to language varieties and to EAP in particular. Following Swales' (1990) seminal work, genres are mainly identified by their communicative purpose, but they are also characterized by the structures that are conventionally adopted by the specialist members of the professional or academic community. The concept of discourse community has proved particularly useful not only in identifying genres themselves, but also in studying the specific features of their variation. A key factor is the role played by the discourse community in identifying the characteristics of “internal” communication (for example, expert-to-expert communication) and “external” communication (for example, communication between expert members of the discourse community and participants who are not quite, or not yet, members of the community). The notion of “apprenticeship” has often been used to describe the process of gaining membership in a discipline, with the “novice” acquiring mastery of what to say, what to do and what to believe in the target discourse through instructional genres.

In this perspective, textbooks not only present a map of the discipline, with its key principles and issues, but also construct their readers, by establishing shared knowledge and accepted argumentative strategies, in line with the apprenticeship function of textbooks (Hyland 1999; Bhatia 2002). When addressing the student-reader (Hyland 2001), textbooks introduce the students to the fundamental notions, the typical beliefs, values and

argumentative strategies of the discipline. Introductory chapters of economics textbooks, for example, are typically devoted to a presentation of the discipline and its methodology (Bondi 1999: 37–69), thus providing a representation of what economists think or should think and introducing the students to disciplinary ways of arguing, specific approaches, theories and positions. Textbooks in general are likely to “contain textual features and conventions of their respective disciplinary communities” (Hyland 1999: 4) – ways of arguing, specific approaches, theories and positions.

In EAP studies, however, the emphasis on genre analysis in the last twenty years or so has raised greater interest in research genres, often downplaying instructional genres. Textbooks, for example, are held to be good at transmitting the “canon”, but not at fostering critical reading (Swales 1990). They seem to conceal the argumentative nature of disciplinary knowledge, by presenting a well-established set of facts and theories. Students are introduced to the basic notions and questions of a discipline, but they are not presented a picture of the multiplicity of positions that characterize scientific debate; neither are they presented with the tools for taking position as to disciplinary issues. Myers (1992), for example, argues that textbooks typically add “factive” certitude to the phenomena being described, by avoiding hedging, by lack of references to the primary literature, by a wide use of simple present and a massive use of cross-references. Almost paradoxically, what makes them easier for students to read “may make it harder for them to deal with other text types they encounter later in a scientific career [...] because they get no sense of how facts are established” (Myers 1992: 13).

The pedagogic implications of this have often led applied linguists to point out that textbooks do not provide useful models for the teaching of writing (e.g. Paxton 2007), as they do not seem to teach students how to perform in interactional contexts that may require them to review the literature critically, to support one position in a debate or to present a small-scale independent study. Use of hedging, for example, is usually higher in research genres, as expert readers expect “that their own views will be somehow acknowledged” (Hyland 2000: 93), whereas textbooks often show a tendency to use fewer hedges (Bondi 2002) and more boosters (Hyland 2000). Attribution also plays a minor role in textbooks, as emphasis is on established facts rather than on the sources (Hyland 1999: 15): writers usually make limited use of quotations from relevant literature, while often summarizing debates through forms of generalized attribution (*according to one argument...*, *there is no clear consensus as to...*), and highlighting moves like “identifying a problem”, “presenting methodological tools”, “representing debate within the discipline” and “guiding the reader through argument” (Bondi 2005). When students have to produce critical essays or reports, on the other hand, they are expected to pay great attention to both attribution and stance-taking.

Genre approaches to EAP have helped practitioners recognize that textbooks may give students an introduction to the basic notions and lexis of their area of study, but will mostly familiarize students with the rhetorical structures of exposition, without presenting a picture of the multiplicity of positions that characterize scientific debate. They have also helped EAP theory and practice to identify the kinds of tasks that may be required of a student, as well as the different role that each genre can play in the development of a curriculum, in relation not only to specific content but to specific tasks and communicative events. When considered in the light of the range of approaches developed in relation to LSP (cf. Calle Martín & Miranda García 2010), textbooks emerge as providing the kind of scaffolding that may facilitate learning, but certainly not as exhaustive in their potential for exemplifying discourse features and exercising skills.

The nature and structure of textbooks

An analysis of textbooks as a genre can help EAP theory and practice identify the nature and structure of textbooks as communicative events. In an interactional perspective, textbooks clearly show traces of different types of dialogues: they do not only reflect the debates taking place in the scientific community, they also construct an on-going textual dialogue between writers and readers and often also report dialogic interactions in narrative episodes (e.g. when introducing debates or case studies by giving voice to participants) (Bondi 1997). As shown by Swales (1995), textbook writers see themselves as both researchers and teachers, and as teachers they interact with other educators and with the students: the “evaluator reader” and “consumer reader”. Building on this distinction, we can identify different writer/reader roles for the textbook writer: the arguer addressing the partner in argument, the researcher addressing the researcher, the textbook writer addressing the textbook evaluator, the teacher addressing the student and the fellow teacher (Bondi 1998).

Developing students’ awareness of this dialogue (and of the lexico-grammatical features characterizing it) may contribute to making them better and more efficient readers. Obvious signals of writer–reader dialogue are personal pronouns like *you* or *we* (Hyland 2002a; Poppi 2004), as well as the use of interrogatives and imperatives (Hyland 2002b; Poppi 2009). In economics textbooks, for example (Bondi 1998), the author often asks questions or makes suggestions addressing the reader directly: *you might wonder, you should be able to realize, anyone who understands macroeconomic analysis can realize*, etc. All these features presuppose and explicitly mark the presence of a reader, whose attention is captured and selectively focused on key issues or junctures in the writer’s argument. Textbook writers often assign readers a variety of roles in the construction of their own argument, on the basis of an expected argumentative co-operation: readers may be asked to draw inferences, to make objections, at times even to assume a given ideological position, only to be brought to agreement with the writer by successive steps in the argumentative sequence (Bondi 1997).

Writer–reader dialogue, however, is not only realized by formal indicators of an addressee. It is first and foremost realized pragmatically by the coherence that the addressee can establish in the structure of texts. Readers’ expectations as to the structure of a textbook may thus greatly contribute to developing efficient reading and study skills.

Textbooks are often characterized by repetition of schematic structures (Love 1991). The textual structure of economics textbooks, for example, follows highly cyclical expository patterns, where general statements about processes are often either preceded or followed by specific examples: general statement ↔ example. As shown in Bondi (1999: 49), this expository structure might be interpreted both in terms of textual patterns and of didactic moves.

(Example 1)

How is depreciation calculated?

Most companies own their own capital goods, but these assets do not last forever. Trucks wear out, computers become obsolete, and buildings eventually begin to deteriorate. The accountant naturally includes an appropriate charge or cost for fixed assets along with all other costs. But just how do we determine how much of an asset is “used up” in a given year?

To account for this decline in the value of fixed assets, accountants depreciate them by using a depreciation formula. There are a number of different formulas, but each follows two major principles: (a) The total amount of depreciation plus salvage value must equal the capital good’s historical cost or purchase price; and (b) the

depreciation is taken in annual accounting charges (even if no money ever leaves the firm) over the asset's accounting lifetime, which is usually related to the actual economic lifetime of the asset.

We can now understand how depreciation would be charged for Hot Dog Ventures. The equipment is depreciated according to a 10-year lifetime, so that the \$150,000 of equipment has a depreciation charge of \$15,000 per year. The \$100,000 of buildings, carrying a 20-year lifetime, shows an annual depreciation charge of \$5000. The total depreciation charge for 1993 is then \$20,000.

(P.A. Samuelson & W.D. Nordhaus, *Economics*,
14th Edition, NY, McGraw-Hill, 1992)

The subheading in the extract above prepares the main point of the section by identifying the topic. The first paragraph provides the necessary background by giving a preliminary definition of “depreciation”, while acknowledging the reader’s knowledge of depreciation as an essential element of accounting (*naturally*), but also focusing the reader’s attention on the calculation itself. The second paragraph introduces the most general features of calculating depreciation. The third and final paragraph provides an example illustrating how the calculation can be obtained. The general-specific textual pattern typical of expository texts can be seen operating at different levels, linking for example the first two sentences in the first paragraph or the second and third paragraph. The whole extract, however, can also be seen to reflect teaching sequences, with headline and first paragraph creating the initiation or motivation, followed by the response, or presentation, to be concluded with follow-up or practice.

Textbooks can thus be seen as lying at the intersection of two orders of discourse: educational and disciplinary (Hyland 2000: 107; Bondi 1999: 38). Disciplinary knowledge is constructed through a text that also reflects a teacher–student relationship. Textbooks make ample use of the typical communicative functions of definition and classification: these are common to both disciplinary and educational discourse, but are found more extensively in instructional discourse. Textbooks also reflect the processes of abstraction that characterize disciplinary knowledge, in their distinctive use of grammatical metaphor and nominalization (Halliday & Martin 1993; Coffin 2006). The same processes may also be related to the pedagogic dimension of the genre, as shown for example in the preference for exact simplified quantities in hypothetical moves or analogical explanations (e.g. *Assume for simplicity that a country produces only two goods, food and cloth*) (Bondi 1999), variously shaping readers’ mental constructs (Poppi 2007). Features that may be directly related to the instructional nature of textbooks are “easyfication” procedures such as rhetorical questions or visual elements (Bhatia 2002: 32–33), and intense use of metadiscourse guiding the reading process (Hyland 2000, 2005, 2009). As shown by Hyland (2009: 120), “[b]y asking (mainly rhetorical) questions, varying their certainty, evaluating ideas, issuing directives, providing definitions and leading readers to particular interpretations, writers massively intervene in these texts to construct themselves as experts and establish a knowledge-transfer perspective of teaching”.

Jones (2005) identifies three ways in which textbooks facilitate readers’ understanding: easyfication, simplification and scaffolding. The first two are adapted from Bhatia’s (1983) work on plain legal language, the third from theories of learning. Easyfication refers to processes of enhancing discourse structure: this may be realized by providing introductory paragraph(s), advance organizers, schematic representations of the text (or text segment), adding annotations/explanations, adding metadiscursive commentaries and questions to encourage interactions with the text. Simplification refers to processes of enhancing

cohesion/coherence: this may be realized by explaining new terms as they arise, restoring cohesive markers of implicit relations, including exemplifications or even just by repeating similar structures. Scaffolding refers to processes of providing domain knowledge: this may be realized by providing activities “which allow students to familiarize themselves with concepts of increasing complexity and to explore these concepts in terms of their reactances and interrelations” (Jones 2005: 746), such as completion or information transfer activities.

The complexity of the organization of the textbook as a whole has been captured in Parodi (2010) by introducing a new macro-level of the analysis: the macro-move. Parodi identifies three rhetorical macro-moves in the genre: “preamble”, “conceptualization and exercising” and “corollary”. Rhetorically speaking, preamble and corollary are satellites of a nucleus provided by the conceptualization and exercising move. The preamble is the opening part of the book, where the writer shows major concern for the audience providing contextualization (in a preface) and presenting content organization, resource organization and a presentation of purpose, audience and thematic nucleus or steps. The conceptualization and exercising macro-move is the central body of the textbook, providing recursive sequences of concept definition–practice–recapitulation moves. The corollary includes solutions and answers to exercises, specifications in annexes and guidelines in indexes and references (Parodi 2010: 205–207). The spiral and recursive structure of the central macro-move leads Parodi to identify a distinctive rhetorical organization called “colony-in-loops” (2010: 217; see also Parodi 2013).

Attention to rhetorical structures has thus highlighted the key role played by definitions and generalizations in textbooks, as well as the importance of organizational units in structuring the textual and interpersonal dimension of extended text. Highlighting the key role of textbooks in educational contexts does not mean ignoring that they also address different professional communities (Orna-Montesinos 2012) and readers with different degrees of expertise. It means seeing them as part of a whole system of genres through which knowledge is disseminated in various contexts.

While they cannot be predominant in the repertoire of academic genres, their essential role as a source of both content and generic literacy cannot be denied. In tertiary education, they are key to the process of acculturating novices into the epistemology of the discipline. In EAP programmes, they are essential material for developing critical reading skills and for building the basis for continuing professional education.

Corpus-based approaches and critical approaches

The recent development of corpus-based approaches has contributed greatly to the study of textbooks in EAP. The most important contributions have been in the field of register analysis, as well as in the identification and description of academic vocabulary and phraseology. Textbooks are seen by many as the key sources of exposure to academic language in EAP, and are therefore often seen as more relevant to the identification of language to be taught in learning programmes than research genres like the journal article.

Biber’s work on spoken and written “university language” (Biber 2006) contributes to all these directions. It provides essential reference work for many of those who are interested in identifying “word lists” for academic programmes, that is, the most important words in different domains of academic study (2006: 33–46). It also provides a useful analysis of the typical phraseology of academic discourse and its variation across speech and writing and across disciplines (2006: 133–175). His work also applies multi-dimensional analysis to the corpus, thus allowing comparison of textbooks with other spoken or written academic genres on the basis of sets of language features. Textbooks are shown to be essentially literate

(vs oral), as they are characterized for example by nominalizations, complex noun-phrase structures and multiple levels of embedding, even if with considerable variation across disciplines (Biber 2006: 177–212). They are also highly focused on content (rather than on procedures), as shown by dense use of technical vocabulary and content words in general. Finally, they are essentially non-narrative (i.e. low in past tenses and reports), and not particularly teacher-centred (low in stance adverbials and nouns) when compared to spoken academic genres.

Attention has long been paid to corpus-based word lists in the EAP context: the best known is the Academic Word List (AWL, Coxhead 2000), a widely used frequency-based list of academic vocabulary. Biber's TOEFL2000 Spoken and Written Academic Language corpus (T2K-SWAL) has also been used extensively to explore genre and disciplinary variation in both general and specific academic language. Comparative work has typically highlighted spoken–written variation, showing that textbooks, when compared to classroom teaching, tend to use a larger set of different word types with lower frequencies (Biber 2006: 45).

Patterns of vocabulary diversity and distribution frequencies are only one of the aspects studied. An interesting area of exploration – in line with general interest in corpus linguistics – has been the study of phraseological units. “Lexical bundles” and “n-grams” are recurrent word strings identified using frequency and range criteria (Biber, Conrad and Cortes 2004). Work on lexical bundles has produced great attention to phraseological issues in EAP (e.g. Hyland 2008), while also drawing attention to limitations of automatic lists: see, for example, the list of bundles produced by Byrd and Coxhead (2010). With a view to compiling pedagogically useful lists, automatic extraction has been integrated with instructors' rating (Simpson-Vlach & Ellis 2010) or manual selection (Liu 2012). Special attention has been paid to corpora of textbooks (Wood and Appel 2014; Hsu 2014), on the basis of their centrality in the experience of students and the usefulness of their word lists for other types of academic texts.

Given the wealth of descriptive data available for many academic registers and genres, another interesting area of investigation has been the analysis of EAP teaching materials in comparison with authentic language in use. Along the lines of Hyland's (1999) comparison of the forms of metadiscourse found in EAP materials and those found in textbooks and research articles, many have studied specific issues or genres. Miller (2011) offers a recent overview, focusing on lexico-grammatical differences between university textbooks and English as a second language (ESL) reading texts advertised for their academic content. Similarly, Wood (2010) and Wood and Appel (2014) point at many discrepancies between the nature of academic discourse in use and that of the reading materials proposed in EAP, when looked at from the point of view of multi-word constructions and lexical clusters. While recognizing that students need to be exposed to a range of texts, the key role played by textbooks in the first years of university life suggests greater attention to the language of textbooks at least in reading programmes and vocabulary development syllabi.

Corpus-based techniques have proved particularly useful in exploring disciplinary variation. Biber (2006: 225–227), for example, notices differences in specific features such as diversity of vocabulary, specialized vocabulary, abstract/process nouns, concrete/technical nouns, passive voice and different types of lexical bundles, as well as in some of the dimensions analyzed as sets of features (procedural vs content-focused; narrative vs non-narrative). The humanities and the social sciences, for example, have more diversified vocabulary than business and engineering, but these in turn make greater use of abstract and process nouns; the features of content-focused discourse, on the other hand, are highest in the natural sciences.

Disciplinary variation has also drawn the attention of discourse approaches, and critical approaches in particular. These have addressed both issues of science communication (and

how knowledge is recontextualized for a different audience), and studies on educational discourse (and how discursive structures and strategies can presuppose and reinforce values or widen access to knowledge).

When the epistemology of the disciplines is considered, i.e. the shared views on how knowledge is established, cross-disciplinary variation could be highly influenced by the different role of interpretative or empirical methods across disciplines, sometimes even leading to a continuum between research and instructional genres. Swales (1995: 3) has noticed for example that, if on the whole the textbook is “typically assigned a marginal and controversial place in the academic genre-system”, there are fields such as applied linguistics where textbooks can be shown to counter low research expectations by integrating contemporary research, thus turning out to be hybrid genres “in their efforts to cope with a complex audience configuration, to represent a broad area of available knowledge, to offer a “vision” and to incorporate new findings emerging as a result of the exigencies of textbook writing” (1995: 15).

The humanities and social sciences seem to make the argumentative dimension of textbooks more clearly visible. Focusing on sociology, for example, Love (1993) has shown how a textbook manages to develop the writer’s particular theoretical position. Others have looked at how linguistics textbooks introduce readers to a local grammar of argumentation (Freddi 2005a), in ways that characterize individual stylistic variation (Freddi 2005b). My own work on history (Bondi 2012) has shown that textbook writers are not just recounters (focusing on the narrative of facts), but they also take up the voice of the interpreter (assessing actors and processes), while still giving little prominence to academic argument and alternative views. If research articles understandably pay much more attention to placing one’s own position in the context of a debate, textbooks still show ample traces of the interpretative nature of the discipline and give authors an opportunity to develop their own positions.

Variation, however, may depend on different elements: views on how learning takes place, as well as on how knowledge is established, for instance. Bhatia (2004: 33ff.), for example, looks at textbooks in the fields of economics and law: though sharing the nature of “social sciences”, the two disciplines differ both in instructional strategies and in rhetorical strategies. They attribute different importance to quantitative data and to principles, they show different degrees of interactivity, reflecting “specifically favoured discursive practices, disciplinary methodologies and pedagogic practices considered effective for individual disciplines” (Bhatia 2004: 46). It is also interesting to notice that Parodi’s (2014) cross-disciplinary analysis of textbooks (in Spanish) has shown that the moves showing greatest variation are those that most explicitly involve the didactic component: practising and solving a task. These moves tend to be generally much less frequent in the humanities and the social sciences than in technical and scientific disciplines. This can be interpreted in different ways: the writer may not want to convey an idea of consensus and rather prefer to leave the reader with the task of making up his/her mind (Parodi 2014: 73). This does not only relate to the epistemology of the disciplines, but also to a view of learning (e.g. reflection vs training).

The foundational role of textbooks has, thus, obviously attracted great attention on the part of critical approaches, particularly when dealing with the first levels of education. A major influence has been systemic functional linguistics and the Sydney School in particular, with its projects developing awareness of generic structures in schools. As shown, for example, in Rose and Martin (2012), the history of the Sydney School’s pedagogy is extremely rich and advocates a critical perspective to literacy education. Awareness of an unequal distribution of knowledge in society is often at the basis of educational projects that aim at making knowledge more accessible. The impact of this kind of work often involves analyzing textbooks (e.g. Coffin 2006), and developing teachers’ and students’ awareness of the meaning structures

underlying textbooks: see, for example, work carried out by Achugar and Schleppegrell (2005) – highlighting the need to develop awareness of implicit and explicit causal meanings – and Schleppegrell and de Oliveira (2006) – showing the need to integrate content and language in teaching and learning. Critical discourse analysis (e.g. Altienza and van Dijk 2011) has paid particular attention to the ways in which textbooks manifest underlying ideologies or hidden curricula.

From the point of view of EAP, and the growing community of students facing tertiary education in non-native English, another interesting perspective that needs to be further explored is that of cross-cultural and intercultural analysis. Student expectations as to the degree of scaffolding or textual interaction in academic materials may vary depending on the different national (or supra-/international) academic communities. The critical skills of students may also vary, depending on their awareness of generic structures and of the ways in which epistemological and ideological issues are manifested (or presupposed) in discourse.

Finally, another perspective that cannot be ignored is that of multimodality. The role of visual elements in learning materials has not just changed quantitatively but also qualitatively over the past few decades: images have moved away from being mere illustrations toward becoming the element that centrally shows a great part of the material to be taught (Kress 2010: 47). Layout has also become a central element of meaning creation and reader's scaffolding, with the arrangement of elements on the page equally involving text and image in the process of semiotic production (2010: 143). The principles of composition and design also influence the patterns of reader participation and are meant to favour understanding and acquisition of concepts, which turns them into potentially useful tools for the learning of academic language.

Recommendations for practice and future directions

Academic textbooks may have changed their role in EAP programmes, but they have certainly profited from the development of descriptive studies aimed at the identification of their rhetorical organization and generic structures. The study of textbooks as a genre has explored the peculiar ways in which they build their expository sequences, while still manifesting the writer's position. Genre analysis (often combined with corpus tools) has also dealt extensively with language features manifesting intertextuality (citations and reference to sources), writer identity (personal references and evaluative features) and forms of reader-guidance (metadiscourse and interpersonal features). Corpus-informed studies have been extremely influential in compiling lists of words, phraseological patterns and lexico-grammatical features characterizing textbooks and other genres of academic discourse.

Textbooks may not provide a good basis for a writing syllabus, as the moves and the kind of "authorial voice" that characterizes textbooks only provide a limited view of discourse when compared to the language needs of students in EAP. Definitions, generalizations and exemplifications are important, but certainly not comprehensive of what a student must be able to do with language. Furthermore, the expository voice of the textbook writer does not provide an adequate model for the more argumentative forms of discourse that are required of students as they go on in their studies. The moves and the lexico-grammar of textbooks, however, certainly play a major role in the development of reading skills and in the building-up of the first academic vocabulary.

Studies on lexis and phraseology have also contributed to greater awareness among EAP practitioners of the importance of developing a lexical syllabus and understanding the value of a lexical approach. Syllabus design can now count on more accurate analysis of the moves and steps that characterize textbooks and on the description of their lexico-grammar, as well

as on more accurate definitions of the potential use of textbook materials in EAP, with its important role in building up the basis of a lexico-grammar, the key role in the first years of reading skills and the obvious limits in the development of writing skills.

Work on textbooks has been wide-ranging in the description of their structures, and the way they vary across disciplines and match (or mismatch) teaching materials. Other areas have been explored less extensively and point to directions for further research. The impact of new forms of communication in the contemporary world suggests the need to explore new forms of intertextuality; for example, looking at how textbooks are integrated in a network of genres and are complemented, for example, by companion websites comprising forms of research writing, blogs, interactive tasks, videos, fora etc. Looking at textbooks as only one of the genres constituting the process of learning at tertiary level suggests looking at how the different media and genres can contribute to what is ultimately the aim of the whole system: knowledge construction and communication. There is a need to explore the cognitive implications of different strategies adopted, considering the issue of reconceptualization, and looking at the spectrum of genres with a view to the process of knowledge communication in the context of tertiary education.

Further reading

Biber (2006); Hyland (1999); Jones (2005); Parodi (2010); Swales (1995)

Related chapters

- 3 Academic literacies
- 6 EAP, EMI or CLIL?
- 10 Academic reading into writing
- 14 Acquiring academic and disciplinary vocabulary
- 15 Systemic functional linguistics and EAP
- 16 Corpus studies in EAP
- 19 Genre analysis
- 21 Intercultural rhetoric
- 22 Critical perspectives
- 24 Lectures
- 31 Research articles
- 42 Needs analysis for curriculum design

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26

SEMINARS

Marta Aguilar

Introduction

Among the most common academic classroom oral activities, listening to lectures and note-taking stand out, followed by participating in whole-class discussions, delivering oral presentations, raising questions or participating in seminar discussions. Seminars have often been regarded as an occluded genre that may have been overshadowed by lectures. Nevertheless, over the past decade, they have started to be recognised as an important academic instructional genre, alongside lectures and textbooks (Hyland 2009). Participating in seminars can be challenging for many university students, especially for non-native English-speakers (NNESs) (Kim 2006; Morita 2004), so pinning down seminars can help us gain insight into the increasingly larger linguistic and communicative demands that are cast over native and non-native English-speaking university students alike.

A seminar is, in its generic sense, a site of inquiry where teaching, research and learning are not dissociated, and where a small amount of participants engage in theory–practice disciplinary dialogue. A seminar is, however, a label that denotes different events in different countries and educational cultures (Mauranen 1994). In the US, for example, seminars are usually student seminars where students debate and discuss ideas with the purpose of improving their academic communication skills while talking about topics related to their field of study. By and large, two different types of seminars can be identified, namely student instructional seminars and expert research seminars. While the pedagogic *student* seminar has received some attention (as seen below), less is known about the *expert* seminar. The former is, strictly speaking, an instructional genre that mainly involves small-group interactive teaching and discussion, and can be more or less tutor-led depending on the discipline, the course or the institution. A *student* seminar is used to further disciplinary acculturation of (post)graduate students, who are provided with the opportunity to explain and discuss their scholarly work. On the other hand, in a peer (*expert*) seminar, academics address a small expert audience to informally disseminate their research. These seminars are self-contained events where a speaker who has been invited in a different or foreign university speaks about his/her on-going or completed research. They are a hybrid genre that shares features with spoken genres like conference presentations, colloquia or lectures and with written research articles.

Instructional seminars

The seminar is an academic spoken genre, whose origin can be traced back to the Socratic debate, and which consists in asking and answering questions with the purpose of stimulating critical thinking. If in lectures students are seen as receivers of knowledge, in seminars students at various levels are regarded as learners that have to actively be involved in their learning process. Graduate and postgraduate seminars, as they are usually known, revolve around selected readings and subsequent discussions with questioning and debating. The canonical form of seminars tends to consist of two sections, namely an oral presentation (based on selected readings, for example) delivered by one or several students, which is then followed by a discussion section. In these small group classes, students learn how to move from an apprentice to an expert position. Seminars are not only believed to facilitate the student's path to graduation or doctorate but also to facilitate socialisation, development and peer mentoring, increase retention and achievement among students, enhance critical thinking, problem-solving and communication skills, and reduce anxiety. By the same token, sociocultural theories drawing on Vygotsky (1987) and Bakhtin (1981) posit that dialogue helps learners learn because dialogic interaction builds up and extends one's thinking in the same way reflective reading and exploratory writing expand thinking and understanding. It then stands to reason that the nature of seminars lends itself to the incorporation of social constructivist approaches that are known to help students internalise knowledge and improve and practise their research skills.

Interaction being a defining characteristic of seminars, seminar research mostly focuses on seminar discussion and interactivity. Seminar discussion is found in the literature as an umbrella term encapsulating interaction in small groups. Yet, an exploration of practice and literature reveals that the term *seminar discussion* tends to be used interchangeably with class discussion (Basturkmen 1995) and even with the oral presentation that may precede the discussion. Basturkmen (1995), for example, identifies three subgenres within MBA seminars: i) the discussion following the presentation by an expert speaker from outside the university; ii) the discussion following the presentation by students; and iii) tutorial-type discussion class. Similarly, claiming that the graduate seminar and the thesis defence belonged to Swales' category of 'other research-process genres', Weissberg (1993) subdivided graduate seminar presentations into four subtypes: i) PhD proposals; ii) in-progress reports; iii) preliminary literature reviews; and iv) finished research reports. All four types of presentation finish with a question-answer period, where discussion takes place.

Research into these seminars has yielded information about the following important issues:

- i seminars as pedagogic tools to improve listening/speaking skills together with discussion and communication skills;
- ii description of the language of seminars, specifically of interactional features in the discussion section (linguistic, pragmatic or structural); and
- iii factors affecting participation, particularly among non-native speakers (NNSs).

Seminars as pedagogic tools

Because establishment of a sense of community and perceived learning seem to be linked, seminars can be an appropriate site conducive to learning and academic enculturation. In addition, seminar attendance and participation provide students with practice in

communication and discussion skills, fundamental skills in most professions. If seminar participation can be challenging for native students, for many non-native students the experience can be so daunting that anxiety, silence and disappointment could neutralise its potentially positive learning outcomes. For this reason, the role of the instructor in effectively attaining these goals is pivotal (Huaiyuan 1988; Ma 2008; Lee 2009; Coward & Miller 2010; Samimy et al. 2011). As we will see below, instructors should avoid being over-dominant, be generous in giving the floor and encourage participation, particularly among NNSs with a low English proficiency and a silent attitude, as conferred by their (mostly East Asian) background education. If the discussion is properly led, though, using the seminar method (i.e. discussion on a list of assigned readings) can create important benefits among NNSs, like stimulation of student oral skills, raised sensitivity to matters of style and function, increased willingness to take risks, reduced apprehension, ability to think for oneself and evaluate one's own work, or ability to use language creatively (Huaiyuan 1988). Morita (2000) found that through oral seminar activities in a teaching English as a second language (TESL) seminar, NNS students who initially remained silent, either because of their insufficient English proficiency or because of their inexperience in participatory classroom formats, are seen to develop their discourse socialisation and oral presentation skills. In fact, many participants in seminars become more aware of their own multifaceted contexts and the causes of their powerlessness, and from this new knowledge they are then able to create a new positive non-native speaker identity as legitimate members of their community of practice (Samimy et al. 2011). In short, a seminar effectively proves an ideal place where empowerment can best be achieved in collaboration between the teacher and other students.

The potential of seminars can of course also be exploited to socialise and empower foreign language teachers, who can become more reflective about their role of L2 teacher educators. In particular, foreign language teaching assistants (TAs) are seen to better understand research, adopt new teaching practices and use action research as a tool for individual and professional development (McDonough 2006) by participating in seminars where action research is included.

Another positive effect of seminar participation is participation itself, that is, gaining acquaintance with floor-holding and floor-winning strategies and with seminar discussion conventions. Seminars are sites of collaborativeness and competitiveness, so different types of conflict, conflict resolution and conflict handling usually occur in academic seminars (Allwood 1993). Defining conflict as differences of opinion or action that are perceived as conflict-generating, Allwood identifies common types of conflict in seminars, like denying the claim, relativising validity of the claim or claiming non-comprehension or irrelevance of the claim. Conflict in seminars can be handled by preventing it (e.g. reaching consensus), avoiding it (e.g. postponing or changing topic), pursuing it (one loses, the other wins or dominates) or by resolving it (e.g. removing grounds for conflict). Seminars are sites for competition for the floor where students participate in different ways. Participation seems to vary according to gender, ethnicity, power relations and previous acquaintance with the conventions of the genre. To some extent, this could be considered to substantiate Benesch's (1999) concept of *rights analysis*. Rights analysis recognises the classroom as a site of struggle, and studies how power is exercised and resisted in academic settings. Benesch theorises EAP students as potentially active participants and acknowledges that academic situations, like for instance the seminar, offer their own opportunities for negotiation and resistance. The study of power relations in seminars can help us discover possibilities for greater student engagement.

De Klerk (1995) studied South African postgraduate seminars to ascertain trends in participation and levels of assertiveness and dominance. Not only did male and white

participants' turns take up 84 per cent of the conversational floor but their turns were also longer than female and other-than-white participants' turns. A high level of assertiveness also seems to be necessary for students to win the floor because the most participative and experienced students were seen to fight for the floor rather than wait to be given the chance. This suggests the high level of competition among students and the importance of familiarity with the appropriate discourse conventions in discussions. De Klerk mentions that the tutors in his study did not know the art of participatory discourse because they were over-dominant in every instance: they showed the highest frequency rates of floor-taking and humour, for instance. This type of research substantiates once again how important the role of teachers can be. Successful levels of participation are thought to render seminar instruction more effective, so a well-informed syllabus providing clear instruction and practice in seminar discussion for both EAP tutors and students is expected to facilitate involvement, which seems particularly necessary in the case of NNS students.

Finally, seminars have been one of the first classroom formats to be virtualised due to their student-centred and dialogic nature (Carey 1999). Web-based courses, synchronous and asynchronous online seminars or a combination of both (blended learning) seem to be on the rise, an alternative to traditional modes of instruction. Emerging technologies can be used to create constructivist learning environments that challenge students to participate more actively in their own education. Research has confirmed the connection between establishing a sense of community and perceived learning, and seminars stand out as an ideal classroom format where new technologies can provide students with opportunities to capitalise and resort to their own experiential knowledge (Potts 2005), either through the use of bulletin board interactions or WebCT packages, or through wikis and other online activities (as Kuteeva further explores in this book). Collaborative cyber communities in foreign language courses (Lord & Lomicka 2004) introduce components like multi-user object-oriented domains (MOOs), electronic discussion, e-portfolios or virtual guests. These online resources seem to bring about clear pedagogical benefits like higher motivation among students, mainly because, in seminars, students learn oral academic skills by speaking and communicating in an academic setting. In brief, distance learning and online seminars with virtual communication teams in academia may become powerful modes of instruction for students to improve their oral academic competence as well as their intercultural communicative competence.

To finish, it must be said that how interaction works in synchronous and asynchronous seminar discussions can yield fruitful information and is still under-researched. For example, an analysis of the nature and extent of interaction through duration of discussion, rates of participation and the extent of interaction in an asynchronous text-based educational environment revealed that lexical cohesion exists by means of subtle links between apparently unconnected messages that did actually work together to advance the construction of knowledge and social connections (Blanchette 2012). Other elements for assessing the quality of student-/tutor-led interaction in online foreign language seminars could be interaction patterns, word quantity, metadiscourse, humour or politeness, and attitude markers.

Discourse, interactivity and structure of seminars

The discourse of interactivity and the structure of interaction are core features of seminars. Within the first aspect we find personalisation, conversational and formulaic expressions, stance markers, metadiscourse, physical cues, expression of non-comprehension and formulation items. Like lectures, seminars seem to contain a mixture of conversational

features and formal academic expressions. For example, explicit interactivity and a high use of person pronouns (*I, you*) are defining features of seminars (Hyland 2009), deploying certain similarities with interactive lectures. Hyland shows that the MICASE (Michigan Corpus of Academic Spoken English) seminars, however, contain almost 50 per cent more person pronouns than large lectures, with *I* and *you* collocating with *know* and *think* and also with *look, see* and *can* as in: *You know (that), I think (that), I don't know, you can see, or if you look*. As noted by Hyland, this confirms Biber's (2006) work in that classroom discourse shows more stance markers than written academic texts like textbooks or conversations. The differences between lectures and seminars stem from the differences in class size, but also from the existence of discussion or negotiation in seminars, and ultimately in the more egalitarian personal relationships found in seminars because they reflect how students evaluate and convey attitude or certainty when they assess their peer students' contributions.

Yet, it might be noted that in much research on academic spoken English, lectures and seminars are rarely separated and often unequally distributed. For example, Biber (2006) used 159 lectures and 40 seminars (25.1 per cent of data) from the BASE (British Academic Spoken English) corpus. It may be hypothesised that results might have changed had lectures and seminars been kept apart or equally distributed. Depending on the specificity of the research scope, including or excluding seminars can be a decisive criterion to take into account because higher levels of interactivity in seminars may affect the final result, particularly if one bears in mind Hyland's seminar versus lecture analysis.

As can be seen, few studies exist on the interactional functions of discourse markers in seminars in particular. One exception could be the study on the functions of *also* as a discourse marker in seminars and TV roundtable discussions (Waring 2003). The additive functions of *also* arise from the tension between collaborative attempts to keep coherence and confront or disagree. Waring describes how *also* is used to add something that is irrelevant to prior talk (disjunctive) but may be relevant to a prior super-topic, achieving the appearance of structural coherence and legitimising one's speaking rights. *Also* is also used to add a comment to undermine another's talk, to strengthen disagreement and intellectual competence, and to soften disaffiliative talk (disagreement), thus creating an illusion of affiliation while expressing disagreement. Most studies have analysed the functions and frequencies of other particles like *just* in academic spoken English (Grant 2011) or of formulaic expressions in academic speech (Simpson 2004). Simpson found out that the expressions that were significantly more frequent in the MICASE could be grouped into two broad categories – those related to the organisation and structuring of discourse, and those related to interactivity.

Metadiscourse in seminar discussion in particular has been shown to serve textual and interpersonal functions (Basturkmen 1995). Within the textual group, she finds three main functions, namely, items that signal topic, activity and type of information. Among topic-signalling items, she distinguishes two turn-initial devices: back-referencing (*you talked earlier about*) and titling (*one other thing you hear is X*). Discourse activity markers, on the other hand, can be prefaces (*can I just come back in with another; but the point I'm making is*) with *question* and *point* and the verb *ask* frequently appearing together. The last group is information-type indicators like advance labelling and elicitations (*I was going to ask you about the similarities and differences*). Within the interpersonal category, she mentions politeness markers (*I'm sorry to interrupt you but*), hedging (*almost, sort of, strictly speaking, kinda*) and attitude markers indicating detachment, commitment (*I think, I mean*) or validity.

Reformulation is very important to convey reciprocity (i.e. resources used to convey '*I'm following you*' without actually saying so) in this competing and collaborative site. Waring

(2002b) probes how native and non-native speakers signal they are following by making minor and non-disruptive contributions that do not assess what has been previously said. Her findings essentially reveal how knowledge is constructed collaboratively in seminar discussions, and hint at ways conflict is shunned in favour of collaborativeness. Three main types of reciprocity are outlined: (a) reformulating; (b) extending; and (c) jargonising.

When seminar participants *reformulate* (e.g. *so what you're saying is*), they are not simply checking information; rather, they use it to resolve disagreement between two parties. An unaddressed third-party recipient singles out opposed disagreement to unlock it and restore a sense of collaboration. When participants *extend* (e.g. *you know what this means; in other words*), they maintain the continuity of the prior speaker's statements and constructively develop the idea. Extending preserves the continuity of the person whose talk is being extended, and is commonly understood as an affiliative move. Finally, participants sometimes reformulate part of prior talk in a more technical way: they *jargonise*. Jargonising implies helping another speaker to verbalise a complex idea and showing in-group affiliation; it invokes the shared context that defines the group, and in fact finishes what another speaker might have intended in more concise and technical terms. These verbal forms point to the presence of collaborativeness and conflict resolution in the seminar, a context where clarity, synthesis and rigour are goals to be attained without sacrificing or damaging relationship among the participants.

How non-comprehension is expressed is another instance of the cooperative mode in seminar conflict handling. Whereas silence may be the preferred option chosen by participants when they do not understand, Waring (2002a) identifies three main strategies used by NS and NNS participants to cope with non-comprehension in seminars. The first strategy consists of *delaying saying they do not understand*, the second consists of *giving an account of attempted understanding, trying to make it somewhat acceptable* and the third is *appealing for group assistance*. Below are examples from the first two strategies:

a) *delaying saying they do not understand*

A:::nd (0.6) what Hudson (.) is (.) suggesting (.) is that the ceiling isn't
a::: (0.2) just a linguistic ceiling, it's a:: hhh linguistic a:::nd psycho (.) linguistic? I
think he said? (0.2) ceiling?

(2002a, p. 1716)

b) *giving an account of attempted understanding*

Ellen: I actually have a question of that whol:e (.) short circuit?
Kelly: Yeah.
Ellen: Um (3.0) Does it no mean what I think it means? It's like ____.

(2002a, p. 1719)

Waring suggests that expressing non-comprehension in a graduate seminar is dis-preferred. Students do not only explicitly admit non-comprehension, they *delay* its admission by means of multiple micropauses, and hedge it (e.g. *A:nd (1.4); I don't know; maybe it means*). In other words, students attending seminars avoid acknowledging they do not understand, and they strive to project an identity of intellectual competence, treating their non-comprehension as a by-product of their novice status. They sometimes appeal to the group offering a candidate understanding in the expression of non-comprehension, and in this way strike the balance between their individual display and compliance with

the collaborative nature of discussion. By treating non-comprehension as their fault while at the same time asserting intellectual competence through the display of candidate understandings, Waring (2002a) contends, students acknowledge their novice status without giving up a claim to their intellectual expertise.

It's not only discursive practices when speakers reformulate or express non-comprehension that give us information about seminar participant intentions. Seminars have a dual nature in that 'speakers become hearers as hearers become speakers' (Viechnicki 1997, p. 105), and for this reason physical cues like gaze, pauses or restarts together with metadiscourse are claimed to cover both the goal of understanding and the competing goal of relationship maintenance (Viechnicki 1997). Thus, familiarity with the academic vocabulary and usual academic spoken formulaic chunks on the one hand, and practice on how to interpret and rely on physical cues on the other, should be catered for in an EAP syllabus to increase idiomacy and fluency and to facilitate comprehension of academic seminars.

The structure of interaction in seminars, exchanges, moves and acts that initiate exchanges and components within turns have been studied following Sinclair and Coulthard's approach (Basturkmen 1995, 2002). As previously discussed, Basturkmen subdivided seminar discussion into three subgenres, some of which are more tutor-led than others. In the UK university seminars that Basturkmen studied, she identified two basic different sequential patterns of discourse organisation and found out that the most frequent pattern of interaction was the simple IRF (initiation, response, feedback) pattern as in this invented example:

- Teacher: What is the capital of France? – (*Initiation*)
 Student: Paris – (*Response*)
 Teacher: Right, Paris. – (*Feedback* or *follow-up*)

Speakers used this simple pattern when they were dissatisfied with the answer, and the exchange continued until the acceptable or correct answer was uttered. The second pattern identified by Basturkmen is an extended pattern where the follow-up moves can be recursive; in this way, an inserted sequence F/I(*n*), treated as re-initiation, can co-occur many times, thus making up the following more complex sequence: I R (F/I R)*n* F. The F/I moves are located by their position and function and they are usually preceded by conversational metadiscourse markers like *well*, *so*, *but* and *though*, as can be seen in this incomplete student–student exchange (Basturkmen 1995, p. 120):

- Speaker: Well yes the point I'm firstly a point on what you've just said – (*Initiation*)
 Presenter: Well it will depend very much on the organisation itself – (*Response*)
 Speaker: So you see it but you see it as a process being associated with the top of the organisation – (*F/I*)
 Presenter: Yes – (*Response*)

This type of exchange can be further lengthened and elaborated in order to enable negotiation of ideas, with the initial idea being refuted or debated, and new ideas appearing in the interaction. The discourse structure is therefore the framework where discussion and ideas are co-built and negotiated. In Basturkmen's data, the second pattern accounted for over 30 per cent of all exchanges, yet Hyland (2009, p. 110) notes that in the MICASE data, the second pattern, not the first, is the most common one. As Basturkmen's and Hyland's data came from British and US universities respectively, the discrepancy may hint that seminars are different in different academic cultures, as pointed out by Mauranen (1994).

The relationship between the kind of sequential pattern and the type of question that motivates a given pattern could also be studied from the linguistic/cognitive complexity perspective; that is, if different types of questions require different levels of cognitive complexity, questions requiring a less demanding answer, linguistically speaking, may be more appropriate for less proficient non-native English speakers. For example, fact-closed *what*-questions and yes–no questions (e.g. *What group does this belong to?*) require short and simple answers; questions eliciting description and narration require a slightly higher metacognitive effort (*What is a...?*), whereas description or metacognitive questions (*How do producers make us buy...? Why do you think that...?*) demand the highest complexity. In international higher education settings like seminars, subject competence and language competence are sometimes not aligned and one can expect that international students who want to make deep or complex comments may have poor L2 proficiency. It is reasonable to suggest that seminar instructors should bear this in mind when, for example, they address international students with a low English competence. If seminar teachers are made aware of the outcomes of using open or closed questions, they may be able to gear the level of difficulty in questions according to the linguistic proficiency of the students to whom they are appealing, or according to how deeply they want students to explore ideas in the discussion.

Seminars and international student participation

A third line of research has explored how linguistic proficiency, cultural or educational differences and identity interact in and affect NNS participation in seminars. Most studies examine the difficulties that East Asian students encounter when they attend seminars in US universities, and seek to understand how NNS learners are socialised in a target language community. East Asian students have been reported to use an excessively formal style (possibly borrowed from scientific writing) in contrast to their NS counterparts, who deliver their oral presentations in an audience-friendly speaking style (Weissberg 1993). By the same token, if student questions in seminars are associated with academic identity needs, more specifically with regard to the originality and intellectual contributions in PhD seminars (Tracy and Naughton 1994), NNSs' questioning practices also differ and merit further study.

Among the most extensively explored issues, we find linguistic difficulties. NNS participation in seminars has been quantitatively studied in relation to students' scores in the test of English as a foreign language (TOEFL) and to their self-perceptions of discussion participation. In order to better understand East Asian students' perception of and difficulties in listening and academic skills at university, Kim (2006) conducted a survey, which partly informed an analysis of their needs. The activities that East Asian students were most concerned about were leading class discussions in the first place; participating in whole-class discussions came second, followed by engaging in small-group discussions. They considered formal oral presentations and listening comprehension to be the most important skills for academic success, and acknowledged that participating in whole-class discussions, practising strong listening skills, raising questions during class and engaging in small-group discussions were the four most frequently required listening-/speaking-related classroom tasks in graduate courses.

For international students, low L2 proficiency is an obstacle that is made manifest even before class, as they have difficulty understanding the required readings. When, during a seminar discussion, they are not able to effectively use connecting words to signal transition from one topic to another or to successfully convey the illocutionary meaning of an utterance, discussion is negatively affected because American NS students cannot grasp the intention

and purpose of international students' comments (Coward & Miller 2010). On the whole, East Asian students' lack of willingness to participate renders them more silent and passive because they feel they learn better by listening reflectively, and this seems to privilege US students (Ma 2008; Morita 2004).

However, linguistic problems may have been overestimated as the main reasons for lack of participation. It has been found that East Asian students' learning developed through oral discussion and through reading and writing changes according to the task involved, and depending on the type of discussion, small group or whole class (Ma 2008); and second, that the scant participation of NNSs is due not only to linguistic problems but also to cultural, personal and disciplinary discourse problems. For example, the major categories that influence Korean students' oral participation in US graduate seminars are English language ability, sociocultural differences (like cultural beliefs, gender and age), individual differences (content knowledge, personality and anxiety) and classroom environment (their class members' attitude toward their comments or questions as well as discussion formats) (Lee 2009). Seminar instructors could help international students open up by creating different types of discussion (small group, whole-class discussion and online), by giving pre-discussion reviews, post-discussion summaries and promoting cross-cultural understanding between US and culturally diverse students.

The question of identity and culture is repeatedly referred to in the literature as a factor affecting participation. Drawing on Lave and Wenger's (1991) concepts of community of practice and legitimate peripheral participation, Samimy et al. (2011) analysed how learning and identity intertwine, and proposed the kinds of practices that influenced three NNS graduate students' negotiations of identities as NNSs. In order to empower NNS graduate students and push them from peripheral to full participation in a TESOL (teaching English to speakers of other languages) programme, three actions were taken in the seminar. First, the students were assigned a mentor who was a successful Japanese faculty member, a model of full participation who was a trusted counsellor for them. Second, students created a community group that allowed them to share their concerns, obtain academic support and resist marginalisation in a safe space. The third intervention refers to providing exposure to alternative discourses; these discourses consisted in providing and discussing readings on the native-speaker superiority fallacy and on the World Englishes paradigm, which helped students see themselves as speakers of a given type of World English, rather than poor speakers. In other words, the NNS students discovered that their low self-image of NNS was based on erroneous stereotypes, and that the seminar had enabled them to associate themselves with more positive and empowering identities as ELT (English language training) professionals.

Research also suggests that culture and NNS identity may have been overstated. Interestingly, it is the novice–expert identity of native and non-native students that also seems to play a role in participation (Vickers 2010). When the interactional achievement of expert–novice in NS–NNS face-to-face interaction is analysed, together with the processes that contribute to expert–novice differentiation during team meetings, it is demonstrated that NSs take on an expert identity whereas NNSs take on a novice identity. It is through the process of ratification, failure to ratify, and rejection of contributions that the expert–novice differentiation and allocation take place. The NS's ability to gain expert status is linked to prior experience; that is, to the NS's previous access to opportunities to participate in similar discussion formats. These findings point to the fact that novice linguistically-based identity inhibits the achievement of an expert non-linguistically-based identity, and that, therefore, EAP instruction has to provide appropriate access and practice. In a similar vein, Coward

and Miller (2010) examined how Asian and US students in US universities participated in a seminar discussion, paying attention not only to linguistic proficiency but also to their goal orientation (knowing it is good to talk and participate, for example), and to their sense of self in the classroom. They contend that cultural background alone cannot account for low or high participation rates because, among other things, even students from the same country have been exposed to different classroom formats, and are equipped with different (mis)conceptions about the importance of classroom discussion. Contrary to previous research, their data suggest that the level of participation of these international students is not linked to their cultural background understanding that learning cannot take place in discussions outside the traditional classroom format. The students in their study did feel they were learning in discussion and welcomed the different learning format because they acknowledged they were in a different cultural setting, even those who had had no previous discussion experiences. In their study, it was the NNSs' low linguistic proficiency that constrained them, as it was clear they had problems in all areas. In addition, they were reluctant to ask questions because they feared questions would only reveal their ignorance. Their findings point to the importance of two other factors. One is the role of instructors and other international classmates in engaging these Asian students. If instructors and classmates are sensitive to Asian students' difficulties and act as mediators, these students feel more secure and participate. The second points to the importance of providing international students with the appropriate resources and opportunities that help them develop not only their academic language skills, but also their practical communicative ability in English.

The pedagogical implications for EAP teacher education and graduate study programmes are clear. Interventions should be created to improve the communicative competence in general and promote the oral classroom participation of international students. The role of the instructor is key to native and non-native student socialisation and full participation, as already mentioned, and in addition NNS students should be provided with opportunities so they can practise their speaking, listening and discussion skills during their stay at university. To conclude, research on instructional genres reflects the tension between acknowledging cultural differences and facilitating access to discursive conventions (Hyland 2006). The linguistic and cultural diversity of today's graduate, postgraduate and doctoral classrooms pose many challenges for instructors and students, but if all students manage to participate fully in discussion-based classrooms, intercultural communication will benefit all students – national and international.

Expert seminars

As mentioned above, in peer expert seminars, academics have been invited to deliver a talk to a small expert audience made up of professors, lecturers and a few PhD students about a topic they are researching. Hence, expert seminars can be regarded as a research genre (Swales 2004). These seminars are self-contained events that last no longer than two hours and which share similarities with the conference presentation in terms of the main structural organisation: the host academic introduces the guest speaker, the speaker proceeds with his/her presentation and finally some questions may follow. Seminars, however, usually have small audiences and tend to be more informal than conference presentations in that they are not scheduled nor framed within such a formal event as a conference. Time pressure is not a matter of concern and interruptions in the form of questions or constructive commentaries may occur in the middle of the talk. Typically, the guest speaker's visit to an outside or foreign university has been previously arranged within a mobility programme. The length

of the stay may range from two days to months, and he/she usually comes with a hidden agenda – for example, networking or starting a joint research venture. More often than not, research projects are born or developed as a result of a seminar. Lastly, the seminar speaker may talk about his/her on-going research, explain the research work he/she has been performing during his /her stay at a host university at the end of this stay, or simply inform about the latest development in the research work that he/she has completed with his/her home university team.

The rhetorical structure of seminars and the metadiscourse used in them seems to show the nature of this genre (Aguilar 2004, 2008) and merits further research. These seminars are a hybrid genre, sharing features with other spoken genres in Dubois' continuum (1987), like plenary lectures, conference presentations (Ventola et al. 2002), slide talks or local colloquia; with other academic genres like lectures, in particular of guest lectures (Crawford-Camicciottoli 2004); and with written research articles.

Seminar speakers possibly rely on their previous experience in lecturing and in conference participation when a seminar is arranged for them to speak. Therefore, some porosity, or hybridisation, is likely to exist, and just as some similarities with the conference presentation and the lecture are expected to emerge, so the specific peculiarities of the event are to result in structural and linguistic differences. For example, when the metadiscourse of engineering lectures and engineering seminars was compared (Aguilar 2008), it was found out that academics utter many more hedges and many more textual glosses used to rephrase, expand, specify, etc. when they speak to experts in a seminar than when they lecture to students.

Gaining more fine-tuned knowledge about academic spoken genres may be necessary to help academics and EAP practitioners because in the process of acquiring a good command of academic genres, they may also acquire disciplinary and academic socialisation and, ultimately, practise a core competence that instils confidence and raises cross-genre awareness (Yayli 2011). Likewise, when Hyon and Cheng (2004) identified occluded written genres for university lecturers and discussed the pros and cons of explicit teaching through EAP curricula and faculty seminars, they suggested further research through triangulation methods or through textual analyses that could uncover similarities among genres with related purposes and even among functionally-related texts (in other professions). It is guessed that some connection may exist between academic seminars and business meetings, as both genres are sites of discussion, conflict and collaborativeness. Do students who have been taught to perform well in academic seminars make good participants at a business professional meeting? That knowledge could provide insight into if and how the mode of communication and the academic or professional orientation (for example, research article vs. seminar, or business meeting vs. seminar) affect the organisational and linguistic features of the genres, and raise cross-genre awareness.

Conclusion

This chapter can be concluded by highlighting that seminars, whether student or expert, remain an under-researched genre. Students are usually challenged by seminars, and in particular by seminar discussions, because their identity as individuals, as novice or expert students, as dialogic or dominant classmates and as native or non-native speakers will come into play at the same time as they learn to collaboratively co-construct knowledge, exchanging and negotiating their ideas. This collaborative construction of knowledge will take place in their native or in a foreign language with fellow students who may come with a different educational background, and under the supervision of a teacher who will assess

their participation. At the same time, academics and researchers may also need to deliver a talk in a seminar and show professional mastery in gauging the degree of conversational features, hedging or humour that is most appropriate in the genre known as the expert seminar. Another issue is whether and how both seminars are going to change over time as they become more and more virtualised within a higher education landscape that seems to increasingly offer not only online seminars, but also large, online lectures.

Further reading

Basturkmen (1999); Weissberg (1993)

Related chapters

- 20 Multimodal approaches to English for academic purposes
- 30 The academic poster genre
- 32 Interpersonal meaning and audience engagement in academic presentations

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PHD ADVISER AND STUDENT INTERACTIONS AS A SPOKEN ACADEMIC GENRE

Beyza Björkman

Introduction

PhD supervision is undoubtedly a critical genre in academic speaking. Lee (2008) lists five main concepts to a “conceptual approach” to PhD supervision: *functional*, where the focus is on project management; *enculturation*, where the issue is about the student becoming a member of the disciplinary community; *critical thinking*, where the focus of the supervision is to encourage the student to critically analyze his/her and others’ work; *emancipation*, where the onus is put on the student to evolve; and finally, *developing a quality relationship*, where the student is inspired (Lee, 2008: 270, 271). Whichever approach one may adopt or prioritize and see as the main aim, achieving communicative effectiveness in PhD adviser–student interactions is an important prerequisite.

Much of the research on PhD supervision to date has focused on pedagogical issues such as achieving good supervision and advisory styles (e.g. Gatfield, 2005; Hockey, 1996; Lee, 2008; Sambrook, Stewart and Roberts, 2008; Sinclair, 2004). Some other issues in research on PhD work have been the assigning of PhD topics (Hasrati and Street, 2009), student perceptions and expectations of the PhD experience (e.g. Heath, 2002; Mainhard et al., 2009; Pole et al., 1997) and different types of problem-oriented studies about the PhD process (e.g. achieving balance as the adviser: Delamont, Parry and Atkinson, 1998; problematic supervision: Hockey, 1996 and Malfroy, 2005; joint supervision as a problematic notion: Pole, 1998). Other studies have investigated the effects of supervision on academic career or PhD completion (e.g. Ives and Rowley, 2005; Over et al., 1990; Wright and Cochrane, 2000).

Among the issues that have been researched from a more empirical angle are certain features and sections of PhD theses and PhD writing process in general (e.g. Hyland, 2004; Paltridge et al., 2012; Pecorari, 2006; Shaw, 1991), as well as students’ and professors’ perceptions of the PhD writing process (e.g. Belcher, 1994; Bitchener and Basturkmen, 2006), all focusing on the written aspect of PhD supervision. As this volume shows, there is extensive research on other academic speech events, e.g. lectures, seminars and student-group work (see Thompson, this volume); however, the spoken academic genre of PhD supervision has received much less attention from a linguistic point of view

(but see Chang and Kanno, 2010 and Vehviläinen, 2009a and 2009b). This is somewhat surprising, considering that there is a large body of research on how to achieve effective PhD supervision (such as the studies mentioned above; see also Pole et al., 1997), and considering that successful supervision is generally seen as one of the critical factors in the completion of a PhD project: “The communication between the adviser and the student is key” (Lee, 2008: 267; Ives and Rowley, 2005). In this respect, taking a closer look at the nature of doctoral supervision and examining doctoral supervision as a pedagogical, spoken academic genre seems necessary. Studies focusing on different aspects of the supervision interactions are likely to provide us with useful insights into these critical speech events, such as the structure of this genre, and other sociopragmatic phenomena (see Turner, Hiraga and Fujii, 1997 for such sociopragmatic phenomena in academic tutorials). Also, the description of such a high-stakes genre as PhD supervision is of relevance to the field of EAP; by means of such descriptions, EAP practitioners can better understand the linguistic and sociopragmatic challenges PhD students face in supervision interactions.

This chapter aims to contribute to the filling of this gap by focusing on the structure of PhD adviser–PhD student supervision meetings. The chapter aims to first provide an overview of the research that has considered the similar genre of tutorials and investigated it for a number of features (e.g. sociopragmatic issues). Following this overview, the genre of PhD supervision interactions will be introduced by means of an investigation carried out in English in a northern European higher education setting. The main data-source consists of six PhD supervision meetings from the Natural Sciences domain at a Swedish university, adding up to approximately seven hours of digitally recorded speech, all transcribed, the transcripts totalling 37,000 words. After the structure of the genre has been introduced, examples will be provided. The focus will also be on the frequency of PhD adviser and student talk across the different types of interaction. Finally, some observations will be provided on expressing disagreement in these interactions.

Studies with PhD supervision interactions as their focus

The studies available on academic supervision have focused on the master’s level only, and investigated conversational advice sequences in giving and receiving feedback, including student resistance (Vehviläinen, 2009a and b). What has received most attention on the topic of PhD supervision has been pedagogical issues and how to achieve effective supervision. In fact, no single study has focused primarily on the nature of interactions in this spoken genre or the structure of it. It is likely that difficulties in obtaining supervision data are among the reasons behind this lack of research. Not even large spoken corpora have included PhD supervision meetings. The Michigan Corpus of Academic Spoken English (MICASE; Simpson et al., 2002) has included academic advising sessions, but these events differ from PhD supervision by nature (see Hartford and Bardovi-Harlig, 1992 on academic advising session closings). In these sessions, students and their faculty advisers meet to discuss the coming term, the courses they need to take and strategize around other practical issues to plan the term in the best possible way. In this sense, they are meetings of what would be closest to the ‘functional dimension’ in Lee’s framework, which is about managing the project (2008; see Introduction above). Other big corpora such as The T2K-SWAL corpus (Biber et al., 2004), BASE (Thompson and Nesi, 2001), ELFA (2008) and VOICE (2013) all include several types of speech events but not supervision interactions.

There are, however, a small number of studies that are of relevance here. Of importance are studies on tutorials where there are analyses of tutor–student interactions from Higher

Education settings. Although tutorials have a teaching-related function and are in this sense different from supervision meetings, there are enough similarities between these two speech events for us to consider tutorials to be relevant here: tutorials try to “draw out the students’ inner resources” in an effort to “help [them] reach their full potential” (Hiraga, Fujii and Turner, 2003: 21). Turner, Hiraga and Fujii (1997) describe the “salient features” of this genre as:

- i achievement processed by quantity and quality
- ii emphasis on critical analysis
- iii uncertainty as a positive impetus to development
- iv consensus between the tutor and student.

(Turner, Hiraga and Fujii, 1997: 263)

It will be shown here that items i), ii) and iv) represent shared features between tutorials and PhD supervision. In an earlier study on the fine art tutorial (12 video and 20 audio-recorded), Turner and Hiraga (1996) provide a three-phase structure of this genre, made up of items i), ii) and iii) from the above list. In what seems to be a follow-up study, Turner, Hiraga and Fujii (1997) consider the difficulties of pragmatic understanding faced by Japanese students in Great Britain. In this study, the focus is placed primarily on power asymmetries, critical analysis, dealing with uncertainty and verbalisation. The findings reveal that most of the difficulties observed in the data are caused by differing sociopragmatic assumptions by the two academic cultures.

In a later study, Hiraga, Fujii and Turner (2003) report that the main role of the tutor is to encourage the student and help him/her “develop the work” by making suggestions. The student’s role, on the other hand, is to properly explain what s/he is working on regarding the purpose and the expected outcome, and to respond to the feedback (Hiraga, Fujii and Turner, 2003: 21). Hiraga, Fujii and Turner first focus on pragmatic difficulties that arise from the tutor–student power asymmetry and cultural differences, discussing the differences between Japanese and British tutors where the latter group treats students as members of the discourse community, unlike the former group. The study also focuses on the assessment of students’ performance and progress, which seems to be different in the two cultures. While independent evaluation and critique are key to the academic culture in Britain, in Japan, the focus is on “careful execution of documents” (Hiraga, Fujii and Turner, 2003: 32). The study highlights the importance of considering such sociopragmatic assumptions when different academic cultures meet.

One of the few studies on doctoral supervision is by Chang and Kanno (2010), who have investigated the importance of “linguistic competence” across three different disciplines. Although their data is not only from supervision interactions, it includes supervision interactions that took place during shadowing observations of four PhD students in the US, who were all non-native speakers of English (NNSE). The results of the study showed that the importance of linguistic competence varied in the three disciplines. The dependence on language was different not only in these disciplines but also in their sub-disciplines. Also, linguistic competence did not seem critical for the academic performance of these students, and the importance of being a native speaker of English varied in different “community practices within a disciplinary community” (Chang and Kanno, 2010: 688). While these students felt being a NNSE was not problematic in terms of academic success, it could be a setback when socializing with other members of the community. Possibly the most important finding of this study is that the PhD students from other cultural backgrounds were able to use their cultural capital (Bourdieu, 1986) as members of their disciplinary

communities. They did not speak about “otherness” in negative terms. They had gained experience in their academic and professional lives, which had equipped them with the skills they needed to operate in the disciplinary community to which they belonged (Chang and Kanno, 2010: 689).

As this brief literature review reveals, none of the above-mentioned studies focused on the nature of PhD supervision interactions but on various sociopragmatic phenomena in tutorials, which is the closest genre in previous research to the genre of supervision (e.g. Hiraga, Fujii and Turner, 2003) and the everyday operations of PhD students (Chang and Kanno, 2010). The present study has, as its main focus, supervision interactions and will describe the structure of this genre including the different types of interactions observed in the supervision meetings. The chapter will also include some observations on expressing disagreement.

We will now focus our attention on the setting in which this study was carried out.

PhD supervision in a northern European setting

The main source of data in the present paper comes from a Swedish Higher Education setting. Swedish higher education has been one of the most internationalized in continental Europe with over 800 English-taught programs in 2014, following the Netherlands with 1,078 and Germany with 1,030 programs offered in English (Wächter and Maiworm, 2014). With so many programs in English, the country attracts a large number of scholars who choose to continue their careers at Swedish universities, along with PhD students who come to pursue doctoral degrees and post-doctoral studies. Especially at doctoral level, admissions are competitive: PhD positions are actually paid positions, so the students do not pay fees, receive a monthly salary and are almost always provided with office space (Swedish Institute n.d.).

The data for the present study was collected at a large Swedish university (67,000 students and 5,000 staff). The large number of foreign scholars and students in this setting often, if not always, have only English as a lingua franca (ELF) through which they can perform their daily tasks and duties. Doctoral theses are almost exclusively written in English in this setting, and the road that leads to the doctoral thesis goes through the use of English, including doctoral supervision. In fact, this is the situation all over northern Europe: PhDs are internationally recognised and consequently in English (Björkman, 2013). Although the surrounding language may not be English (unlike in Hiraga, Fujii and Turner, 2003, for example), the dominant lingua franca of a typical northern European university is English.

The data in the present paper comprise six digitally-recorded supervision meetings in the domain of Natural Sciences (earth and environmental sciences: geological sciences and geology; physical geography; and biology: ecology, environment and plant sciences). The data is all authentic and naturally-occurring; no part of the data was set up for research purposes. All advisers had between seven to twelve years of experience with supervision, and all students were about half-way through their projects. None of the advisers or students came from a Swedish background. The first languages present in the data were Arabic, Chinese, German, Spanish and Thai.

In Sweden, most PhD students are assigned two advisers, the main adviser and the co-adviser. In most cases, and in all cases in the present data, it is the main adviser that has regular supervision meetings with the student. Supervision meetings often take place in the adviser's office.

Let us now turn to the findings of the present investigation.

Table 27.1 The structure of supervision meetings (sections), the types of interaction in supervision meetings in the present data (A, B and C), and in which section of supervision meetings these different types of interactions typically occur.

Interaction types		Sections of supervision meetings		
		Introduction	Main part	Closing
S	Social talk (small talk, generally based on the student's project)	✓		✓
C	Core (content) interaction (interaction that is based solely on the subject matter)	✓	✓	✓
P	Project management (the functional dimension in Lee's framework (2008); discussion of deadlines and other practicalities)	✓	✓	✓

The structure of the spoken genre of PhD supervision

“Genres are social practices, moulded into a particular shape by habitual patterns of use” (Turner, Hiraga and Fujii, 1997). The analyses in the present chapter are based on one domain and university; however, supervision meetings are about critical thinking, enculturation of the PhD student into the research community and emancipation among other things (Lee, 2008). What determines the structure and nature of this genre are the “habitual patterns of use” (Turner, Hiraga and Fujii, 1997) and the functions that must be achieved, rather than the specific setting. So it can be suggested with some degree of justification that the following pattern is representative of a typical supervision meeting. Three types of interaction emerged from the data (Table 27.1). Although there was some internal variation in the order of these interaction types, all supervision meetings included these three types of interaction: social talk (S), which is affective “academic small talk” designed to create an appropriate atmosphere; core interaction (C), which refers to technical talk on content issues; and finally, project management (P), which is talk on deadlines and other practical issues around the project.

Let us now focus on each type of interaction and see examples from the transcribed data to get a better understanding of how these interactions are different from one another. We will follow the order in Table 27.1 and start with the introduction of a supervision meeting. The introduction of a meeting can be as short as in excerpt (1):

- (1)
- 1 <Sp> Ok. Yes. </Sp>
 - 2 <St> Yes I think I'll show you what I've done and then I will show you what is what
 - 3 I want to do in the next step </St>

In excerpt (1), the student (St) immediately starts discussing the project after the adviser (Sp) initiates the conversation by saying “OK” and “Yes” in line 1. So the student chooses to start with core interaction by telling the adviser what s/he wants them to focus on first (lines 2 and 3). In some cases, there is a degree of social talk before the core interaction starts, such as in excerpt (2):

(2)

- 1 <Sp> First I want to know what is your overall impression </Sp>
2 <St> From this? (POINTING TO THE PAPER) </St>
3 <Sp> Yes, do you feel frustrated or <Sp>
4 <St> Eh. It is tough actually it is tough really </St>
5 <Sp> Hmm uhuh </Sp>
6 <St> One one of the reviewer is I feel he is relevant to what we have done </St>
7 <Sp> Hmm </Sp>
8 <St> These comment are useful . and critical in the same direction but the other one
9 is really far </St>
10 <Sp> I think the other one actually this one who recommend for rejection but he
11 also offered several suggestions I think some of his suggestions are quite good and I
12 feel that why he rejected because he thinks this methodology we used to evaluate it's
13 not right (XX) </Sp>
14 <St> No I think not only that he didn't like the whole idea </St>

In excerpt (2) above, the adviser starts the meeting by asking the student's general reaction to the reviews of a paper s/he had submitted to a journal. The paper got rejected, and the adviser wants to know the student's "overall impression" (line 1) of what has happened. Although the "overall impression" might not help the student rescue the paper, the adviser still asks this question (line 1), followed by the question "yes, do you feel frustrated" (line 3), probably to achieve an affective tone. The student's response in line 4, that it is tough, shows us further that this is more *social talk* than talk about the subject matter. In line 10, the adviser starts talking about what the reviews said, possibly trying to get the student to reflect on it and be critical of his/her own work (*emancipation* in Lee's framework, 2008). Line 10 is also when the social talk slowly turns into *core interaction*, and in the rest of the meeting they talk about the reviews and the revisions that need to be made for the paper to become publishable in a journal.

The next type of interaction is termed *core interaction*. This term is used to refer to the 'core' of the project, which is the subject matter. Excerpt (3) below is from the field of geology, and the student (St) is explaining to the adviser (Sp) what s/he has done to solve one of the problems in the project. S/he starts by explaining the solution for the adviser (lines 1–6), followed by what seems to be an objection from the adviser ("But I think they are very different" in line 7). The student clarifies the issue (line 8–11), which seems to help the adviser understand the method the student has used (lines 9 and 11). In the rest of the excerpt (lines 11–21), we have the student explaining to the adviser what s/he has done about this problem:

(3)

- 1 <St> Yeah exactly so I now pick the whole region and I pick the area (all between
2 22 to 36 east and between 11 to 15 north I made it one box and then I did the analysis
3 or the calculation for the whole region maybe it would be (us) good if I gave it little
4 test with just these and then we one can say something about that </St>
5 <Sp> Ok </Sp>
6 <St> But not (here) </St>
7 <Sp> But I think they are very different this a and b </Sp>
8 <St> No that is what you can see here </St>
9 <Sp> Oh oh ok </Sp>

10 <St> Yeah (that) what you can see </St>
11 <Sp> Oh ok. Oh ok </Sp>
12 <St> Now this is a particle number the particle density of of of the whole region </St>
13 <Sp> Hmm </Sp>
14 <St> And for the four time steps </St>
15 <Sp> Ok </Sp>
16 <St> If you just directly compare it with the old one, this is old one </St>
17 <Sp> Oh yeah yeah yes yeah yeah yeah </Sp>
18 <St> Before I used only one time step now I use four time steps </St>
19 <Sp> Hmm </Sp>
20 <St> So I have more data </St>
21 <Sp> Hmmm yes now it's the region (you) just (xx) </Sp>

The following excerpt (4) from the field of physical geography is typical of the project management interactions. We see the adviser asking the student questions about the first draft of his/her paper (lines 1–10), and then reminding the student of another deadline around the expected completion date of the first draft (lines 10–12). There is a slight topic change after line 10 with the focus being shifted to another paper for which the student is waiting for reviews, but the issue is still that of project management and deadlines (lines 13–21):

- (4)
- 1 <Sp> Hmm. Ok if we start if you start writing from August do you think you can
2 finish the first draft in one month or </Sp>
3 <St> after this one </St>
4 <Sp> Yes and then it's like start from August </Sp>
5 <St> Hmm </St>
6 <Sp> Then you whole August can you </Sp>
7 <St> In the end until end of August</St>
8 <Sp> Hmm </Sp>
9 <St> Yeah I think it can be done by then </St>
10 <Sp> Yeah but I am also think that maybe at that time you will get the previous paper
11 review back then you also need to spend a lot of time on that one and have you checked
12 that status </Sp>
13 <St> I I haven't checked yesterday I thought to check </St>
14 <Sp> It's already two months or </Sp>
15 <St> They don't send the e-mail by decision I expected them to send (e-mail) </St>
16 <Sp> I think they will send e-mail. I think they will send you e-mail </Sp>
17 <St> Yeah</St>
18 <Sp> But if you check you can see that maybe one review already finished another
19 review still waiting for </Sp>
20 <St> Yeah I will I will do it</St>
21 <Sp> Comments so this yeah uh. Hopefully that one will be good luck otherwise it
will be more extra work for that (one) </Sp>

Excerpt 5 below is from the closing section of a supervision meeting. As Table 27.1 shows, the conclusion part can be made up of any of the three types of interaction. Excerpt 5 is the transcript from the last 23 seconds of one of the supervision meetings, where we see *social talk* with which the meeting ends:

(5)

- 1 <Sp> Good so during your vacation you will be here or go somewhere </Sp>
2 <St> I will be here yeah in this town </St>
3 <Sp> Ok </Sp>
4 <St> I might go to (NAME OF COUNTRY) for just visit but I will be around </St>
5 <Sp> Oh ok ok great </Sp>
6 <St> And no plan to travel to (NAME OF COUNTRY) this summer </St>
7 <Sp> Hmm. Yes and if you have anything or any question you just email uh yes </Sp>

The adviser asks the student about his/her holiday plans (line 1). We see the student's response in lines 2, 4 and 6, with minimal responses from the adviser in lines 3 and 5. The adviser ends the meeting by welcoming the student to contact him/her if needed (line 7). It is worth mentioning that while core and project management interaction types seemed to appear in any of the three sections of a supervision meeting (introduction of meeting, the main part, closing), we see social talk only in the beginning or the end of the meetings (see Table 27.1). It is also interesting that social talk was generally linked to project management issues, such as holiday plans leading to a discussion on meeting the deadlines for the revision of a paper.

In some cases, the boundary between core interaction and project management interactions was blurred. In fact, in some cases, the two types of interaction seemed to intersect. Excerpt 6 below is an example of such a case, where the adviser gives the student advice on how to go about the revisions of the rejected paper. This interaction includes sections which could be categorized as core and project management at the same time (e.g. lines 1 and 2; lines 18 and 19).

(6)

- 1 <Sp> because no it's made some extra work for your schedule you have to be very
2 efficient for this one </Sp>
3 <St> hmm but err </St>
4 <Sp> Hmm and what's your plan for submission you want to completely change or
5 change some of this that we discussed and resubmit to climate dynamics or </Sp>
6 <St> is it allowed </St>
7 <Sp> of course it is allowed it's like a new submission but then you have to address
8 all these questions </Sp>
9 <St> Hmmm really because </St>
10 <Sp> yeah but if you err if you err if you submit to another journal you still have to
11 address some of the important issues like this </Sp>
12 <St> yeah yeah </St>
13 <Sp> because in case it's it can be sent to the same reviewer and if they saw that you
14 didn't do any change and just submit again then they will completely reject and </Sp>
15 <St> what other journal we can send it to </St>
16 <Sp> then we talk about this with (NAME OF CO_ADVISER) next time </Sp>
17 [...]
18 <Sp> because you have to finish this one as (as/soon) as possible because otherwise I
19 don't think you can focus on your other </Sp>
20 <St> the other one yeah </St>
21 <Sp> Hmmm </Sp>

The student and adviser continue talking about what type of revisions can be made to the paper for eighteen more turns and end the meeting with the scheduling of the next meeting initiated by the student (line 1) in excerpt (7) below. The meeting ends with laughter, where the adviser says that “hopefully in one or two months” the student will have “[got] rid of [the revisions]” (line 12):

- (7)
- 1 <St> Hmm yeah ok do we now have schedule for meetings </St>
 - 2 <Sp> yes weekly I don't know if you still can come </Sp>
 - 3 <St> yeah </St>
 - 4 <Sp> Today is Friday right </Sp>
 - 5 <St> yeah </St>
 - 6 <Sp> then ten o'clock every Friday </Sp>
 - 7 <St> ten o'clock every Friday </St>
 - 8 <Sp> yes but do you think next Friday you already can make some plans </Sp>
 - 9 <St> plan </St>
 - 10 <Sp> yes </Sp>
 - 11 <St> yes I can come next time this plan with what we exactly we will change </St>
 - 12 <Sp> (then we can) hopefully in one or two months you can get rid of this </Sp>

This chapter does not have as its primary aim to be quantitative by nature or include calculations of statistical significance. However, some insight can be provided into the genre of supervision meetings with percentages and some quantification on adviser and student talk time with respect to the three types of interaction, as well as the ratio of each type of interaction in the data. For reasons of brevity, we will first look at two meetings in detail (see Table 27.2) by different adviser and student pairs; however, we will discuss the general trends present in the data for all six meetings that have been analysed with percentages.

Table 27.2 includes some information on the nature of this genre which deserves to be discussed in more detail. Although the table includes two meetings only, the remaining four

Table 27.2 The length of supervision meeting 1 and 2 with respect to each type of interaction in words, percentages and time along with adviser (Sp) and student (St) talk time in each interaction type

<i>Type of interaction</i>	<i>SpM1</i> (total words 4,972, total minutes 35:24)		<i>SpM2</i> (total words 7,006, total minutes 49:37)	
	<i>Words + %</i>	<i>Time (min.)</i>	<i>Words + %</i>	<i>Time (min.)</i>
Core interaction	3,598 (72%) Sp TT: 55% St TT: 45%	27:01	5,685 (81%) Sp TT: 52% St TT: 48%	40:44
Project management	1,204 (24%) Sp TT: 77% St TT: 23%	8:23	1,120 (16%) Sp TT: 68% St TT: 32%	7:39
Social talk	170 (3%) Sp TT: 12% St TT: 88%	23 sec	201 (3%) Sp TT: 19% St TT: 81%	1:54

SpM: Supervision meeting TT: Talk time

meetings showed a very similar pattern. In general, core interaction dominated in the data with at least 70 per cent of all talk being on the technical details of the project on the subject matter. Project management interactions follow up with 15–25 per cent of the meetings spent on discussing deadlines and other practical matters around the PhD project. Social talk, as mentioned earlier, almost always seems to be linked to scheduling and other project-related matters. Nevertheless, it can be referred to as a type of ‘academic’ small talk designed to achieve an appropriate atmosphere. The percentage of social talk is the lowest across the three types of interaction with less than 4 per cent in all the supervision meetings in the data.

Equally interesting is the ratio of adviser and student talk in each type of interaction. The adviser and the PhD students seem to say equally as much in core interaction, with an average of 52 per cent adviser and 48 per cent student talk. We will return to this in the final section of the chapter. The situation is different in the project management interactions: the advisers have considerably more talk time than the students with at least 68 per cent in all interactions. Finally, in the social talk, the students seem to say more than the advisers, the adviser talk making up an average of only 19 per cent of the interactions. This low percentage may at first seem surprising; however, this is a consequence of the advisers asking brief questions to initiate small talk with the students, which the students answer in detail (see Excerpt 5). It is most likely that this is related to the power asymmetry in such interactions: PhD students cannot take the liberty to initiate small talk with their advisers and opt for topics that may not be related to their projects.

Reporting on an interesting pragmatic phenomenon: expressing disagreement

Turner and Hiraga (2003), in their discussion of the British academic context, state that the students are treated as participant members in the discourse community from the beginning of their studies, despite the institutional power that the tutor has. This is said to be quite typical of the Western academic culture and is manifested in the present data when expressing disagreement. The students seem in control of their projects and reject suggestions by the adviser when they feel the adviser may be missing a point or simply making a suggestion that is not relevant. They seem to have good scholarly judgment and display good knowledge about their projects. An example of this is in Excerpt 2 where the student questions the adviser’s judgment when it comes to the reviews of the paper (line 14). One would perhaps expect the PhD student to simply rely on the adviser’s evaluation of the reviewer’s comments (lines 10–13), but the student says “No I think not only that he didn’t like the whole idea” (line 14). Another example is in Excerpt 3, where the adviser questions a step in the student’s solution to a particular problem by saying “But I think they are very different this a and b” (line 7). The student says “No that is what you can see here” without a pause or hesitation, which is an indication that s/he is sure of the method. There are many instances of the students expressing disagreement in the data. Another example is in Excerpt 8:

(8)

- 1 <Sp> Hmm. instead of boundary layer these classification they just take height one
- 2 kilometer two kilometer three kilometer but it I think it’s more appropriate to divide it
- 3 into boundary layer and above boundary layer. It is more meteorological term. People
- 4 will understand this. </Sp>
- 5 <St> No no. [...] They are not like pressure level when you have the (xx) model
- 6 where there is a pressure level. The particles are more random and they can be

7 anywhere. What I do is I say ok [...] you will get this position where it is and you
8 will get this height it is height in the surface for instance and you will get height of the
9 boundary layer at that point and the height of the troposphere </St>

In Excerpt 8, the adviser tells the student about a “more appropriate” approach when going about one of the steps (line 2), because people would be familiar with what is a “more meteorological term” (line 3), and that “people (would) understand” it (lines 3–4). The student, sure of his/her method, rejects the suggestion (“No no” in line 5) and explains in the rest of the turn why the adviser’s suggestion does not work and why his/her approach works (lines 6–8) (see Björkman, 2015).

Concluding remarks and implications

Although this chapter has focused strictly on northern Europe, the description provided is likely to be representative of universities with English-medium instruction at doctoral level. English is the dominant lingua franca of such academic activity (e.g. Björkman, 2013), and advisers and PhD students from different L1 backgrounds use English as their vehicular language. Academic culture surely plays a role where PhD students from different academic cultures and backgrounds may experience hardships, such as when developing critical thinking (e.g. Lee, 2008), but it is suggested that the supervision meetings described here will be similar to any supervision interaction in the Western academic culture. Also, the difference between academic cultures is likely to be present not in the types of interactions presented here but in the sociopragmatic structuring (Hiraga, Fujii and Turner, 2003).

In the Western academic culture, the PhD student becomes a participant in the disciplinary community from day one, and power in terms of institutional status becomes less important (Turner and Hiraga, 2003). This was manifested in the data in two ways: the ratio of adviser and student talk across the different types of interactions, and in the expression of disagreement by the students. The results here show that while the adviser did most of the talking in the project management interactions, the adviser–student talk times were almost equal in the core interactions, which are about the subject matter. This suggests that while the asymmetry in power in terms of institutional status may play a part in project management where the adviser adopts the role of the decision-maker, such power asymmetries are less of an issue in strictly content-related talk where the adviser and student can be more ‘equal’. In core interactions, the power asymmetry in terms of institutional or academic status was for the most part not overtly visible, where the students seemed to reject suggestions made by the adviser without any noticeable hesitation when they felt it was necessary to do so. In fact, it is possible that there is knowledge symmetry in the students’ favour: midway through their studies, PhD students are supposed to know more about the details of their projects than their advisers (see also Björkman, 2015).

Also relevant to the discussion of power here is linguistic competence. There are situations where the adviser may be more fluent in English (such as in Hiraga, Fujii and Turner, 2003) and may exercise more power in the interactions, which may also be reflected in the talk time. In this data, however, the linguistic competence of the adviser and students seemed quite equal, which again may indicate that power asymmetries become less visible. A speaker with less proficiency is not likely to be able to exercise power and therefore would not dominate in interactions. On that note, linguistic competence did not seem critical in the present data (see also Chang and Kanno, 2010). There were several nonstandardnesses in both the advisers’ and students’ turns (e.g. Excerpt 6,

lines 1–2: *it's made some extra work for your schedule*), which did not seem to disturb communication. This is typical of ELF settings.

This chapter focused on the PhD supervision genre and included observations on expressing disagreement. There are other pragmalinguistic and sociopragmatic phenomena to consider in supervision interactions, such as expressing linguistic stance towards one's own and others' research, and general issues around power asymmetries and intercultural competence. The field of EAP would certainly benefit from studies describing such phenomena. By means of such descriptions, EAP practitioners can better understand the linguistic and sociopragmatic challenges PhD students face in supervision interactions and incorporate appropriate materials in course design. It is hoped that this study has sparked some interest in this high-stakes academic genre.

Related chapters

- 28 PhD defences and vivas
- 29 Genre approaches to theses and dissertations

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PHD DEFENCES AND VIVAS

Špela Mežek and John M. Swales

Introduction

The PhD *defence* or *viva voce* is the doctoral student's final rite of passage prior to the award of the doctoral degree. It usually takes the form of a mandatory final oral examination. As such, it has been the object of research in educational assessment and quality assurance (e.g. Jackson & Tinkler, 2001; Morley, Leonard & David, 2002), with also some attention to how students can best be prepared (e.g. Murray, 2009; Watts, 2012). Less research has focussed on the defence/viva as a genre; as a result, most descriptions of this genre have only been available in university policy documents and in some shorter descriptions and participant accounts. However, there are additionally a small number of transcripts extant, some accompanied by video or sound files (details below).

From a geographical perspective, most research on PhD defences in English is situated within Anglophone contexts such as the US, the UK, and Canada. However, such PhD defences are also held in other geographical contexts where English is used as a lingua franca. In these cases, PhD defences do not necessarily follow the American or British format, but instead follow local procedures. Defences of this type, however, remain largely unexplored.

The aim of this chapter is to introduce the genre of the PhD defence in different geographical contexts. The chapter surveys PhD defences in the US, the UK, Asia, and continental Europe. The description of PhD defences in these different contexts is provided through a review of previous research and complemented by informant accounts of defences they have participated in, incidental observation of Swedish defences in various disciplines, and any available institutional documents regulating how defences should be conducted. The only recordings and transcripts available to us are three PhD defences in the US from the Michigan Corpus of Academic Spoken English (MICASE) (49,000 words; Simpson et al., 2002), each of them in a different discipline (Swales, 2004), and an earlier one in sociology (Grimshaw, 1989), and the transcripts of four PhD defences (66,000 words) in English linguistics from Sweden. The Swedish defences must, thus, stand as representative of non-American defences, in order to explore parameters along which the genre can vary.

The PhD defence in the United States

In the United States, the document under scrutiny is called a “dissertation” rather than a thesis, and the oral examination is called a “defense” rather than a viva. There is no requirement that an academic from another institution be invited, although this sometimes

happens if some special expertise is thought helpful. The examining committee consists of a Chair or sometimes two Co-chairs (candidate's advisor(s)/supervisor(s)), plus three or four faculty members, one of whom is "cognate"; that is, he or she comes from another department. Committee members are chosen by the candidate, often in consultation with the Chair. Before the defence, they have all approved the proposal and may have even seen and commented on various drafts of the thesis. The proceedings are nominally open to the public, but there is an increasing trend in the sciences for a "half and half" scenario; in other words, the candidate's opening presentation is attended by others (typically graduate students from the candidate's home department, interested faculty members, close friends, family members, etc.), followed by general questions from the audience, but then the committee and candidate withdraw to a closed room. The usual—if dubious—justification for this is that it provides a better opportunity for the committee to ask "hard questions". The size of the audience for defences can vary from nobody to perhaps 40–50 people. Dissertation defences usually last around two hours.

The nature of this genre is rather hard to pin down. Are dissertation defences, on the one hand, simply "meaningless rituals", essentially epideictic celebrations, with the various actors "just going through the motions"? Or are they, on the other, tough and true oral examinations of the submitted work, consisting of carefully prepared but unpredictable interrogations of the texts under review and thoughtful and intelligent responses by the candidates? Or are they sometimes both, or at least sometimes more and sometimes less one or the other? One thing, however, is pretty clear; the outcome will be "pass" with, in nearly all cases, various requirements for revisions to be undertaken.

Unfortunately, our primary knowledge of the *discoursal* properties of this genre is limited to a single sociology defence recorded at Indiana University in 1975 (Grimshaw, 1989; Grimshaw & Burke, 1994) plus the three dissertation defences recorded around the end of the last century as part of the MICASE project. In his 1989 volume, Grimshaw discusses what he believes to be certain stylistic oddities and inconsistencies in the defence he had examined. He observes:

It does seem possible, however, that there are speech events which are defined as somehow simultaneously formal and informal—formal because of institutional constraints and the importance of the business at hand, informal because of the nature of interpersonal relationships among cointeractants.

(Grimshaw, 1989, p. 522)

However, this "mixed variety" style, with its juxtapositions of formal phraseology ("I would now like to address the question of..."), everyday *lexical bundles* ("Could you say a little bit about..."), and technical jargon intercalated with the contractions and hesitations of on-line everyday speech, turns out to be broadly characteristic of American academic speech as a whole. Since this type of discourse is just as likely to occur in lectures, panels, and question periods following presentations by outside speakers, we know that it cannot really be ascribed to "the nature of interpersonal relationships among cointeractants". Nor, indeed, given its prevalence, can it best be described as a "mixed" style since it appears to be the norm rather than an exception. From an insider, *emic*, perspective on academic discourse, the centrality of this style needs to be characterised in its own terms, and not in terms of some odd collection of heterogeneities.

In fact, what we see here in the defence is the performing of academic *personae*, be they candidates, committee members, speakers or questioners, who do not want to "talk like

books”, and yet who, when speaking, are “on show” as careful and thoughtful human beings; who are repositories of expertise and yet are capable of humour; and who are able to wear their scholarship sufficiently lightly so as not to alienate the other participants, whose reactions to their own utterances they (usually) closely monitor. Cook-Gumperz and Gumperz (1994) explore the ritualistic nature of this genre and note, in contradistinction to “high” or formal rituals, that “the ritual character rests in the performance of the event itself, not in its content or terminology” (p. 394). Of course, this is in considerable contrast to many defences in continental Europe, where the ritualistic apparatus is foregrounded.

One small sign of this blending of relaxed tone and high purpose in the defence can be seen in the form, distribution, and putative role of vocatives. According to Biber et al. (1999), vocatives are much commoner in multi-party exchanges, presumably often to avoid confusion. In the 1975 defence, there were 41 vocatives used in about two hours of speech. All were in first-name format and often abbreviated (e.g. Pat, Sherm). Sixteen addressed the candidate by name, 21 occurred in exchanges among the committee members, ten of these being uttered by the Chair, while just four were used by the candidate to address a committee member. The committee members often used vocatives to pre-announce to the candidate that questions were coming up, as in:

. mm hm I was particularly concerned *Lee* with the th- possible implications of this for your acceptance...

In the three MICASE defences, the cumulative total amounted to only 18 vocatives, seven of which invoked the candidate. There is no obvious explanation for the discrepancy in vocative use between the 1975 defence and those recorded around 25 years later. However, a senior doctoral student at Michigan (Collette Moore, p. c.) noted that, if a candidate is on first-name terms with three members of her committee but not the fourth, she will be likely to “no-name” all their examiners in order to avoid the overt disparities that would otherwise arise. Similar inhibitions might also affect committee members.

So far, we have attempted to characterise and capture an initial something of the verbal and cognitive flavour of this genre in the US in order for it to be contrasted later with comparable events in Europe and elsewhere. We now turn to the *structure* of this genre. When we put the Indiana and the Michigan defences together, we see sufficient variation to suggest that a simple outline structure makes a lot of sense at this stage in our knowledge. In contrast to Indiana, the Michigan tradition of having an early in-camera session forms a natural boundary between the Preliminaries and the Defence Proper, during which the committee reads each other’s reports and decides on the order of questioners. One consequence of this is that candidates’ narrative accounts (or, rather, their attempts at such sustained monologues) become the first element of the Defence Proper. Second, we can build into the generic structure the option of “rounds”, and, third, since the Defence Proper (as Grimshaw’s choice of terminology already implies) remains the longest and most important part of the genre, this needs to be highlighted. The resultant picture is in Figure 28.1 (elements in parentheses are optional).

A fairly clear sense of the similarities and differences among various defences can be gained from calculating the number of actual turns—for example, excluding back-channels and failed attempts to get the floor—taken by the various participants (Table 28.1). The percentage of turns by the candidate provides some insight into how much the defence maintains a question-and-answer format between the candidate and another participant, and how much the defence involves “sidetrack” discussions among the non-candidate speakers. As

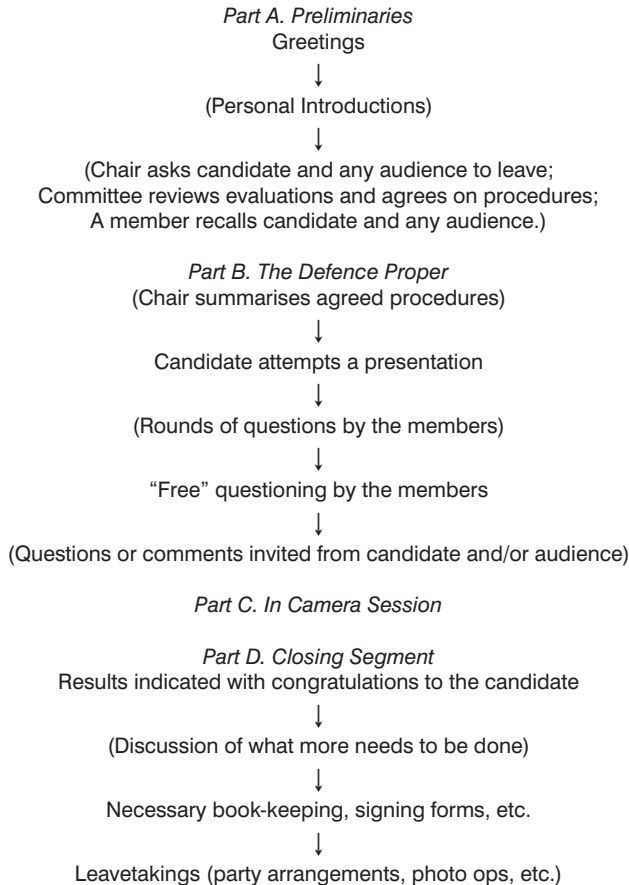


Figure 28.1 Provisional outline structure of US dissertation defences

the table shows, the Q&A frame was largely maintained in the computer science defence, but was considerably eroded in social psychology, with the musicology defence falling somewhere in the middle. The percentages also tell us something about the role of the Chair. In the computer science defence, the Chair asked very few questions and largely functioned administratively. Apart from one short Q&A exchange, he largely left “his” candidate to fend for herself. In considerable contrast, the Chair in social psychology, a distinguished university professor and very well known in his field, played a considerable further role in supporting “his” candidate.

The Chair in the musicology defence also handled the management of the defence, but additionally asked her share of “sharp” questions to “her” candidate, especially toward the end of the speech event. Further, this defence was the only one in which there was a clear sense of “rounds” of questions by individual committee members, with the Chair going last, and the Chair managing these “rounds”. In social psychology, any hopes for such a structure broke down early, as shown in this extract. The candidate is about six lines into a summary of his dissertation when this occurs:

Memb 1: c c- c- could I ask a procedure question? um, should we interrupt throughout this, or how do you how do you wanna proceed?

Table 28.1 Percentages of turns per participant type in three MICASE defences

	<i>Computer science</i>	<i>Social psychology</i>	<i>Musicology</i>
Length of recording	113 min	76 min	91 min
Candidate	45	28	38
Chair	6	18	13
Member 1	16	23	13
Member 2	8	18	18
Member 3	20	13	15
Member 4	5	(n.r.)	3
Totals	100%	100%	100%

- Chair: uh, well normally it's just a quick, run-through, but I don't if people wanna do it on a on a you know just..., in this, fashion common on the fourth floor <LAUGH SS> that's fine too. I don't know, what do people wanna do? I mean there's nothing (xx)
- Unknown 1: (whatever)
- Memb 1: I mean cuz there're various points of which, I think I might wanna want clarification and or comment on certain things
- Chair: okay well [[Cand: okay, yeah] why don't you why]] don't you do that?

The final topic we explore is the role of humour in this genre, especially as we might not expect to find much humour in the dissertations themselves. Both episodes of general laughter (GL) and individual laughter (IL) occur quite frequently in all three defences, as shown in Table 28.2. In effect, then, in the whole dataset, a burst of general laughter occurs on average about once every eight minutes.

For reasons of space, we focus on the general laughter episodes in the social psychology defence, although it is important to point out that there are at least three GL episodes close to the *beginnings* of all the other defences. It seems as though Grimshaw's (1989) opening "settling in" segment encourages participants to maximise opportunities for humour as a way of relaxing tension, creating a non-adversarial interactional framework, and/or "deformalising" the ceremonial aspects of the genre.

The social psychology defence actually has a laughter episode right at its beginning:

Table 28.2 Laughter episodes in three MICASE defences

	<i>Length of recording</i>	<i># of GL episodes</i>	<i># of IL episodes</i>
Computer science	113 min	9	21
Social psychology	76 min	12	21
Musicology	91 min	15	7
Totals	280 min	36	49

- Chair: okey-doke, uh well Kim Sook was gonna do another, very brief summary of what he's up to. uh to bring it all up on our screens...
- Cand: alright, um...first of all I'd like to thank all of you, for agreeing to be on the committee, reading the draft, and coming to the defense, being with me at, my last moment of, graduate school.
- Memb 1: <LAUGH> such optimism <LAUGH SS>

We can see here that our distinguished university professor begins very informally ("okey-doke...what he's up to"). In response, the candidate opens gracefully with a more formal expression of appreciation to his committee, the last part of which leads to the committee member's (Memb 1) witty sally at the candidate's expense. The sally is successful because of the faint chance that the candidate might in the end fail his oral examination and have to do it all over again.

It might be thought that this kind of joking banter is only permissible for those in authority, but toward the end of the defence this particular candidate can turn the tables, as it were. The necessary context is that earlier the Chair, who is in late middle age, had failed to remember the second part of a question he wanted to ask:

- Chair: ... how can you put, those, drive all three of those things from the same, core notion?
- Cand: i mean, I was surprised that um, you, do not see the connection. <LAUGH SS> that was [funny
- Chair: yes], we've been talking about the aging problem <LAUGH SS>
- Cand: (actually) to me, [to me
- Memb 1: it's obvious] <LAUGH SS>

The three instances of general laughter here have very different origins, but work together to create a delightful exchange. The first occurs in response to the candidate's (tongue-in-cheek?) expression of surprise at his advisor's apparent obtuseness; his advisor then rises to the occasion, turning the joke on himself by referring to his incipient senility; and when the candidate begins to respond, a quick-witted committee member completes the candidate's utterance with a very forthright "it's obvious", thus extending the jocularity at the Chair's expense. Humour, along with informality and other features, is here used to reduce tensions and to moderate the pious insistencies of institutional regulations.

The PhD defence in Sweden

In Sweden, the oral examination of a PhD thesis is called *disputation*. The PhD defence is a public event which is about two hours long. A number of people participate in the examination: the respondent ("the candidate"), the opponent ("the examiner"), the Chair, and the grading committee (three to five members). The student's supervisors (advisors) are present as well. Since the defence is a public event, other members of the department, the respondent's family and friends, PhD students, and others also attend the defence. The audience of the defence can, thus, be from a few people to over a hundred. As participants often do not speak Swedish, defences are typically in English, particularly in the STEM subjects (science, technology, engineering, and mathematics) and social sciences. This use of English is fully naturalised in Swedish universities.

The participants at the defence come from different departments and institutions. The Chair of the defence is a senior member of the department (sometimes the student's principal supervisor), whereas the opponent is from a different institution (national or foreign) than the respondent. Different institutions have different regulations about who comprises the grading committee; however, at least one member has to be from a different institution, only one can be from the respondent's department, and none should have worked with the respondent before. A deputy/replacement member also needs to be present.

It is the grading committee that determines the grade (pass/fail) after the defence is finished. As in the US, very few theses receive the fail grade. However, unlike US practice, the thesis is published by the university several weeks before the defence, and the changes to the thesis are only made if the PhD student decides to publish their thesis as a monograph after the completion of their degree. The thesis is, thus, considered a finished work before the defence, and, as such, a failing grade would be quite shocking.

The structure of the Swedish defence is in parts notably different from the American defence (Figure 28.2). In the first part, the Preliminaries, the Chair first opens the defence, introduces the participants, and explains the procedures. Because the thesis has already been printed, the Preliminaries are usually concluded by comments from the respondent, who presents the audience with a list of errata or other comments about the thesis. The Defence Proper follows a different structure, as well. Here, the respondent and the opponent are the most important participants, as the majority of interactions are between them. The opponent's role, however, varies depending on the discipline. In the natural sciences, it is the respondent who provides the main summary of the thesis, whereas in the humanities and social sciences, this is the opponent's job. This summary is usually quite long; in our corpus, the summaries lasted between 7 and 33 minutes. In the humanities and social sciences, the summary is usually followed by a response given by the respondent, and, in the natural sciences, by the opponent putting the thesis into a broader context. In the natural sciences, the order of these two parts can also be reversed. After the summary part is complete, the opponent and the respondent have a discussion about the thesis. Following is a dialogue between the grading committee and the respondent, and, finally, the audience and the respondent. The defence is then concluded by the Chair. The grade is decided by the grading committee in a secluded room immediately after the defence and the results of their discussion are usually reported back to the student and others within an hour after the defence.

Another difference between American and Swedish defences is in the distribution of turns the various participants took during the defence (Table 28.3). As in the American defences, the candidate ("respondent") took the most turns. However, what is different in the Swedish defences is that the turns taken are distributed relatively evenly between the respondent (ca. 45 per cent) and the rest of the participants combined (ca. 55 per cent). The opponent is the person with the second highest percentage of turns taken. Other participants, three to four members of the grading committee, and in our corpus, three to nine audience members, each took fewer turns than those in the American defences. The Chair mainly functioned administratively. One defence where the pattern is different is Defence 2, where the opponent took fewer turns. In addition, the opponent questions part of the defence usually had a higher average word count for the respondents' turns than the opponents', but this was not so in Defence 2. The opponent in this defence took fewer, but on average longer, turns. Instead, the audience took more turns. A possible explanation for this is that the respondent was slightly more reserved and gave shorter answers, and so the audience had more time and more topics they wanted to bring up for discussion.

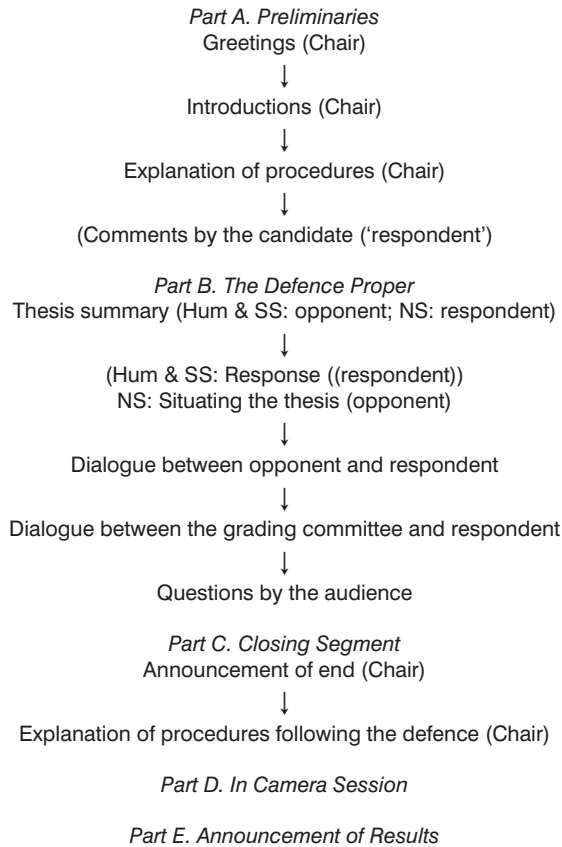


Figure 28.2 Structure of the Swedish PhD defence conducted in English

Table 28.3 Percentages of turns per participant type in four Swedish PhD defences in English linguistics

	<i>Defence 1</i>	<i>Defence 2</i>	<i>Defence 3</i>	<i>Defence 4</i>
Length of recording	102 min	87 min	127 min	116 min
Respondent	47	40	44	45
Opponent	30	17	32	31
Chair	5	11	9	8
Member 1	2	5	1	4
Member 2	2	2	1	3
Member 3	8	2	3	2
Deputy member	–	2	–	–
Audience (combined)	6	21	10	7
Totals	100%	100%	100%	100%

Most of the time the exchanges go back and forth between the speakers; somebody asks the respondent a question and the respondent gives a long answer, after which they have a discussion on the points brought up in the answer. It is also common that the subsequent questioners refer to previous discussions or pose follow-up questions. In this way, the Q&A sections can be seen as discussions between various speakers, even though usually only two speakers converse at a time. However, occasionally several people have a conversation together as well. This occurs particularly in the later part of the Defence Proper, and in instances where the topic of the discussion interests several people or where the student has problems responding. The exchange below is an example of the latter where several participants get involved in the discussion between an audience member and the respondent.

- Aud 4: [...] have you looked into that w- w- what kinds of words that you say are not advanced maybe uh [(xx)
- Resp: uh] yeah that's a very good question yeah and I think that, that has to do with th- the list being outdated th- th- I think there are a few, words that are common now uh I I can't really remember any but but
- Chair: computer is often given [[Resp: yeah] as an] example
- Resp: yeah computer yeah or something [[Opp: text] like that] yeah [internet
<Many people speaking at the same time>
- Opp: text] which was rare [Resp: mhm] it's now very common [[Resp: yeah] to] text
- Resp: w- words like that uh uh th- they uh they are very common among the learners but the the they um, um are marked as advanced uh words uh by the measure
- Aud 4: right
- Aud 1: we'd have the reversed version of ones falling out sahib was among the four thousand most common words in cobuild in ninety eighty-seven <LAUGH-General>

As in the American defences, the speech in the Swedish defences is a mixture of very formal and everyday phrases. The Chair in particular tends to use set and formal phrases in the Preliminaries ("I declare the proceedings open"), the Closing Segment ("I declare the session closed"), and when marking the start of the different questions sections of the defence ("we now turn to the members of the grading committee who are invited to ask questions"). The opponent summary tends to be more formal as well, particularly the beginning.

The vocatives, similar to the American defences, are in the first-name format. The majority of the vocatives are used by the Chair referring to the members of the committee and the audience when calling on people to ask questions. Out of 47 vocatives used in the four defences, 38 were used by the Chair. The rest were used by the opponent, members of the grading committee, and the audience, to refer to the respondent. Interestingly, none were used by the respondent, possibly because the Chair had already specified who the speakers were. From this, the administrative function of the Chair is clear; they make sure the defence follows the procedures and that it runs smoothly. Unlike in the American defences, Swedish Chairs do not ask questions.

Another aspect we looked at in the corpus of Swedish defences is laughter. Here episodes of GL and IL are also very common. In fact, in the Swedish defences, laughter appears to be much more common than in the American defences (Table 28.4). Previously it has been

Table 28.4 Laughter episodes in four Swedish PhD defences in English linguistics

	<i>Length of recording</i>	<i># of GL episodes</i>	<i># of IL episodes</i>
Defence 1	102 min	105	3
Defence 2	87 min	24	17
Defence 3	127 min	43	36
Defence 4	116 min	44	11
Totals	432 min	216	67

reported that humour is perhaps not that common in Swedish defences (Fillmore, 1994). Our results show otherwise, however. It is unclear whether this is due to differences in transcription methods, educational cultures and disciplines, or individual differences.

General laughter episodes often came very close together; there were periods when people were making jokes and then longer periods of serious discussion without any humour. In the example below, we can see one such period where we counted five general bursts of laughter. Before this excerpt, the opponent asked the respondent which questions they were expecting to get that they did not. After providing one such question and then answering it, the respondent asks whether they should provide more questions, which is where the excerpt below starts.

Resp: yeah, sh- shall I, go on
Opp: uh one more. <LAUGH-General> can you manage one more
Resp: yes. um you did not ask me about domain loss so much
Opp: no I thought that probably... <LAUGH-General>
Resp: oh you [thought somebody else would do it
Opp: (xx) there there] would be uh [[Resp: sure] thought] I would leave [that to to him
Resp: yeah, yeah,] yes. <LAUGH-General> but I shouldn't maybe answer that then
(should I). ... <LAUGH-General> uh should I yes
Opp: I think you can get it one way or another
Resp: yeah, or
Memb 1: yeah please do <LAUGH-General>
[Respondent gives a 98-word answer]

This section of the transcript would be difficult to understand without the video. The second laughter episode, for example, starts after the opponent gestures towards one of the members of the grading committee who is interested in domain loss. The third and the fourth episodes happen while the respondent is alternating looking at the opponent and the committee member in question, as if waiting for permission from both of them to answer the question. The final laughter episode in this segment occurs after the permission is given by the committee member. What generates laughter in this segment is, thus, the break in protocol: the respondent seeking non-verbal permission to answer a question from a speaker who is at that moment not a part of the conversation.

As in the American defences, laughter episodes have various origins. They also occur during all of the speakers' turns, so the respondents generate laughter as well. It is also quite common that laughter episodes occur at the beginning of sections. The following example illustrates three general laughter episodes occurring in the response section, where

the student is asked whether the opponent's summary of their thesis was correct. The laughter generated here might be due to the student's awkwardness at having to evaluate the opponent's summary of their work. At the end of this segment, the tone of the defence shifts from the playful intermission to a more serious tone.

- Opp: [...] that was my summary, but uh uh is that is that a reasonable summary generally <LAUGH-General> are there things that were quite different
- Resp: that was a very good and very thorough summary it was very well done yes yes <LAUGH-Resp> <LAUGH-General> no you you got everything it was, really well done. <LAUGH-General> I don't have anything to add. um except some of the questions that you had during the uh the presentation you said you'd like to discuss them
- Opp: should [[Resp: yeah] should] we should we discuss those first
- Resp: yes

Laughter is, thus, quite typical in these types of transition episodes, marking the endings and beginnings of different parts of the defence, and having a function here to relax the atmosphere.

PhD defences in some other countries

Australia

PhD defences are rare in Australia, although the candidate is required to give a presentation before the final submission of their thesis (Green & Powell, 2007). Instead, the grade is determined on the basis of written reports by the examiners. Only if there are ambiguities or uncertainty can an examiner request an oral defence (Mullins & Kiley, 2002).

Belgium

In Belgium, the PhD defence (*verdediging/soutenance*) is a public event, which can be attended by people outside of the department. The defences usually last about 1.5 hours. The defence is scheduled after the printed thesis has been sent to an examination jury who decide whether the candidate is ready for the defence. According to our informant, some institutions have a longer review process before the thesis is sent to the jury. At the defence, the main participants are the Chair, the candidate, and the five members of the examination jury, one or two of whom are the candidate's supervisors, and one an international scholar. The defence itself is formal: the examiners wear the official university gowns and the Chair uses ceremonial phrases. The structure of the defence is as follows:

- i The Chair opens the session and welcomes the participants and the audience;
- ii The candidate presents their thesis;
- iii The examiners ask questions;
- iv The examiners discuss the grade in a separate room;
- v The examiners and the Chair come back into the room. The Chair announces the result (pass/fail);
- vi The supervisor gives a *laudatio*;
- vii The candidate thanks everybody and invites them to a reception.

Step vi, the *laudatio*, is not only typical of PhD defences in Belgium, but also the Netherlands (Green & Powell, 2007). In *laudatio*, the supervisor praises the candidate and his/her achievements, and in this way adds to the ceremonial feel of the Belgian PhD defence. In some Belgian defences the *laudatio* is, after a defence in English, in another language (e.g. Dutch, German, French) for the benefit of the family members present.

Canada

In Canada, the PhD defence is also a public occasion, which can be attended by an audience other than the examining committee, Chair, and supervisors. Its structure follows the American format. There is variation in Canadian defences, though. Chen (2011) points out that in some universities, PhD students have two defences, although the final is not public, rather like the US “half and half” system in the sciences. Some candidates are also allowed to read the examiners’ reports before the actual defence. What is unclear, though, is whether there are also differences between disciplines.

Hong Kong

In Hong Kong, PhD vivas are preceded by examiners’ reports. The vivas are closed events, although in some institutions other research and academic staff and invited guests are allowed to attend as well (PolyU Handbook, 2014). The viva begins with the candidate’s presentation of the thesis, followed by the questions and answers session. Who is allowed to ask questions differs depending on the institution. At some institutions, only members of the examination committee are allowed to ask questions (HKU Procedures, 2014), while at others the audience may ask questions as well (PolyU Handbook, 2014). At some institutions, it is also possible for the candidate and the examiners to have further discussion after the audience questions, although this session may be closed to others in attendance (PolyU Handbook, 2014).

Iran

Work on defences in Iran has been done by Don and Izadi (e.g. 2011), who use conversation analysis to investigate how participants achieve face in their corpus of 12 PhD defences. They report that Iranian defences follow the American format: i) introduction; ii) candidate’s presentation; iii) questioning; iv) evaluation; v) result.

Norway

In Norway, like in Sweden, the thesis is published by the university before the defence (*disputas*). It is evaluated by three committee members who decide whether it is ready for the defence; they also examine the public defence. The structure of the defence proper follows the American format, with the difference that the preferred form of address is the third person (Burling, 1997). As in other countries, there are variations in defences between different disciplines, faculties, and universities.

In Norway, the candidate also has to give a lecture on a given topic other than the one in their thesis (Kyvik, 2014). *Disputas*, thus, do not focus only on the thesis work done by the candidate, but also on the candidate’s general knowledge of the subject and their ability to lecture on various topics.

Spain

According to one of our informants, in Spain the PhD defence (*defensa*) is a public event, 1–3 hours long. Reviewers write reports before the defence, and based on these reports it is decided whether the candidate is ready for the defence. The defence is chaired by one of the five examination committee members. The structure of the defence is the following:

- i The Chair opens the session, introduces the participants, and explains the procedures;
- ii The candidate presents their study;
- iii The committee members ask questions. The candidate has a choice whether to answer all of the questions at once or individually;
- iv The audience may comment or ask questions, but in this particular case, only people with PhDs were allowed to ask questions;
- v The examiners have an in-camera discussion;
- vi The Chair announces the results.

No revisions are required of the candidate if they receive a passing grade.

UK

Research in educational assessment and quality assurance has shown that there is much variation between vivas in different institutions around the UK, not only in their structure, but also in whether the examiners are required to submit reports both before and after the viva, or only after the viva (Tinkler & Jackson, 2000), and whether a candidate can receive a failing grade on the basis of their viva (Jackson & Tinkler, 2001), such as being offered a lesser degree (e.g. MPhil).

Generally, though, the PhD viva in the UK is a private examination in practice, although not necessarily always in policy (Tinkler & Jackson, 2000). It is conducted behind closed doors, and only the candidate, the Chair, two examiners, and in some cases the supervisor, are allowed to attend. In the viva proper, the examiners ask the candidate questions about their thesis and research process. After the viva, the examiners can either decide to pass the candidate (sometimes with required corrections to the thesis), fail the candidate, or suggest a resubmission.

One account of the British viva (Trafford & Leshem, 2002) gives a more detailed description of the viva structure:

- i Pre-meeting between the two examiners;
- ii Greetings and introductions by the Chair;
- iii Opening remarks by the candidate;
- iv Questioning by the examiners;
- v Closing remarks by the candidate;
- vi In-camera session without the candidate and supervisor;
- vii Results.

According to this account, the candidate was invited to say something about him/herself and the reasons for choosing the particular topic of research before the questioning session. This reportedly relaxed the candidate.

However, there are differences between vivas in different disciplines. Jackson and Tinkler (2001) have reported that in the natural sciences the vivas are longer and fewer candidates are told about the examiners' decision beforehand. They also found differences in candidates' perceptions of vivas after the fact, which might indicate that vivas serve a different purpose in different disciplines. These differences between disciplines are something which requires further research.

Concluding remarks

Dissertation defences/vivas are often dismissed as “meaningless rituals”, but they are clearly different in rhetoric, length and character from ritualistic and ceremonial genres of the academy that deal with the awarding of prizes, honours, and degrees. Even if in the great majority of cases the outcome will be “pass” (in some countries after some revisions to the text), the dissertation defence provides an opportunity for an important academic conversation that operates to certify the candidate's membership in his or her chosen specialisation. In effect, in public defences everybody wants to do well: the Chair to demonstrate control of events; the examiners/committee members to demonstrate their expert knowledge and yet show their humanity; and the candidate to proudly defend the document that the examiners have (one hopes) all read and yet be ready to accept that his or her document, while meeting the institutional requirement of “making an original contribution to knowledge”, is still not quite as good as it might be.

Any repurposing of this genre (Askehave & Swales, 2001) suggests that there is a sufficiently complex agenda at work to disallow any single (or simple) function to predominate. Certainly, there remains an examination aspect, but equally (or close to it) there is a sense in some contexts, such as the US, that we have been witnessing a high-level editorial committee meeting. There is, additionally, a palpable air of what might be called “celebratory relief” whereby all participants share a sense that a long intellectual journey is in the process of coming to an end. Finally, the genre offers a showcase opportunity for the major players so that they can present themselves as demotic scholars within the evolved traditions of university life, within which expertise, humanity, wit, and insight can—ideally—be communicated without excessive pedantry or undue egotism.

Implications

Currently, little is available dealing specifically with language training for doctoral candidates, although some universities do offer English courses on speaking in research contexts. Courses should also be offered where candidates could practise summarising and presenting their theses and answering what they consider “difficult” questions. Ideally, mock defences/vivas, following the same procedures as the “real” defences/vivas, should also be organised.

A further promising international development is the emergence of “Three Minute Thesis” (3MT) competitions, where doctoral students are helped to summarise their research projects in just three minutes for a general academic audience. Examples of these can be found on the web.

Further reading

Swales (2004)

Related chapters

- 12 Dialogic interaction
- 27 PhD adviser and student interactions as a spoken academic genre

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PART VI

Research genres

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29

GENRE APPROACHES TO THESES AND DISSERTATIONS

Paul Thompson

Introduction

Writing a doctoral thesis or a master's dissertation is probably the greatest writing challenge a graduate student will face in the course of completing an academic programme, both because of the length of the text that has to be produced and also because of the complexity of the rhetorical task. At a fundamental level, the student writer has to demonstrate a command of subject knowledge allied with an ability to undertake independent research of a requisite standard, but the writer also has to display a degree of affiliation to a disciplinary community, by adhering, to some degree, to accepted conventions of communication within the community, and also has to establish an individual, coherent voice through the text. These requirements are not always made explicit, either, and often the writer has to work out what the expectations are.

In this chapter, I will argue that the main value of a genre approach to PhD theses and MA dissertations lies in the heuristic potential of such an approach, rather than as a set of prescriptions for how texts should be structured and expressed. This is not a novel argument; John Swales (2004:240) makes a similar point in relation to research articles (RAs). With reference to doctoral work, it is highly unlikely, for example, that a thesis on the history of alehouses in seventeenth-century Britain will be organised and written in the same way as a thesis on the molecular detection and characterisation of free radicals. The history thesis is likely to be organised into chapters by topic, progressing chronologically, while the chemistry thesis will report a set of experiments. It will be argued in this chapter that in diverse disciplinary and cultural contexts there are different degrees of rigidity of conventions surrounding the structure and style of theses, and that the task of the English for academic purposes (EAP) teacher is to sensitise students to the expectations of supervisors, and advisers and examiners in their field, or to make them aware of the need to find out what those expectations are. The writer then has to work within the constraints that conventions place upon organisation, style and presentation, and decide to what extent to adhere to those conventions. Furthermore, an important challenge facing the thesis writer is the need to develop a clear voice of authority (cf. Andrews 2007; Thompson 2012a). While conventions can facilitate communication and help readers to predict the development of a text, it should

also be recognised that in some circumstances a text can read as overly formulaic and that this can work against the writer's attempts to construct a voice of authority.

This chapter approaches the thesis (or dissertation) as genre, and surveys the findings of a range of studies of texts within this category: studies of rhetorical organisation, of moves, of metadiscourse features, of patterns and types of citation. Rhetorical organisation is dealt with first, in order to illustrate what has been observed about the typical structures for dissertations and theses, and to relate these to what has been written so far about the generic features of different sections of research articles. One point that is worth stressing here is that theses are not necessarily similar in structure, nor in communicative purpose, to research articles. We then move on to look at the genre studies that have investigated the moves and the typical features of different sections of theses, such as introductions, literature reviews, discussions and conclusions.

Consideration is then given to the notion of voice, and of how writers position themselves within their texts, and in relation to other texts: through the use of metadiscourse and of citations.

Rhetorical organisation

The prototypical form for the organisation of an experimental research article is the IMRD (or IMRAD) model: 'introduction, methods, results and discussion'. Typically, there will be a literature review component which may feature as part of the introduction or it may be a separate section, following the introduction. This model is also used as the structure for a thesis or dissertation but it is by no means the only one. Thompson (2001) found that writers in agricultural botany followed either a simple IMRD model or they produced a series of chapters, each of which followed the IMRD model, and placed a general introduction at the beginning and a conclusion at the end, while doctoral students in agricultural economics were more varied in their organisation of theses, and used what can be called a 'topic-based' model. In one agricultural economics thesis, for example, the chapter headings introduce the topic of each chapter as follows: 'The Classification of Marketing Systems', 'Theoretical Considerations', 'Practical Applications', 'A Modular Approach' (in which the framework developed in the thesis is explained), 'Data Collection Methods', and 'Applying the Modular System to the Egyptian Potato Sector'. There is some predictability in the order of the chapters, from theory to framework, then to data and testing of the framework, but each chapter is less conventionalised than the chapters in an IMRD thesis.

Swales (2004:110) summarises the findings of four studies with regard to instances of structures, where distinctions are made between a simple style (i.e. IMRD), a complex style (he refers to this as 'article compilation', although that was not what Thompson (2001) had originally intended by the term 'complex') and a topic-based model (Table 29.1). This

Table 29.1 Types of PhD thesis in various studies

	<i>Simple</i>	<i>Complex</i>	<i>Topic-based</i>
Ridley 2000	6	23	21
Paltridge 2002	6	5	4
Thompson 2001	1	7	6
Bunton 1998, 1999	3	9	9

indicates the range of structures employed by thesis writers. This three-way model has been adopted broadly in the literature; Paltridge and Starfield (2007), for example, use this in their guide for PhD supervisors.

The article-compilation thesis is known also as a ‘thesis by publication’ or a ‘compilation thesis’, and typically is made up of chapters that have been published in international journals as stand-alone pieces, as well as an introduction and a conclusion that aim to give coherence to the compilation. Samraj (this volume) discusses genre approaches to research articles and no further treatment will be given here of the compilation thesis.

Because not all theses and dissertations are the same, the distinction between the three types of thesis structure is to some extent simply a convenience that allows for generalisations along the lines of ‘How are methods sections written in complex theses in the area of agricultural botany?’ However, the tripartite distinction does also allow researchers (and students) to explore texts that at first sight do not fit the models. Paltridge *et al.* (2012) investigated practice-based doctoral dissertations in the visual and creative arts within Australian Higher Education and found that there was a gradient of textual practices, ranging from those writers who follow traditional patterns of organisation and those who are establishing innovative practices. Some of the dissertation writers adhered quite closely to a traditional IMRD structure, while others adapted the framework for their own purposes or used a loose topic-based model. Rather than form being simply a mould for content to be poured into, the writers appear to exploit forms to convey their messages (cf. Coe, 1987). As Paltridge *et al.* (2012:333) point out, citing Miller (1994), ‘Clearly, a genre is more than its form’.

Looking at the sections

Introductions

In the same way that genre analysis has been applied to the constituent parts of research articles, with most attention being given to the traditional IMRD model, researchers looking at theses and dissertations have investigated the typical moves and linguistic features of the introductions, the literature review sections, results and discussions, and conclusions, in theses and dissertations.

Bunton (2002) developed a model of generic moves in PhD thesis introductions, using a set of theses written by Chinese L1 writers. He observed that thesis introductions tend to be longer than research article introductions (typically a full chapter rather than a section), and therefore contain more moves than are detailed in the create a research space (CARS) model. His data consisted of 45 theses, drawn from a range of faculties: science, engineering, arts, education and social sciences. He found differences between (broadly speaking) the science and technology writers and the arts/social sciences writers. For example, in social science theses, research questions and hypotheses were far more likely to be stated explicitly in the introduction than in the science and technology disciplines. Bunton’s model retains the shape of the CARS model (there are three moves, here called ‘establishing a territory’, ‘establishing a niche’ and ‘announcing the present research’), with the greater change from the RA CARS model appearing under the third move which is shown to contain the following possible steps:

- 1 Purposes, aims or objectives
- 2 Work carried out
- 3 Method

- 4 Materials or subjects
- 5 Findings or results
- 6 Product of research
- 7 Significance / justification
- 8 Thesis structure.

(Bunton 2002: 74)

Genres, according to Miller (1994), are social actions, and they develop out of the repeated performance of similar communicative events which in turn leads to conventionalisation. If this is the case, it is to be expected that they will differ between language and/or cultural groups. Soler-Monreal *et al.* (2011) conducted a contrastive study of the rhetorical organisation of English and Spanish PhD thesis introductions in the field of computing. They found that the three moves ('establishing a territory', 'establishing a niche' and 'announcing the present research') were all present in the English theses but in the Spanish theses the second move was optional. They also found that the English theses featured more cyclicity of the moves (for example, M1-M3-M1-M2-M3-M1-M2-M3-M1-M2-M3) than the Spanish. Additionally, the English theses contained more assertions regarding the originality of the work, and its contribution to the field, which may indicate a more self-promotional quality to writing in English.

Using a corpus of literature PhD theses written by native speakers of English (48) or Japanese (51), Ono (2012) performed a move analysis of the introductory chapters of the theses. She found that these chapters all contained the following moves: 'statement of aims', 'stating the writer's approach', 'presenting the fictional work and/or its author', 'review of previous research', 'writer-centred statement' (Ono's term for statements expressing the writer's cultural, social or educational experience) and 'outlining the chapters', but, interestingly, they seldom added to previous knowledge nor did they explicitly justify their own research, method, approach, theoretical position, claim or thesis structure. In terms of cross-cultural differences, Ono observed that the Japanese writers put more emphasis on indicating gaps, and specifically they pointed to 'lacks' in the previous literature. In this case, the variations are ascribed to differences in educational traditions and cultural norms rather than due to differences in disciplinary practices.

It is important to note that the Soler-Monreal *et al.* study was conducted on a corpus of twenty theses which is a reasonable size for a close genre analysis but, as a result, the results can only be generalised with much caution. Even Ono's corpus of 99 theses is small in comparison to the number of dissertations and theses produced annually worldwide. This is true of all of the genre studies discussed in this chapter – they have been conducted on small samples. From an EAP practitioner's point of view, therefore, it would be inadvisable to conclude, for example, that all computing doctoral students in an English-medium environment are expected to promote themselves openly in the introduction section. Rather, this suggests a hypothesis for the teacher and students to test, a prompt for an investigation of whether or not supervisors and departments encourage students to state the value of their thesis explicitly.

So far, we have looked at studies which take a broadly functional approach to text analysis, with the emphasis on the sequencing of 'moves' and 'steps'. Lim *et al.* (2014) argue that EAP writers may lack the linguistic skills needed in order to perform or introduce the steps, and so it is important not only to identify the steps and moves but also to describe the language patterns typically used to perform a step. They focus on how thesis writers in a particular discipline typically perform a single step: the expression of hypotheses in the introductions

of experimental applied linguistics PhD theses. They find that half of the theses that they sample contain explicit statements of hypotheses, and that these statements tend to be in the present sample in an anticipatory *it*-clause, indicating a prediction (for example, 'it is hypothesised' or 'it is expected'), followed by a *that*-clause.

Variation between disciplines is examined in finer detail by Samraj (2008) who looks at master's theses from three disciplines: biology, philosophy and linguistics. Her study combines discourse analysis with interviews with subject specialists. In line with Bunton, she establishes that dissertation introductions contain discourse features that distinguish them from research article introductions as a genre. Her comparison of the three disciplines also reveals a cline between biology students who tend to remove themselves from the text in contrast with philosophy students who assert a stronger authorial presence through the use of first person pronoun and the ways that they cite other work. Linguistics students are in the middle of this cline.

Literature reviews

Bunton (2002) found that introductions varied in length, and part of the reason for this was that some thesis introductions included substantial reviews of literature, others included some review of literature while the rest left the literature review to other chapters. Kwan (2006) investigated similarities and differences between thesis introduction chapters and literature review chapters in terms of moves. In a corpus of 20 doctoral theses written by native English-speaking students of applied linguistics, Kwan found that the discussion of the literature was divided into thematic sections, each of which featured recursive move structures that resemble those which Bunton had found in thesis introductions. She observed that they used many of the same steps that Bunton identified in the introduction moves, and some additional strategies were observed: strength-claiming, relevancy-claiming and the synthesising of the theoretical framework. However, she noted that a major difference between the introduction and the literature review is that the introduction also has a macro function of creating the research space for the thesis in more general terms.

Gil-Salom and Soler-Monreal (2014) extend their contrastive analysis of English and Spanish computing theses (see above) to the literature reviews of the same 20 theses. They use Kwan's framework for analysis of moves and strategies and find, *inter alia*, that the two sets of writers use Move 2, 'create a niche in research', but the English writers use a wider range of strategies.

Discussion of results

Dudley-Evans (1986) proposed a nine-move model for discussion sections of master's dissertations. In a writing guide directed at writers of empirically-based doctoral theses, Bitchener (2010:180) provides a revised model that is composed of three moves:

- 1 Provide background information
 - (a) restatement of aims, research questions, hypotheses
 - (b) restatement of key published research
 - (c) restatement of research/methodological approach
2. Present a statement of result (SOR)
 - (a) restatement of a key result
 - (b) expanded statement about a key result

- 3 Evaluate/comment on results or findings
 - (a) explanation of result – suggest reasons for result
 - (b) (un)expected result – comment on whether it was an expected or unexpected result
 - (c) reference to previous research – compare result with previously published research
 - (d) exemplification – provide examples of result
 - (e) deduction or claim – make a more general claim arising from the result, e.g., drawing a conclusion or stating a hypothesis
 - (f) support from previous research – quote previous research to support the claim being made
 - (g) recommendation – make suggestion for future research
 - (h) justification for further research – explain why further research is recommended.

In this framework, Bitchener explains, the writer is likely to repeat a cycle of 2 followed by 3, so that the pattern may be: 1–2–3–2–3... (where the ellipsis indicates that the sequence 2–3 can be repeated several times).

Basturkmen (2009) compared how research article writers comment on their own results in the ‘results’ section with how master’s dissertation writers do the same. She found that the sequencing of moves was the same between both groups but that the student writers tended to provide more detail about their results, as though they were still unsure about the interpretation, and the RA writers were more likely to provide alternative explanations.

Conclusions

Bunton (2005) notes that the generic structure of a conclusions chapter is not the same as that of a discussion chapter, and proposes a five-move model for a conclusions chapter, given here with a small change made to Move 4 based on Thompson (2005a):

- Move 1: restatement of aims and research questions
- Move 2: consolidation of present research (findings, limitations)
- Move 3: practical and theoretical implications
- Move 4: recommendations for further research
- Move 5: concluding restatement.

Bunton also stresses that there is variation in practice and that the moves are not obligatory. This is reiterated by Lewkowicz (2009) in her close analysis of 15 theses from the field of English applied linguistics, written by Polish students. In four of these theses, the authors did not include the ‘Consolidation of present research’ move, but instead summarised the findings of each chapter in turn. Lewkowicz also makes use of a distinction that Bunton drew, between conclusions that are predominantly thesis-oriented (consolidating the research space) and those that are field-oriented (addressing field-central issues with mentions of how the thesis contributes to the field). One of her conclusions is that there is no single pattern, and that success is not a question of following a formulaic approach. It is worth noting, however, that Lewkowicz does not provide any information about the grades that each thesis received. Were the writers who included ‘Consolidation of present research’ moves more highly rated, or *vice versa*? This is not to take away from the point that Lewkowicz makes about the danger of taking a formulaic approach but it is important also to question what level of success may be achieved by following a particular strategy.

The author's presence in the text

Elsewhere (Thompson, 2012a) I have discussed the importance of voice in the PhD thesis. A doctoral student is typically in the position of having to demonstrate authority in a particular field of study. The text that is produced will be examined by a set of examiners, and the student is required to 'defend' the thesis (Mežek and Swales, this volume), and so in the text the writer has the opportunity to anticipate and mitigate any possible challenge to that authority from the examiners. Two means for developing a strong voice of authority within a thesis are the uses of metadiscourse and of intertextual reference, or citation.

Metadiscourse has been theorised and discussed in depth by several researchers, perhaps most notably Hyland (2005) and Ädel (2006). For Hyland (2005:37), metadiscourse is 'the cover term for the self-reflective expressions used to negotiate interactional meanings in a text, assisting the writer (or speaker) to express a viewpoint and engage with readers as members of a particular community'. When Swales (1990) made the observation that, because theses and dissertations are long texts, there will consequently be a need for more metadiscourse, he was presumably thinking mainly of the pieces of text that are added in to guide a reader through a text and through an argument (such as 'This chapter consists of four sections' or 'This will be explored in greater in detail in the next chapter'). Bunton (1999) tested this suggestion in his examination of 13 PhD theses. He found considerable variation in the amount of metatext (as he terms it) in the theses, with a range between 2 per cent and 16.5 per cent for the proportion of text taken up by higher-level metatext. The study confirms that metadiscourse can play a major role in a thesis, and Bunton also argues that the low incidence of metatext in some of the texts may suggest a need for writing guidance on the importance of including metatext (on the premise that the theses with 2–5 per cent needed more metatext). In addition, there are clear differences between the science and technology and the humanities/social sciences (HSS) in the uses and quantity of higher level and lower level metatext, with much higher incidence of lower level metatext in the HSS texts.

Lee and Casal (2014) conducted a cross-linguistic study of the use of metadiscourse by English and Spanish thesis writers. They examined the results and discussion chapters in 100 English and 100 Spanish Engineering theses, and found that interpersonal features of writing are strongly linked to the linguistic and cultural contexts in which the texts are produced. For example, the Spanish texts contained a higher number of engagement markers, particularly in the use of first person plural pronoun, which Lee and Casal attribute to a need for projecting an impression of inclusiveness in Spanish, while hedges and boosters are more common in English, where the tendency is to mitigate one's claims, as opposed to a proclivity for bald statement in Spanish.

In relation to hedges, Koutsantoni (2006) compared levels of hedging in research articles and theses in the fields of electrical and chemical engineering. Her analysis of a corpus of 17 research articles and nine master's and PhD theses revealed that the students hedged more than the 'expert' writers, and they almost exclusively avoided taking personal responsibility for their claims; that is, where expert writers may say 'We make no claims for our particular version other than it is fairly standard', the thesis writer tends to write 'The results of X are preliminary only and there is considerable scope for further work'. It should be observed, however, that the number of theses in this study was small, and that it was a mixture of master's and PhD texts – one would expect that the PhD writers would be closer to experts than the master's students.

Hyland (2004) investigated metadiscourse in a substantial corpus of 240 theses and dissertations written by Hong Kong Chinese students. In line with Lee and Casal, he

found that the most frequently used devices for these English language writers were hedges and transitions. Between the two types of texts, Hyland found that the doctoral theses used proportionately more metadiscourse than the dissertations, and also that they used more interactional metadiscourse (hedges, boosters, attitude markers, *inter alia*) than the master's dissertations. This can partly be attributed to the greater length of the texts but also to a developed recognition by the doctoral students of the social interactional nature of academic text.

Using a large corpus such as Hyland's makes it possible to make relatively robust generalisations about the occurrences of features in a given genre, but using a small corpus allows the analyst to delve deeper into the complexities of certain linguistic features. In a smaller corpus, for example, the researcher can code the data comprehensively in order to identify features that cannot all be identified by surface formal features alone. This is true of the studies of citation practices in theses and dissertations where analysts have worked with smaller collections of texts. Thompson (2005a) looked at both functions and forms of in-text references to other texts within a set of eight agricultural botany theses, which follow either a simple or complex model of overall organisation. The use of citations is most common in introduction/literature review and discussion sections, with relatively little positioning of the writer in relation to other texts in the methods and results sections. Weissberg and Buker (1990) distinguish between integral and non-integral citations (the former is placed within the sentence and plays an explicit role within the syntax of the sentence, while the latter is typically placed outside the sentence in brackets), and postulate that integral citations put focus on the cited author(s) while non-integral citations make the information contained in the sentence prominent. Drawing on this, Thompson observes that in agricultural botany thesis introduction and discussion sections, the tendency is to use non-integral citation types and focus on information rather than the researchers. The choice of citation type appears to be influenced by this and other rhetorical considerations, including the preferred theme–rheme relations in a series of sentences.

Petrić (2007) examined citation functions in eight high- and eight low-graded master's theses in the field of gender studies, written in English as a second language. The rhetorical functions of citations studied were: attribution, exemplification, further reference, statement of use, application, evaluation, establishing links between sources, and comparison of one's own work with that of other authors. Both high- and low-rated writers used citations predominantly for attribution, but the use of citation for non-attribution functions was found to be much lower in the low-rated theses than in the high-rated theses, both in the whole theses and in individual chapters.

Samraj (2013) explored the functions of source text use in the discussion sections of master's theses and research articles from biology, using both Thompson's (2005a) framework and a novel set of functional categories, along with a set of specialist informant interviews. Her study revealed that citations were used not only in order to compare present results to results from previous studies but also throughout the discussion section to contextualise the current study within previous studies, and to strengthen the writer's argument. Looking at a small number (in Samraj's case, 16 theses) has the benefit of revealing the complexity of citation use in thesis writing. In addition, her interviews with specialist informants indicated that, although the student writers had attempted to relate their individual studies to the 'bigger picture' by including citations to previous literature within the discussion, they were not always successful in making adequate connections between what the writers have done and what had already been done.

In terms of distribution of citations across the chapters of a thesis, Thompson (2005b) observed disciplinary differences with experimental science writers tending to use citations in the final chapter of the thesis, to compare their findings to those of previous researchers, while the economics writers used far fewer. The economics theses, Thompson explains, tend to concentrate on the development of a new model (or models) out of the discussion of previous ones, and the conclusion chapter functions mainly as an evaluation of the new model, rather than a recontextualisation within the field.

Charles (2006) examined citation behaviour in theses in a comparison of two disciplines: material science and politics/international relations. She looked at the phraseological patterns that were used in reporting clauses, more specifically, finite reporting clauses with *that*-clause complement. Both disciplines used significant numbers of the reporting clauses, usually as integral citations with a human subject. Both disciplines used ARGUE type verbs (e.g., *argue*, *note*, *suggest*) but in materials science, there was also a predominance of use of the FIND/SHOW verb group (e.g., *show*, *find*, *observe*) in past tense.

A recurrent theme of the studies is that citation is a complex matter and that authors have to make informed decisions about the verbs they choose to use, the type of citation (integral or non-integral) and so on. As Thompson (2005a:321) concludes:

... student writers should look not only at the formal features of citation types but should also consider the implications of different choices, both at a local level (the sentence and the paragraph) and also at a higher discursive level (what to give prominence to, how to maintain the dominance of the authorial voice throughout the text, and how to position oneself in relation to the immediate audience and to the wider disciplinary community).

Situational perspectives and pedagogical issues

Thus far, the focus has been predominantly on textual products. Theses are not produced in a vacuum, though, and Swales (2004) makes a cogent case for viewing theses as part of a genre-chain. He provides as example a flow diagram going from 'prospectus/proposal' to 'defence' to 'dissertation', 'defence', 'revisions' and 'award' which describes the final stages of a US doctoral degree. In different educational systems the chain may be different. In addition to these elements will be the various genres that surround doing doctoral work such as conference and seminar oral or poster presentations, documents submitted for upgrade, progress review statements and so on. Comparatively little has been written in the EAP literature about these genres, although they are worthy of attention because the rhetorical context is so often different, and students may need to be made more aware of the factors that they should consider.

In addition to the complex of genres, these texts need to be seen in dynamic terms. As Paltridge (2012:1) writes:

There are many factors that influence the decisions a student makes while writing a thesis or dissertation in English. These include the orientation of the project they are describing, the student's perceptions of the audience of their text, the discipline in which the student is writing, and the values and expectations of the academic community at which the text is aimed.

Thesis writing has been treated as a situationally mediated activity in studies that explore the academic interactions and relationships between student, other students and the supervisory team. These studies will not be discussed in detail here as the focus of the chapter is on genre approaches; more detail can be found in Thompson (2012b).

Shaw (1991), for example, found that science supervisors tended to exert a strong influence on several aspects of their doctoral students' thesis, such as the research design and the writing of the literature review, while in an arts subject Turner (2003) reported that the supervisor wanted the students to be much more independent. Belcher (1994) observed that less successful students tended to have less complete understanding of the values of the community they worked in; and Duff (2010), conversely, found that the more successful supervisors were those who were able to articulate and communicate the values of the community more effectively. Cadman (1997) worked with a Thai doctoral student for a year helping the writer develop a more authoritative voice, and she observes how the student writer slowly moved away from attention to small details and achieved a view of the 'bigger picture'. Le Ha (2009) recounts and reflects on the experience of helping her Indonesian student, Arianto, to overcome feelings of alienation and inferiority, and to establish a personal writing space in English. For a rich collection of papers that explore how graduate students learn how to participate in their research communities, how they learn to negotiate their relationships with supervisors and peers, and how they cope with the challenges to their sense of identity, readers are referred to Casanave and Li (2008).

In relation to how writing was perceived, Bitchener and Basturkmen (2006) explored the differences in perceptions of difficulties in writing the 'discussion of results' section of a thesis. Students tended to perceive their language problems at the sentence level while the supervisors viewed them in terms of creating clear meaning at the paragraph level, and of understanding the rhetorical and organisational requirements of the genre. Cooley and Lewkowicz (1995, 1997) also reported that supervisors at the University of Hong Kong identified difficulties affecting the development of coherent ideas and arguments as more important than surface-level errors.

There are countless handbooks on 'How to write a PhD thesis' (for a review, see Paltridge, 2002) but few of them are closely informed by the findings of genre analysis. Bitchener (2010) is a notable exception. The book has separate chapters for the abstract, the introduction, literature review, methodology, results, discussion and conclusion, and each chapter is then divided into sections that identify first the functions and then the forms of the particular rhetorical unit, before presenting exemplary move analyses of samples. Swales and Feak (third edition, 2012) is a classic genre-based textbook for use with graduate students, and is complemented by shorter books focusing on the abstract (Swales & Feak, 2009), the introduction (Feak & Swales, 2011) and the literature review (Feak & Swales, 2009).

Conclusion

The main argument of this chapter has been that genre approaches to the analysis of dissertations and theses have a powerful heuristic value. As seen in the work of Petrić (2007), for example, more successful writers exploit a wider repertoire in their texts, and genre approaches (and findings) can be used to make students aware of the range of options that is available to them.

First, genre analysis identifies the communicative functions that thesis writers typically need to express, in what sequences, and then relates these functions to overall purpose. This is usually related to broader macro-functions such as 'literature review', 'methods', 'results'

and so on. Having identified the functions, the genre analyst can then determine which linguistic structures are typically used to perform the functions, relating these to community preferences and, therefore, also to potential effects, and, thus, help student writers to expand their range of options and their ability to make informed decisions about which option fits their purpose most closely.

Second, genre analysis can identify and classify the role that resources such as metadiscourse and intertextual reference play in the mediation of the relationship between author and reader and in positioning the author amongst other researchers in the field.

The genre research that has been conducted to date on theses and dissertations has established useful frameworks for describing the structures of such texts, and has identified some rhetorical features (such as additional move types and sequences) that distinguish these texts from research articles. However, it must be stressed that most of this work has been conducted on small samples of data, and with often quite particular disciplines, which means that EAP practitioners need to test these descriptions against representative (and local) samples of the texts that their students are aiming to produce.

The findings of genre studies are valuable to EAP teachers for the insights they provide into what are often complex and remote texts (unless the teacher has had experience of writing a thesis in the same field of research as the students that they are working with). With the growth of e-thesis repositories (Edminster and Moxley, 2002), teachers and students alike have better access to exemplars of theses and dissertations (with the proviso that there is often no grade attached and no assurance of high quality). Analyses of this textual evidence, along with investigations of the expectations and values of their disciplinary community, can be conducted by students, acting as researchers into the practices of their communities (Johns, 1997; Paltridge & Woodrow, 2012).

Further reading

Bitchener (2010); Swales (2004)

Related chapters

- 16 Corpus studies in EAP
- 17 Ethnographic perspectives on English for academic purposes research
- 27 PhD adviser and student interactions as a spoken academic genre
- 28 PhD defences and vivas

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30

THE ACADEMIC POSTER GENRE

Friend or foe?

Larissa D'Angelo

Advantages and disadvantages of the academic poster genre

Almost all students or novice researchers, upon entering the academic world, know that eventually they will be invited to prepare and present an academic poster. This task is often met with mixed feelings not only because it is often the entry point into academic life, but also because what the genre entails is not always clear to the novice author (Hay & Thomas, 1999). The poster session itself is often met with mixed reviews both from the participants as well as the viewers, because of several physical limitations, and the fact that still today it is considered less prestigious to present at a poster session than at a paper session (Swales & Feak, 2000; Swales, 2004).

De Simone et al. (2001), for example, have noted that the traditional poster presentation can at times be frustrating for authors and can leave them, as well as the audience, with a sense of incompleteness. This negative evaluation of the genre leads De Simone et al. (ibid.) to consider the academic poster as a communication tool that is frequently inadequate for the message it carries. Probably triggering this idea is the fact that each poster generally attracts a limited number of viewers and sometimes not enough attention is given to the poster session by conference organizers. A poster presenter does not have the advantage of having a committed audience and has to compete with other presenters for space, visibility and attention (Morin, 1996a, 1996b), and if poster presenters do manage to attract someone's attention, they have to accept the fact that in most cases, the interaction will be brief and superficial; a frustrating experience to say the least.

Sometimes instead, the interaction might carry on longer than expected, which is at the same time rewarding and challenging. The possibility to interact personally with an author, with no time limitations, in fact means that viewers are given the chance to pose numerous questions and comments which, if particularly challenging, might put the poster presenter into difficulty. If paper presenters have to endure five or ten minutes of question time, poster presenters are asked to remain available and interact with viewers for one or two hours at a time, sometimes even longer. Staying alert and attentive for such a long time can be tiresome and stressful. Fortunately, as mentioned before, this smaller arena is also traditionally more informal than other sessions. This colloquial, almost intimate aspect of the poster presentation is what makes the genre so unique and challenging at the same time.

A person approaching a poster presenter, if interested, can establish a relationship with him/her, which is undeniably less intimidating than the one taking place at a paper presentation. It is also here that the presenter can engage, if necessary, in longer discussions, describing the work done (or yet to be done), admitting to mistakes and doubts, asking questions and receiving answers from viewers. Finally, it is often here in this smaller academic arena that researchers socialize and the most fruitful networking is done.

Notwithstanding the apparent limitations of the genre, poster sessions do play an important part in scientific conferences, or at least they have the potential to do so for various reasons. Posters, if done well, can become a valuable tool because they enable researchers to display not only completed research work, but also on-going research and preliminary findings, which would often not be accepted for paper sessions. In this sense, the poster genre can be said to have ‘intermediate status’ (Swales, 2004, p.199), a characteristic that distinguishes it from other genres, and makes the poster session an engaging and often highly productive event to participate in.

It is also a type of conference presentation that makes the use of visuals pivotal because, like PowerPoint presentations, posters display text and visuals and are organized in such a way that the viewers are able to ‘glimpse’ the research work of a colleague, having, in this case, the freedom of ‘reading’ the poster at their own speed, of lingering on a specific aspect of the work, a table, graph or picture displayed. Finally, if they wish to, they have the rare opportunity to engage with the author in a one-on-one discussion.

Given the fact that the academic poster comprises a textual, visual and oral component, it can be defined as a multimodal genre (D’Angelo, 2011) that, compared with genres with more rigid structures such as the research article, lacks precise prescriptive guidelines but at the same time allows presenters not only to be creative but also inform and persuade. Already in the early 1990s, researchers realized that the poster genre requires numerous artistic and stylistic skills from the author and is not a genre to be taken lightly:

Integrating text and graphics within a limited space to convey a visual message requires detailed organization. Without professional assistance, the poster presenter must function as a writer, editor, designer, and artist. In displaying scientific information, a poster functions “to give visual access to the subtle and the difficult – that is, the revelation of the complex” (Tufte, 1983); it achieves this function through the pure form of a condensed, high-impact message integrating text and graphics.

(Matthews, 1990, p. 231).

As Purrington (2014) notes, since then numerous programs other than PowerPoint have appeared on the market (e.g. InDesign, LaTeX, Illustrator, CorelDRAW and PosterGenius) enabling researchers to design and format posters with relative ease. These technological tools, however, implicate that the poster presenter has a good command of IT and knows how to utilize these tools correctly.

Another point to consider is that the poster session is a relatively safe place to test the oral capabilities of speakers and the soundness of their research. It is during poster presentations that students and young researchers can, in fact, learn from trial and mistake because they are protected by an informal setting that allows minor mistakes and omissions and that, most of all, allows researchers and students alike to build and strengthen their academic persona.

The technological evolution of the academic poster genre

What also sets the poster genre apart from other, more traditional genres such as the research article is the fact that it is a genre closely linked with technology and is therefore subject to rapid changes and technological innovations (Bach et al., 1993). With the aim of transforming poster sessions into wider, more appealing events, a number of disciplines has been experimenting with different ways of facilitating presentation and discussion of posters (MacIntosh-Murray, 2007). Among them are poster projections followed by two- to three-minute oral presentations, online poster sessions, digital interactive poster presentations (DIPP) and virtual science fairs with online conferencing or weblogs (De Simone et al., 2001; Powell-Tuck et al., 2002).

As De Simone et al. (2001) explain, the DIPP is a PDF version of a traditional paper poster, which is usually projected on a screen during specific DIPP sessions that precede (or replace) traditional poster sessions featuring paper versions of posters. During these DIPP sessions, presenters are asked to project their PDF posters on a screen for three to five minutes maximum, and summarize their research work. The audience present can then look for any poster that interests them during the regular poster session. The chance to take the floor, even for a few minutes, is undeniably precious as it gives presenters the possibility to showcase their work even before the poster session starts and probably attract a greater number of interested viewers as a consequence. During the brief presentation, presenters can enlarge parts of the posters, such as tables, graphs and images so that they can concentrate on certain aspects of the presentation. A DIPP can also be made available online by conference organizers, not only after but also before a conference takes place, so that participants can browse through a database of posters presented (or to be presented) and retain the information they are mostly interested in. DIPPs allow, for this reason, the participation of a much larger audience; they create an interactive presentation and a more effective discussion of scientific data. Because of these innovative features, the audience generally meets these digital poster presentations with wide and enthusiastic acceptance (De Simone et al., 2001).

In comparison, a traditional poster (i.e. printed on paper and showcased on a panel) has severe time and space constraints, because the research work it displays remains available to the public only for the duration of the conference. The fall-out of a regular poster presentation is, therefore, limited and the poster itself is bound to have a short life span. It is the norm, in fact, for a poster that has been presented at a conference to end up either in a bin or on the walls of a department for display before it deteriorates and is eventually thrown away.

Powell-Tuck et al. (2002, p. 261) used the term 'e-poster' for a form that resembles a DIPP and is handled and displayed in the same way. Their work is, however, interesting because it provides an initial appraisal of this new 'technological' version of posters provided by conference participants attending the e-poster session. As Powell-Tuck et al. (*ibid.*) write, at a medical congress which took place in 2001, presenters were invited to send their PDF versions of posters to the organizers. As for the DIPP,

Presenters were encouraged to 'talk to' the projection as if it were a traditional poster, but could 'click' with a mouse onto individual components, perhaps a table or figure, of the 'e-poster' and thereby enlarge it to full screen size. A further click of the mouse returned the presenter to the poster format.

(Powell-Tuck et al., 2002, p. 261)

Delegates attending two e-poster sessions, and a control group attending two simultaneous traditional poster rounds, responded to a questionnaire evaluating the ability of delegates to hear and see well, the posters' clarity and attractiveness and whether the format of the session was able to capture viewers' interest and encourage discussions. Finally, delegates were asked if they would respond positively to the use of e-posters in the future. The feedback received, Powell-Tuck et al. (2002) say, clearly favoured the use of e-posters, because they facilitated the viewing of the full content of all posters, they captured viewers' interest and encouraged discussion.

The fact that an e-poster database makes it possible to carry out a detailed search of a computer-based database of presentations is pointed out by Powell-Tuck et al. (2002), who also believe that post-conference collaboration is enhanced by facilitating e-mail exchanges. This is possible especially when the digitalized poster is no longer just projected on a wall and is instead shown through a computer or LCD screen. In this case, numerous features, such as QR codes, hyperlinks and email addresses that allow instant messaging can be added, enhancing the communication passing between the presenter and the audience (D'Angelo, 2012). Also, the amount of information provided by the presenter is tremendously increased, in this case. For example, e-posters can be quickly scrolled through and viewers can email comments and feedback to presenters immediately, a feature that allows communication and feedback to instantly reach poster presenters, even if they are not physically present or the e-poster session has already closed. Smartphones can scan the QR code displayed on the e-poster to receive further visual, audio or textual data, to note the author's contact information or to be re-directed to a specific web page. The possibility to hyperlink a poster's content is particularly useful, because it eliminates the space limitation problem typical of posters (ibid.).

A few years after e-posters started to be used, Rowe and Ilic (2009, p. 5) reported on the development of another interesting and innovative type of interactive poster called 'MediaPoster':

In developing the 'MediaPoster' concept, we have looked to enable the combined evolution of the DIPP principle and its traditional forebear. The 'MediaPoster' aims to combine information technology (IT) with a 'traditional' poster appearance, thus retaining the static image and at the same time releasing the full interactive potential of the medium.

Just like the e-poster, the 'MediaPoster' is presented on an interactive LCD or whiteboard screen, and displays embedded links to additional information. Like with the e-poster, viewers can select a particular area on the poster and instantly access additional data, images, video and audio material, as well as texts. The novelty in this case is that this additional material opens at the side of the screen, so that the original poster presentation always remains in sight (Rowe & Ilic, 2009). Viewers are not redirected to a webpage, which would force them to virtually leave the poster presentation, but instead remain within the same media, with the original poster always open and accessible. In this case, as Rowe and Ilic (2009, p. 6) have noted, authors are given the chance to 'assign their own academic "depth" to the medium'. Likewise, readers are free to browse through as much information as they wish, concentrating on a single aspect of the research displayed or retaining all the additional information provided through the hyperlinks. This digital system is currently being utilized by electronic poster software companies such as ePosterLive and is rapidly gaining a wide acceptance by academics (PR Newswire, 2012). What is important to note here is that with

systems such as the one mentioned, the poster session experience changes enormously. Large monitors replace traditional paper posters, and boards are no longer needed. By presenting posters in sequence and on-demand, more posters can be viewed at different times. Also, the strategic use of dedicated workstations allows attendees to find, review and download posters during the entire conference. There are, however, a number of drawbacks to consider when it comes to the use of e-posters. For example, what happens when more than one person wants to look at a poster on an interactive LCD screen? Probably, if a conference participant finds an LCD screen occupied, s/he will avoid approaching the screen because only one person can 'navigate' an interactive poster presentation, zooming in and out of the hyperlinks. We see here a genre that was traditionally meant to be open to multiple viewings (imagine a small crowd of people gathering around a traditional paper poster, all listening to the presentation or individually looking at the poster content) becoming instead an exclusive experience. If the author of the e-poster is physically present next to the LCD screen, then s/he might be able to mediate between the needs of multiple viewers, but one viewer will always prevail over another, monopolizing, even if briefly, the discussion and therefore the interactive poster presentation. Also, setting up e-posters might make the costs of conferences rise because of the need for new software and hardware, as well as the costs associated with electronic poster software companies. Meeting these technological and financial demands might not always be possible, especially for conferences in the humanities.

Another dedicated online service is MULTIEPOSTER, but in this case, the procedure to convert traditional posters into digital posters is not always a straightforward one. The poster author attending a conference that utilizes the MULTIEPOSTER system is required to send the PDF or PPT version of the poster, divide it into sections and give these sections a title, as well as a chronological order. The poster is, thus, transformed into a PPT presentation, an important shift in medium that has a number of important consequences for what concerns readability, salience and, most of all, the reading process. The magnifying glass tool is no longer available, because it was deemed 'confusing' by the creators of the system, and it was replaced by a guided auto-zoom that guides users into the various poster sections, apparently facilitating reading and enhancing the comprehension of the content. Also, slides are easily embedded with video and audio clips which enhance the presentation's content. The shift from the poster genre to the PPT genre is a radical one, and the consequences of this change are not entirely positive. As with every PPT presentation, especially if automated, the reader is forced to follow the sequence of the slides and cannot skip unwanted information or quickly browse through the entire poster before deciding on which aspect to focus. The use of a uniform template, moreover, prevents presenters from using key visual elements capable of attracting viewers (cf. D'Angelo, 2012). The presenter in this case has no way to 'stand out from the crowd', because each poster is rendered equal (from a cognitive point of view) to everyone else's. A final negative aspect of this shift is that neither the best practices of poster design nor those of PPT are followed. When assembling a PPT poster presentation, authors are advised to avoid slides overcrowded with text, as this diminishes the retention of information, and might even eventually lead the reader to stop reading the presentation altogether (Alley, 2003; Atkinson, 2005; Doumont 2005).

Another type of medium that sometimes replaces the traditional poster or e-poster at conferences is the website. In this case, presenters choose to construct a website to display their research results or on-going research, as well as additional information in the form of text, pictures and videos. Because of the infinite space a website provides, the amount of information conveyed through such a medium cannot possibly be compared with the limited paper boundaries of the traditional poster. Also the e-poster, with hyperlinks, emails

and videos, is still bound to two reading levels: the first one being the original poster and the second being the enlarged section of the poster, the PDF file that can be downloaded as supplementary material or the video that can be viewed. Websites, instead, contain numerous reading levels that in turn provide as many hyperlinks and downloadable material as desired. Because of the different nature of this medium, an e-poster/website is capable of containing as much content and information as a research article, if not more. This aspect represents a radical change for poster presenters who are, in this case, given the tools not only to go 'online', but to go online with endless space to communicate. Unfortunately, as with the e-poster form, the presentation loses its public aspect because it only allows one viewer at a time, browsing through the website poster at his/her own speed and depth.

A final example of how far the poster genre has come in the past few years, and how the tools available to presenters have changed, are virtual science fairs with online conferencing or weblogs (Powell-Tuck et al., 2002). In October 2006, the New Media Consortium (www.nmc.org) hosted a 12-day international symposium on the impact of digital media. The symposium took place entirely within the virtual world of Second Life (www.secondlife.com), where NMC has also built a virtual campus. On this occasion, poster presenters were not required to physically travel to the conference, but made use of virtual reality to log on the website, insert proper credentials and use an alter ego to display the poster and interact with any other conference participant who was also online and was interested in the subject. Much like in a real poster session, gigantic posters are displayed in the background, and an alter ego, also called an avatar, moves about the poster and has human features. Interested viewers, who are participating in the virtual conference and would like to hear the presenter speak through his/her avatar, simply need to step closer to the poster and enter the circle, which surrounds the avatar. A viewer can decide to simply hear the presentation or pose questions and make comments.

A virtual conference undoubtedly offers a number of advantages, such as the fact that there is no need to travel far and wide to present at conferences and carry or post large, heavy posters. The cost and burden of travel are eliminated, and there is no risk to damage or even lose a poster. However, to participate in such conferences, one must have a certain amount of IT knowledge, which is not always the case. Also, no matter how similar to real-life the virtual environment is, it can hardly reproduce the atmosphere and sheer excitement that is often associated with these events, thus making networking harder and certainly less natural and spontaneous. One should also take into consideration the fact that the setting up of a virtual conference is inevitably expensive, and this will probably raise conference fees significantly.

In conclusion, these digital versions of poster presentations undeniably offer a number of advantages such as lower conference costs, archival capabilities, additional material provided to attendees, as well as eliminating the burden of carrying a fragile and bulky paper poster. However, technology also changes, sometimes dramatically and not always positively, the way posters are displayed, presented and retained by the audience. Because information retention and a fast spreading of knowledge is the ultimate goal of poster sessions, be they traditional, digital or virtual, hopefully in the near future proper investigations will be carried out on these new media formats.

Current literature on academic posters

Although research on new types of digital posters is still in its infancy and should be developed in the near future, thanks to the Internet there is now a considerable amount

of material searchable online on traditional academic posters. This informative material ranges from how-to tips and techniques (Alley, 2003; Block, 1996; Briscoe, 1996; Miller, 2007; Purrington, 2014) to a vast kaleidoscope of downloadable templates. Alley (2003), for example, brings forth examples of good presenters in the hard sciences (engineering in particular), and advocates that an assertion–evidence approach should replace the typical bullet-point format in scientific presentations. Block (1996) lists basic dos and don'ts that are still useful today, regarding the layout and format of posters, their content and their presentation. Briscoe's (1996) work is another landmark when it comes to preparing good scientific poster and presentations, and is particularly interesting because it focusses mainly on how to correctly handle images, tables and graphs. In Miller (2007) we find useful, hands-on annotated examples of ineffective writing and weaknesses in poster productions, followed by an explanation of how to improve the content and format of presentations. Finally, Purrington (2014) provides an example of fun, easy and direct tips to design a good poster, together with an array of first-hand experiences, meant primarily for students, but not exclusively. All these resources could represent valuable entry-points for EAP teachers to introduce students to a correct use of the poster genre.

Besides the numerous tips on poster construction, there are a number of publications focussing on the use of posters in the workplace, by professionals in various fields. Miracle (2003, 2008), for example, explains how posters can be used to communicate and discuss important decisions between hospital units effectively, yet still informally. Other authors, mostly belonging to the medical field, have also commented on the use of posters in professional settings (see, for example, Hardicre et al., 2007; Keely, 2004), and Nemcek et al. (2009) even considered extending its use to improve patient–doctor communication.

Clearly, the use of posters is no longer limited to the hard sciences or the medical field, but is spreading to other situated practices as diverse as nursing (Boullata & Mancuso, 2007; Briggs, 2009; Campbell, 2004; Halligan, 2008; Price, 2010), marketing (Brownlie, 2007), law (Heller, 1999), psychology (Beins & Beins, 2011; Marek et al., 2002), psychiatry (Singh, 2014), statistics (Moreno & Schollenberger, 1998) and geography (Vujakovic, 1995). An extensive literature also exists describing how, in the past two decades, posters have been utilized as in-class activities at university. MacAndrew and Edwards (2003), in particular, compared the essay against the poster production as a tool to assess students, considering also the workload involved, and the benefits for students and lecturers. A similar analysis has been carried out by Remi and Bolalné (2013), who concentrate mostly on the use of posters to manage and evaluate large classes at university level. Others also provide positive examples of how to use posters to evaluate undergraduate and graduate students. The work by Marino et al. (2000) is interesting because it demonstrates how this genre can positively replace a standard hour exam by probing students' communication skills as well as their topic knowledge. The positive outcome of the case study is reinforced by students' encouraging feedback. Orsmond et al. (2002) carried out a study assessing the use of poster exemplars and peer assessment with students, which helped them produce better posters as well as make more informed and objective judgements.

A further example of the varied research carried out on this subject is Billington (1997), who compared students' achievements in different assessment exercises, demonstrating that by using poster presentation as an assessment tool, next to written and oral exams, it is possible to provide a diversity of assessment strategies so as to assess students fairly and to avoid discrimination. Akister et al. (2000) provide a useful case study describing how the genre can become a valuable tool to develop the skills of social work students to verbally support assessments carried out in the workplace. They also record the interesting feedback

of those students who chose to present a poster vs. those who did not. Finally, Menke (2014) explained how online poster sessions used in class eliminate the need for large rooms (inevitable, in the case of traditional paper poster presentations) on the one hand, and on the other hand, allow one instructor to quickly evaluate a large number of posters in a short period of time.

Another aspect related to academic poster presentations that has been considered is the selection process of posters at conferences. Bushy (1991) presents the sole example available of a research poster appraisal tool (RPAT) consisting of 30 items that aid professionals, teachers and students in selecting, grading and critiquing posters. The habit in the hard sciences of presenting the same poster at different conferences has been investigated instead by Bhandari et al. (2005), who have calculated an alarming 20 per cent duplicate presentation rate between annual meetings in orthopaedics, and call for a stricter guidelines enforcement and a more careful poster selection on the part of conference organizers. Their plea is reasonable and is valid for all scientific fields, because researchers that present the same results at different meetings prevent others from presenting original and possibly important research.

Salzl et al. (2008) have carried out an interview-based study that evaluates the organization and the significance given to poster exhibitions in medical conferences. They documented attendance, analyzed the poster review process and calculated the redundancy of presentations. Their results are particularly interesting because they document a low participation in poster sessions, despite the fact that the research displayed was deemed of great interest by attendees. Furthermore, like Bhandari et al. (2005), they calculated that almost 30 per cent of posters present had already been displayed at other meetings. Wang et al. (1999) researched the publication rate in peer-reviewed journals after papers and posters were presented at three major spine meetings held over a three-year period. Their main finding was that almost 90 per cent of the papers and posters presented at these meetings were published within four years. Other interesting and valuable studies have considered the motivation of authors to design posters (Tulsky & Kouides, 1998), or how much time conference participants dedicate to poster presentations (Wright & Moll, 1987).

Although not numerous, a number of linguistic/semiotic analyses on the poster genre have also started to appear after the pioneering exploration of the genre carried out by Matthews (1990). For example, Morin (1996b), Larive and Bulska (2006) and Nicol and Pexman (2003) evaluate the use of colour, typography and basic design principles in posters to increase readability and create visually appealing scientific posters, whereas Maci (2012) investigates the macrostructure of medical posters and what relevance images have in relation to text. Her multimodal analysis reveals that visual elements are predominant over text, so much so that even methodological aspects and results might be communicated through visual elements instead of text. She also highlights a predominance of tables over graphs and images in medical posters, a custom that seems to be caused by computer-designed visuals. In Maci (2012), instead the diachronic evolution of abstracts in medical posters is analyzed and we see that poster abstracts have changed from narrative to non-narrative style, which marks a significant shift to the IMRD (introduction, methodology, results, discussion) format.

An interesting work that also considers visual communication in posters is one by Rowley-Jolivet (2002) who seeks to identify the recurrent features of the visual dimension in posters. Visuals here are classified and a wide range of meaning-making strategies is revealed. These strategies, she explains, facilitate communication between native speakers (NSs) and non-native speakers (NNSs) of English during conferences, because they rely on a common visual knowledge.

She has also researched extensively the logical connections, discourse structure and rhetorical claims that are found in conference presentations taking place in three different disciplines: geology, medicine and physics (Rowley-Jolivet, 2004). Although she doesn't address poster presentations directly, her results are worth mentioning because they demonstrate that disciplinary practice, methodology, epistemology and type of data investigated heavily influence visual communication in science.

Shifting the attention to the way posters are perceived and valued by the scientific community, MacIntosh-Murray (2007) takes into consideration, for the first time, the forms, norms and values associated with poster presentations; that is, the poster creation process, the different presentation practices (depending on the disciplinary field) and the way posters are perceived and valued as we move from one discipline to another. Also, Rowe and Ilic (2009) have explored how the academic poster presentation is perceived, addressing, in particular, attitude and opinion items. Their study revealed that the academic poster genre is widely regarded as a good genre for the transfer of knowledge, and constitutes a valid form of academic publication. As the literature mentioned earlier suggests, this is a debatable topic and further analyses focussing on the value and status given to the poster genre in different academic fields are needed. However, given the shortage of empirical studies evaluating the effectiveness of posters (Ilic & Rowe, 2013), this survey provides interesting initial results.

Despite the numerous studies mentioned so far, it seems that a cross-disciplinary linguistic and visual analysis has never been carried out on the genre of academic posters. This lack of data makes it unclear whether certain poster presentation rules and conventions are discipline-specific. Are posters in the hard sciences similar to the posters in the so-called soft sciences? Are there any unspoken rules and conventions that recur within single disciplines and should, therefore, be openly known to novice academics? These are just some of the unanswered questions that still revolve around the eclectic and fascinating poster genre. Because a fast and efficient spreading of scientific knowledge is the ultimate goal of poster sessions, be they traditional, digital or virtual, one can only hope that further investigations will be carried out on this new genre type.

Further reading

Brownlie (2007); D'Angelo (2012); Purrington (2014)

Related chapters

- 26 Seminars
- 32 Interpersonal meaning and audience engagement in academic presentations
- 33 Research blogs, wikis, and tweets

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31

RESEARCH ARTICLES

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Introduction

The research article is no doubt the most studied genre in English for academic purposes (EAP). As Hyland (2009a, p. 67) states, it remains the “pre-eminent genre of the academy” and “is the principal site of knowledge-making.” Swales’ (1981, 1990) seminal work on the rhetorical organization of research articles has been followed by a large number of studies exploring the rhetorical organization of various parts of this genre, rhetorical and lexicogrammatical features characterizing this genre, and cross-disciplinary and cross-linguistic variation in the genre’s structure. As the pre-eminent genre produced in the academic community, the research article has also been the site for exploration of a number of rhetorical aspects of academic discourse such as stance, engagement, evaluation, and author presence. These studies have increased our understanding of this genre and the epistemologies of different disciplinary communities.

Because academic institutions around the world expect scholars to publish in highly-ranked peer-reviewed Anglophone journals to achieve academic success (Hyland 2009b, p. 84; Belcher, 2007), and because 90 percent and more of “top” journals in the natural and social sciences are published in English (Lillis and Curry, 2010), more and more English as an additional language (EAL) scholars are using English for the purpose of research publication, making the pedagogical applications of discourse studies of research articles valuable.

This chapter on the research article has a number of equally important foci. Because of the vast number of studies that have been conducted on the research article, only a subset will be discussed directly in this chapter. The chapter will first focus on the rhetorical organization of this genre, moving from its major sections to the moves and steps identified in each section. More recent studies have not just identified moves and steps but focused in greater detail on some particular moves in a section, such as commenting on results in discussions or how writers present their studies in the third move of the introduction, “filling the niche” (Martín and León Pérez, 2014), further enhancing our understanding of this genre. A second focus of this chapter will be studies of the construction of salient rhetorical features of academic discourse such as stance, author presence, and intertextuality in the research article, which have increasingly employed computational techniques on large electronic corpora of research articles (for example, Hyland, 2000). The chapter will also consider the pedagogical impact of research on the research article including the creation of EAP materials and evaluations of teaching practices employing genre-based instruction of the research article (e.g. Cheng, 2008b). The chapter will close with some brief research recommendations.

Organizational structure of research articles

Swales' (1990) create-a-research-space (CARS) framework, postulated to account for introductions in research articles, was followed by a large number of studies applying the framework to introductions from a variety of disciplines and languages, leading to its modification 14 years later (Swales, 2004) to better capture some of the findings of these studies. Although introductions have been the most explored part-genre of research articles, abstracts have also been frequently analyzed, revealing the rhetorical work conducted by this small but important part of a research article. Sections such as discussions and methods have also been studied, beginning with the early work of Hopkins and Dudley-Evans (1988), but to a smaller extent.

Major sections in research articles

Although studies conducting a move structure analysis of research articles seem to have assumed the introduction-method-results-discussion (IMRD) structure for research articles, the absence of the hourglass-shaped rhetorical structure in research articles from astrophysics and other non-experimental disciplines was pointed out in an early study (Tarone et al., 1998). The overall rhetorical structure is stated to take the shape of a logical argument that gradually narrows in scope in these research articles. More recent studies of research articles from less explored disciplines such as mathematics and applied linguistics have identified variation in the major sections found in research articles. Mathematics research articles, according to a study by Graves, Moghaddasi, and Hashim (2013), do not include methods and discussion sections, and may even not include conclusions in pure mathematics articles. Ruiying and Allison's (2004, p. 269) analysis of primary research articles (that is, those that report on analysis of original data) from applied linguistics helpfully revealed that research article "macro-structure is not always transparent and fixed," and indicated the presence of sections which might serve the same functions of traditional IMRD sections, although with varied headings such as "experimental design" and sections that have content headings such as "L2 reading strategies." They also have tentatively proposed a macro-structure including the introduction, argumentation, and conclusion sections to account for secondary research articles, which provide critical reviews and synthesis of certain topics.

Besides these interesting variations identified by Ruiying and Allison (2004), which would pose a challenge for cross-disciplinary comparisons of the reporting of results or discussion of findings in research articles, Lin and Evans (2012) have shown through an extensive study of research articles from 39 fields that the IMRD macro-structure is not the default organizing principle, even in articles reporting empirical research, and have identified the presence of the literature review, conclusion, and joint results and discussion sections, revealing greater variation in macro-structure than previously acknowledged, which they point out needs to inform EAP instruction.

Introductions and abstracts

Swales' (1990, 2004) important CARS model, with the three functional moves of establishing a territory, establishing a niche, and presenting the present work, captures the rhetorical work conducted in introductions of research articles where authors seek to establish the novelty of the research being reported while maintaining a connection to previous research in the field. Swales' 2004 version of the CARS model, following results from studies of this part-genre in

disciplines such as computer science (Anthony, 1999) and wildlife behavior (Samraj, 2002), includes positive justification as an optional means of creating a niche for one's research, in addition to creating a gap or adding to what is known in the second move. The revised model also includes the step "stating the value of the present research," in the third move "presenting the present work," capturing the promotionalism that can be constructed even at the end of the introduction. The revised third move also includes a larger number of optional steps such as summarizing methods and definitional clarifications.

Interest in research article introductions has led to studies focusing on just one rhetorical move from the introduction. How researchers establish niches in research article introductions has perhaps been the most explored move of introductions, in particular in introductions across different languages and disciplinary fields. These studies have indicated that explicit "indicating a gap" in order to create a niche may be eschewed in some languages such as Malay (Ahmad, 1997) and Swedish (Fredrickson and Swales, 1994), which might pose a challenge if these scholars sought publication in high-impact Anglophone journals, where explicit gap indication appears to be common.

Belcher (2009), in an interesting study exploring the presence of gap creation in applied linguistics research articles produced by authors who are female or English as an international language (EIL) speakers, found that an increasing number of such authors over a ten-year period from 1996 to 2006 corresponded to a greater presence of explicit gap statements and a decrease in implicit gap statements, contrary to her predictions (and implications from studies such as Ahmad, 1997). Explicit gap statements are those that directly mention missing information, and implicit gap statements include politeness strategies to hedge academic criticism. Although preference for explicit gap statements increased across all author categories, male, female, and EIL authors, over the decade the greatest increase was for EIL female authors and, interestingly, the overwhelming preference for explicit gap statement by EIL authors was the same in both 1996 and 2006! She suggests that an "obvious reason for the unanticipated high number of explicit gap statements could be that such statements may not be viewed as so uncomfortably adversarial" by women and EIL academic scholars as earlier research may have led us to believe (Belcher, 2009, p. 231).

The importance of the move of niche establishment in research article introductions has also led to detailed analysis of ways in which this move is constructed and the linguistic choices used to realize it. Through an analysis of a set of articles from business management, Lim (2012) showed the much greater frequency of the use of the "gap creation" step (such as "Nevertheless, given that there are no studies linking dispositions to absence attributions ..." (p. 234)) rather than the "adding to what is known" step (such as, "Our study continues in this tradition by investigating how reactions vary to ..." (p. 240)) in establishing a niche in his data set.

Detailed analysis of the third move of introductions has also shown that use of promotional strategies, namely announcing principal outcomes and stating the value of present research, can vary across languages (a greater use in English than in Spanish) and disciplines (a greater use in health sciences than in the social sciences explored) (Martín and León Pérez, 2014). Results from these later studies have continued to provide support for Swales' early work, pointing to the rhetorical work accomplished by introductions.

The abstract that accompanies the research article also performs a promotional and persuasive function, much like the introduction, although early studies characterized research article abstracts simply as a "factual summary" (Bhatia, 1993, p. 78) of the longer research articles, and proposed an IMRD structure to account for its macro-structure. Santos (1996) postulated an additional move to this IMRD structure, "situating the research," which could

state current knowledge or a problem to account for the rhetorical structure of applied linguistics abstracts. Hyland (2000), in a multi-disciplinary study, also employed a model with five moves. The introduction move in his model, similar to the first move in Santos' framework, was found to be much more frequent in soft disciplines than hard disciplines. Interestingly, his diachronic comparison of abstracts from 1980 and 1997 showed an increase in the presence of introductory and concluding moves, both of which perform important evaluative work. The introductory moves, by situating the research and providing a motivation for it, perform a communicative purpose quite similar to that of the research article introduction. In fact, in a study comparing abstracts and introductions in two sub-fields of environmental science, Samraj (2005) noted that the abstracts accompanying research articles in conservation biology, an emerging interdisciplinary field, bore a greater resemblance to article introductions (because of the presence of centrality claims in the first move in the abstracts) than those from the much more mature and established sub-discipline of wildlife behavior.

The abstract has also undergone cross-linguistic investigation. An interesting study by Melander, Swales, and Fredrickson (1997) indicated that cross-linguistic or cross-national variation can be less prevalent in some disciplines such as biology but more obvious in others such as linguistics, pointing to the need for analysis of a greater number of sub-categories of genre exemplars before concluding about disciplinary and linguistic variation in genre structure.

The studies of introductions and abstracts of research articles discussed above are a subset of the many published works on these part-genres but reveal key features about these part-genres, especially of particular rhetorical moves. Over the last two decades, these studies have also emphasized a cross-disciplinary and cross-linguistic perspective.

Methods, results, discussions, and conclusions

Although most of the work on research articles has tended to focus on introductions and abstracts, genre analyses in the last 15 years have attended more to the rhetorical organization of the relatively unexplored sections of methods, results, discussion, and conclusion, building on some crucial early work on these part-genres conducted by scholars such as Hopkins and Dudley-Evans (1988), Holmes (1997), and Posteguillo (1999).

The methods section of research articles, said to show significant disciplinary variation in Swales (1990), is probably the least studied of the various research article sections. Swales (2004) makes the useful distinction between clipped (fast) and elaborated (slow) methods sections, with elaborated methods descriptions characterizing social science research articles, and clipped methods sections generally being found in physical science articles (Brett, 1994; Bruce, 2008). Although it might seem that methods sections might be more straightforward and include less persuasion than other more complex sections such as discussions and introductions, a detailed analysis of methods sections from management research articles identified the presence of three sets of justification for research procedures (Lim, 2006). A step providing justification was found in each of three moves identified: "describing data collection procedure/s," "delineating procedure/s for measuring variables," and "elucidating data analysis procedure/s."

Both Yang and Allison (2003) and Lin and Evans (2012) have pointed to the complexity in organization of sections following the methods section. As noted above, Lin and Evans (2012) have shown that many research articles contain joint results and discussion sections instead of individual sections. Yang and Allison (2003, p.3 66) indicate that a number of studies have been conducted on discussion sections but they tend to treat discussion sections

as an independent entity and fail to consider the influence of adjacent sections, even when the study focuses on the complete research article, such as Nwogu (1997). Yang and Allison's study used a two-level analysis, including both moves and steps, instead of the one-level move analysis that characterized earlier analyses of discussion sections (Posteguillo, 1999), and identified complex ways in which the sections that follow the methods section are related to one another.

Based on a detailed and nuanced analysis of 20 research articles reporting empirical research in applied linguistics, Yang and Allison (2003) showed great overlap in communicative function but differences in emphasis between the results and discussion sections. They state that the results section focuses on "reporting results" while the discussion section deals with "commenting on results." This is shown not just by the presence of unique moves in the different sections but, more interestingly, by the greater frequency of one move, the greater development of a particular move, and cyclicity of a move in one section rather than another. For example, "commenting on results" is obligatory in discussion sections but not in results sections, where it is less frequent. On the other hand, the "reporting results" move is highly cyclical in the results sections. The same move might also vary in its constituent steps in different sections, and the relative frequencies of two moves might differ across related sections. Although the use of a small number of texts in the study of research articles such as Yang and Allison (2003) has been criticized by those employing large corpora (Kanoksilapatham, 2015), this intensive, qualitative analysis has made significant contributions to our understanding of some complex and related sections of the research article and shown that adjacent sections might "differ more in emphasis than in kind" (Yang and Allison, 2003, p. 380).

Yang and Allison's (2003) study has been followed by studies attending to not just the discussion sections in research articles from particular disciplines (for example, Basturkmen, 2012) but also studies focusing on the construction of just one move either in the results or discussion sections (for example, Lim, 2011). Basturkmen's (2012, p. 142) study on discussion sections in dentistry research articles revealed that the argument structure differs from that identified in applied linguistics discussion sections (Basturkmen, 2009) due to choices at the step level for the "commenting on results" move. Comparisons of results with the literature and evaluation of the results serve far more frequently as steps for this move in dentistry than in applied linguistics research articles, leading to the conclusion that "disciplinary differences may be located in step level choices" (Basturkmen, 2012, p. 142).

Lim (2010), arguing that the writing of results sections, particularly commenting on results, can be challenging to novices, studied the use of this move in research articles from two disciplines, education and applied linguistics, and articles that used different methodologies: quantitative, qualitative, and mixed-methods. Education results are said to be "comment-stripped" (p. 291) because of the uncommonness of the comment move in results sections. Interestingly, this study also showed that the research methods employed in the study being reported exerted no bearing on the presence of this move.

These studies following early work on research articles such as Hopkins and Dudley-Evans (1988) and Swales (1990) have vastly extended our knowledge of the rhetorical organization of the main sections of the research article, and provided evidence for the persuasion and argumentation that characterize this genre. The growing research has not only pointed to disciplinary variation but also sub-disciplinary variation in genre structure; for example, in environmental science (Samraj, 2005). In addition, these studies have also deepened our understanding of specific moves in these part-genres, such as "commenting on results" in discussion sections and "creating a niche" in introductions.

Rhetorical and lexico-grammatical features of research articles

Research on academic writing in the last few decades has also explored rhetorical features such as evaluation and stance, and lexico-grammatical features such as the use of the first person pronoun in research articles to understand textual practices in disciplinary communities, because of this genre's prominence among academic genres. Early interest in variation across registers included studies of the scientific register in comparison to other "general" English registers (Tarone et al., 1998), and recent studies employing corpus techniques can be viewed as studies pursuing similar research questions informed by a growing understanding of the nature of genres within scientific discourse in general. These later studies are also more likely to employ ethnographic methodologies, including the views of disciplinary experts together with the use of large corpora analyzed electronically. In addition, some of the studies focusing on lexico-grammatical choices in research articles have also partly aimed to challenge advice found in handbooks regarding the writing of academic discourse (for example, Swales et al., 1998). Because of the large number of studies focusing on rhetorical and lexico-grammatical features of research articles, this section will only highlight some of the key findings in the overview provided. It should also be noted that several studies have compared the frequency and functions of discursive features across different genres such as research articles, textbooks, and student reports (Hyland, 2002), although these comparisons will not be focused on here. This chapter will also not include discussions of cross-linguistic explorations of discursive features in research articles in the interest of space.

Because the claims made in research articles are situated within previous knowledge, explicit reference to previous research has been an important feature of published research articles over the course of its history (Berkenkotter and Huckin, 1995) and has been the focus of numerous studies. Hyland (1999) performed a variety of analyses, including identification of the forms of citation (integral versus non-integral) and ways in which citations are incorporated in the text (as quotation, summary, or generalization from more than one source), and a categorization of reporting verbs, on 80 research articles from eight disciplines. The findings from this study, which also drew on insider knowledge through interviews with subject specialists, revealed that reference to previous research was more overt in the humanities in contrast to the backgrounding of human agency in physics and engineering research articles through fewer uses of integral citations. Additionally, the categorization of reporting verbs revealed the important role of reasoning and argumentation in disciplines such as applied linguistics and philosophy through their preference for use of discourse activity reporting verbs, such as "discuss" and "hypothesize." In contrast, the high frequency of research-type verbs, such as "observed" and "developed," in science and engineering articles was seen to support the value of "laboratory work as impersonal, cumulative and inductive" in scientific ideology (Hyland, 1999, p. 360).

Further work on attribution in academic discourse has focused in greater detail on the functions fulfilled by the use of citations based on the views of the authors themselves. A study by Harwood (2009) based entirely on interviews of authors from two disciplines, sociology and computer science, points to some overlap and variation in the reasons authors provide for their use of citations in research articles. For instance, sociologists described more of their citations as having the function labeled as "engaging," which refers to citations used when authors enter in critical dialogue with their sources, while computer scientists used a greater amount of "signposting" citations, which direct readers to other sources.

The research article has also been the site for explorations of discursive practices that construct the author's presentation of self and relationship with readers. Hyland (2009a,

p. 74) has clearly shown through his various studies that research article writers use choices from the systems of stance and engagement “to offer a credible representation of themselves and their work by claiming solidarity with readers, evaluating their material and acknowledging alternative views in appropriate ways.” The use of various features of stance, such as hedges, boosters, and self-mention, and engagement, such as reader pronouns, directives, and questions, in research articles from different disciplines has been the subject of numerous EAP studies. In an overview paper where he lays out a model for exploring stance and engagement in academic writing, Hyland (2005) points out the importance of expressions of stance and engagement in research articles using results from analysis of a research article corpus, including articles from several “soft” and “hard” disciplines. The “soft” disciplines such as philosophy, sociology, and linguistics exhibit more explicit markers of evaluation of claims and interactions with readers than the “hard” disciplines of science and engineering. Continuing interest in stance and engagement or evaluation in academic discourse has led to studies focusing on specific disciplines, such as pure mathematics. McGrath and Kuteeva (2012) explored stance in the under-studied pure mathematics research article, where reported research is not experimental in design. This study revealed that pure mathematics research reports exhibit values for stance and engagement that show similarity to both philosophy (due to the high number of shared knowledge references) and physics (due to the low number of hedges), establishing the distinctive nature of the epistemology of this discipline and how it influences writing norms.

In-depth studies of just one discursive feature, such as the use of the first person pronoun and imperatives, have also characterized EAP studies of the research article and a few such studies will be discussed here. The first person pronoun in published research articles has been studied by a number of researchers (Kuo, 1999; Hyland, 2001), who have captured the range of functions served by its use. One key finding has been the greater usage of the first person pronoun in the soft disciplines where its use has been related to authors’ desire to “both strongly identify oneself with a particular argument and to gain credit for one’s individual perspective or research decisions” (Hyland, 2001, p. 217).

Harwood (2005) considered both inclusive and exclusive uses of the pronouns in a range of disciplinary writing, and revealed that switches between the inclusive and exclusive use could help the author convey the novelty of his or her own work. The qualitative analyses of the results of the corpus study showed that the inclusive use of “we,” where the pronoun refers to both the author and audience, could construct positive politeness as its use can communicate the author’s belief of the audience being competent enough to follow his or her arguments and interpretations of data. Solidarity between writer and audience is also created as the inclusive “we” is used to provide critiques of the discipline and suggestions for future research. The identification of the functions of inclusive and exclusive pronoun use in published research articles is followed by a discussion of the presentation of pronoun use in a number of popular EAP textbooks, which revealed a lack of overlap between advice given in such handbooks and the findings from the corpus study of authentic academic writing, leading to specific pedagogical suggestions.

Imperatives, which at the outset seem to contradict discourse norms in academic writing that seek to maintain “a harmonious reader–writer relationship” (Swales et al., 1998, p. 98), have also been explored for their use and rhetorical functions in research articles across disciplines. Swales et al. (1998) not only analyzed the frequency of imperative use across disciplines but identified common lexico-syntactic patterns for frequently occurring imperative verbs such as “see,” “consider,” and “suppose.” Using close textual analysis, this study detailed particular rhetorical uses of specific imperatives and lexico-syntactic structures

such as the use of “Now/Next/First/Second + consider + noun phrase” to begin a (sub) topic in linguistics and statistics. The results of this empirical study are used to show that textbooks and manuals for EAL writers (even those written by the first author himself, such as Swales and Feak, 1994) may not reflect actual practice.

One of several discourse studies motivated by comparisons of manual and textbook instructions regarding academic writing and expert practice is Chang and Swales’ (1999) study on the use of informal elements in published research articles. An analysis of 40 style manuals for commonly stated general rules yielded a number of features associated with an informal spoken style, which were then analyzed in research articles from three disciplines: philosophy, linguistics, and statistics. Research articles from the three disciplines vary in their usage of these informal features, with philosophy research articles containing more of such features than research articles from the other two disciplines. This study differs from others exploring discursive features in research articles in its inclusion of views of L2 writers towards informal features in scholarly writing. The views of advanced EAP students regarding a subset of the informal features studied, including the use of direct questions, first person pronoun, and sentence fragments, in scholarly writing point to the challenges posed by the acceptability of these features in academic writing.

Corpus-based studies of general language use have identified lexical bundles in different registers, and these studies have been followed by more focused explorations of the kinds of lexical bundles (that is, combinations of three or more words that frequently occur in a register) that characterize particular genres or disciplines. Hyland’s (2008) study of lexical bundles in research articles, doctoral dissertations, and master’s theses from the contrasting disciplines of electrical engineering, biology, business studies, and applied linguistics revealed significant disciplinary differences in use of lexical bundles, with electrical engineering texts containing the greatest range and density of bundles, pointing to a greater reliance on formulaic expressions in this field. Employing both a structural and functional categorization (including research-oriented, text-oriented, and participant-oriented bundles) of the lexical bundles found in the different genres from the four disciplines, Hyland (2008) showed that different sorts of bundles characterize different disciplines, such as the presence of participant-oriented bundles, specifically stance bundles (for example, “it is possible that”) in social science research articles. These findings underscore disciplinary variation revealed by other analyses.

Some other studies have sought to identify lexical bundles in a specific part of the research article such as the introduction. Cortes (2013) identified a list of bundles in research article introductions using texts from a variety of disciplines, and sought to relate bundles to particular rhetorical moves and steps in introductions. However, the results did not always show meaningful correlations between bundles and rhetorical moves and steps unless the bundles were longer than four words. More significantly, four-word bundles that are only found in one particular step, for the most part, do not seem functionally related to the steps, such as the bundles, “a function of the” or “in terms of the.” They are shown to be only found in the second step of Move 1, “making topic generalizations,” perhaps indicating limits to the usefulness of studies of lexical bundles in part-genres.

The studies of lexico-grammatical and discourse features characterizing research articles, especially in the last two decades, has undoubtedly increased our understanding of the social situatedness of academic writing, by revealing varying discursive conventions in the research article across a number of disciplines. Among other things, these studies have elucidated how academic writers construct relationships with their readers and structure arguments through the use of a number of rhetorical features, and have shown how disciplinary writing

conventions are related to the knowledge-making practices of discourse communities. The analyses of discursive features have led to implications regarding the teaching of EAP, with some researchers proposing specific ways to include corpus-based activities that would raise students' awareness of use of such features in their target disciplines in the genres that they need to produce (for example, Harwood, 2005).

Research articles and EAP instruction

Many of the studies of the genre structure of research articles have been motivated by the hope that the results could be used in EAP instruction. This section will briefly mention some EAP textbooks that have employed the findings from analyses of research articles. Studies evaluating the use of findings from genre analyses in the teaching of academic writing will also be considered in this section.

Many of the results of analyses of both the macro-organization of research articles and the lexico-grammatical and rhetorical features of research articles have been employed in textbooks published in the last 20 years, the best example probably being Swales and Feak's (1994) *Academic Writing for Graduate Students: Essential Tasks and Skills*, which is in its third edition and has sold more than 100,000 copies (Swales, personal communication). This volume and others (for example, Feak and Swales, 2009, Swales and Feak, 2000, 2009) include carefully crafted pedagogical materials based on recent findings intended to raise students' awareness of disciplinary variation in the research article. These textbooks also include activities where students revise drafts of texts and evaluate exemplars of parts of the research article. In addition, other researchers, such as Hyland (2009b), in outlining instructional practices based on the results of genre analyses, have also pointed to the need to encourage students to reflect on the goals and readership of journals they seek to be published in and to familiarize EAL students with the publication process.

Although many genre studies on the research article have been motivated at least to a certain degree by applications to EAP instruction, not many studies have taken on the task of evaluating the use of genre-based pedagogy employing the results of analyses of the research article. An early study by Hyon (2002) of a reading course that used the genre approach in teaching the research article (in addition to other genres) indicated that such an approach could help some students recognize instances of the genres in new texts, improve reading speed, and even increase enjoyment of reading, according to interview data from students who had completed the course. A follow-up study (Hyon, 2001) using eight of the original 11 students revealed long-term learning, although in some cases students overgeneralized from their newly acquired genre knowledge, which was not always beneficial.

An interesting set of case studies explored the writing development of graduate students resulting from the use of genre-based instruction that included explicit instruction of the move structure of research articles, as well as some discussion of rhetorical features and their functions such as the use of reporting verbs (Cheng, 2007, 2008a, 2008b). Using detailed analyses of student writing, interview transcripts, student annotations on their writing, and student analysis of research article samples, these studies traced students' learning of the research article. Cheng (2007, 2008a, 2008b) shows that students not only learned genre features such as move structure but also developed an understanding of disciplinary influences on academic writing and the interaction of reader, writer, and purpose in academic writing. They were then able to employ this understanding in their own writing. Based on four students' analyses of research article excerpts from their individual disciplines, Cheng (2011, p. 80) argues that a genre-based approach to teaching academic writing does more

than make students aware of a group of textual features, and that his students' attention "moved beyond these [non-prototypical] textual features themselves and ... reached issues such as genre as social actions, as discipline-specific actions, and as rhetorical responses," leading to a greater understanding of context.

There has been a growing attempt to apply research findings to the teaching of EAP and this has resulted in some outstanding examples of transformations of research into pedagogy (for example, Swales and Feak, 2012). A handful of studies have evaluated the efficacy of genre-based instruction incorporating the results of discourse research, and these studies provide strong evidence for the value of such practice.

Conclusion and suggestions for future directions.

This chapter has described the large amount of research on the organizational structure, and rhetorical and lexico-grammatical features that characterize the research article, a key genre in academic writing. These studies have established the breadth of variation in discourse norms across disciplines, and provided evidence for the social situatedness of these discursive practices. Looking to the future, perhaps, we can point to areas that might already be well studied and not in need of further studies, and areas where more research would be desirable.

Given previous research, it appears that further studies on how a specific move or step in a research article varies across disciplines might not be particularly urgent. The studies discussed in this chapter have provided us with an understanding of the range of variation across this genre in overall organization, and research-informed textbooks and instructors encourage students to be ethnographers of writing norms in their own disciplines (Swales and Feak, 2009, for example). It is not clear that further findings about particular disciplines would necessarily enhance EAP instruction of the research article. However, there is still a need for genre studies that add to our understanding of disciplinary epistemologies and the social-constructionist perspective on academic writing, especially those that might challenge or problematize current dichotomies such as "hard" and "soft" disciplines. Further studies that compare the discursive features found in research articles with other academic genres such as textbooks (such as Hyland, 2002) would also add to our understanding of academic discourse.

In addition, there is need for longitudinal studies exploring the acculturation of EAL writers into different disciplines with a focus on their use of discursive features that construct writer stance, engagement with readers, and argumentation structure in advanced academic writing that lead to the production of the research article. Studies that have compared advanced student writing to research articles in particular disciplines have tended to focus on finished products such as PhD dissertations. Conducting close textual analyses of drafts of graduate student or junior scholar writing in disciplinary contexts (similar to studies conducted in EAP course settings, such as Cheng, 2008a) using the analytical frameworks employed in studies of research articles can shed important light on novices' struggles with mastering the discursive practices of their own disciplines, especially if such textual analyses are also embedded within an ethnographic methodology. Gaining access to student texts and disciplinary practices in such contexts might prove challenging but the results from such studies would be valuable in informing EAP instruction. Further studies evaluating genre-based pedagogies in both EAP reading and writing instruction are also needed. The field of EAP would also benefit from studies of the long-term effects (including transfer) of genre-based learning. Although the findings from analyses of research articles have informed writing pedagogy, these findings could also be employed in EAP reading pedagogy.

Further reading

Hyland & Guinda (2012); Swales (2004)

Related chapters

16 Corpus studies in EAP

38 English for professional academic purposes

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32

INTERPERSONAL MEANING AND AUDIENCE ENGAGEMENT IN ACADEMIC PRESENTATIONS

A multimodal discourse analysis perspective

Gail Forey and Dezheng Feng

Introduction

‘Start with a quote’, ‘start with a hook’, ‘capture the attention of your audience in the first few seconds’ and many other ‘tips’ can be found about how to give a good presentation, and there are a plethora of websites, YouTube videos and textbooks offering tips for better presentations (www.TED.com; Duarte, 2010; Gallo, 2014). Academic presentations (APs) are a key mode of sharing information both in the workplace (Evans, 2013; Kline, 2003) and academia (Ventola & Charles, 2002; Hood & Forey, 2005; Thompson, 2003). Students’ presentations are often a form of assessment and studies related to student presentations have discussed group and individual performance (Chou, 2011), the projection of identity by the speaker (Zareva, 2013) and L1 versus L2 perceptions of APs (Zareva, 2009). At a postgraduate level, studies provide insights into such features as dissertation defenses (Mežek and Swales, this volume). For example, both Recski (2005) and Wulff et al. (2009) examine the discussion section (DS) of the dissertation defense and demonstrate the high stakes nature of APs. APs are high stakes for both students and faculty; that is, students’ presentations are linked to assessment and grades, and faculty presentations are informally assessed for their contribution to the field by their peers. For faculty members, APs are an integral feature of their annual workload, and these presentations may range from an invited plenary, informal seminar, parallel paper presentation to a large or a small audience. Due to space, we focus on APs given by academics rather than students, and suggest that the features identified in faculty APs will have currency and value for students and other public speakers.

Within the field of EAP an overwhelming number of studies favor written rather than spoken EAP (Hood & Forey, 2005). It could be argued that some of the written modes are ‘spoken-like’, that perhaps the conference AP is often ‘written-to-be-spoken’, and that

some of the less stimulating APs sound extremely written-like (Halliday, 1985). As pointed out by Thompson (1997, 2003), one of the significant differences between a research article (written mode) and an AP (spoken mode) is the foregrounding of interpersonal and interactive meanings in the latter. It is the interpersonal element of APs that is one of the most striking features, and is the focus of the present chapter. Studies on APs include a wide range of features and, more recently, have tended to focus on multimodal interpersonal meaning. We present an overview of these current studies, and then move on to examine the multi-semiotic resources chosen by the speaker to develop the tenor (i.e. the relationship the speaker has with the audience) in an extract from an AP. Finally, we draw together the discussion of interpersonal meaning and suggest possible future directions for research related to APs.

Studies of academic presentations: linguistic and multimodal analyses

The dialogic aspects of APs, that is of having an audience to speak to, influence the choices the speaker makes from the initial decision to attend the conference and the drafting of the abstract proposal to the last word spoken. The academic, when presenting, aims to highlight chosen features, either current research, frameworks or other elements that they believe will be of interest to the audience. The speaker mediates the intended meaning through the ‘semiotic spanning’ between the linguistic, visual and audio choices (Ventola and Charles, 2002). Semiotic spanning ‘involves looking at how we link with other sources, with other experiences and their expressions, and still keep what we say as relevant and focused in terms of the presented paper and the point of discussion’ (Ventola 1999, p. 118). Semiotic spanning helps us understand the link between multiple semiotic resources found at a conference and beyond the conference; for example, how one speaker relates to the previous speaker, and perhaps how a presentation is referred to and discussed in the coffee break and at a later point. Ventola (1999) and Ventola and Charles (2002) point out that the discourse at a conference expands beyond what the speaker says to the complex world of discourses. The presentation lives on through formal and informal texts, quotations in other people’s texts, social exchanges such as around the dinner table, newspaper reports or written papers, etc.

The term ‘linguistic features’ refers to what is said during the presentation, and this is often the starting point for research focusing on APs. Some studies focus on general linguistic features such as Bhattacharyya (2014) who discusses communicative competence in engineering presentations. Other studies focus on specific language features such as Fernández-Polo (2014) who outlines the role of *I mean* by English as a lingua franca (ELF) speakers in their presentations. Using a corpus analysis approach, Fernández-Polo (2014) demonstrates the various use of *I mean*, such as self-repair, corrective or preemptive purposes, introducing background, foregrounding interpersonal solidarity with the audience, along with reinforcing and highlighting the ideas presented. Another approach is to focus on sections of the talk as in Hood and Forey (2005) who outline interpersonal meaning in introductions, and Querol-Julián and Fortanet-Gómez (2012), who analyse the discussion section of presentations. Querol-Julián and Fortanet-Gómez (2012) point out that there is a complex shift from the monologic elements of the main part of the presentation to the discussion (Q&A) section of a presentation. Both Hood and Forey (2005) and Querol-Julián and Fortanet-Gómez (2012) draw on a systemic functional linguistic (SFL) framework (Hood, this volume) and adopt Martin and White’s (2005) appraisal system to investigate the complementarity of the linguistic and visual choices that convey the relationship between the speaker and the audience with respect to how ‘solidarity’ is or is not achieved. Both

highlight the value of studying interpersonal meaning in the introductions or the discussion sections of APs. Both focus on language and highlight the importance of the relationship between the linguistic interpersonal meaning and gesture (Austin & Weller, 2014). However, a more comprehensive examination of the relationship between the linguistic and gesture is needed.

In order to understand the multi-semiotic resources we need to capture the multitude of resources available to a speaker when presenting. A number of studies have adopted the multimodal discourse analysis (MDA) approach (see Kress & van Leeuwen, 2006) which was developed from systemic functional linguistics (Halliday & Matthiessen, 2014). MDA scholars have explored an increasing range of domains: for example, visual image (Bateman, 2008; Kress & van Leeuwen, 2006; O'Toole, 1994), three-dimensional objects (Martin & Stenglin, 2007; O'Toole, 1994), websites (Djonov, 2005) and film (Bateman & Schmidt, 2012; Feng & O'Halloran, 2013). In addition, classroom teaching has captured increasing attention from multimodal theorists, which is studied within the emerging field of 'multiliteracies' (New London Group, 1996; Cope & Kalantzis, 2000; Kress et al., 2001; Lim et al., 2012; O'Halloran et al., this volume). APs have also started to attract systematic multimodal analysis. The relationship between the visual (the slides) used in an AP and the linguistic (what the speaker says) has been discussed in a number of studies (Cassily & Ventola, 2002; Rowley-Jolivet, 2002, 2004, Rowley-Jolivet & Carter-Thomas, 2005). Bernardis and Gentilucci (2006) focus on the symbiotic nature of spoken word and gesture. Rowley-Jolivet (2002, 2004) examines the visual resources found in science and in particular geology, medicine and physics presentations. In an earlier paper, Rowley-Jolivet (2002) highlights the role of image as a key resource for making meaning in science, and the disciplinary differences between these three scientific subject areas (Rowley-Jolivet, 2004). She highlights the benefits of shared visual knowledge within a discipline, especially at international conferences where English is not the first language for many (ibid. 2002). Using the multimodal annotation tool ELAN, a free software developed by the Max Plank Institute (<https://tla.mpi.nl/tools/tla-tools/elan>), Rowley-Jolivet and Carter-Thomas (2005) demonstrate the importance of the relationship between the visual, paralinguistic and kinetic resources that are used to co-construct evaluative meaning in the discussion section of science presentations. Rowley-Jolivet (2004) also demonstrates the value of applying software to support the analysis of multimodal texts. Rowley-Jolivet (2004) uses ELAN to enable a detailed analysis of multiple complex choices. In this study, we adopt an alternative software tool, the Multimodal Lab Software (Smith et al., 2014), to analyze the data. The value of utilizing software ensures archival resources and ultimately can lead to a comparable corpus of a complex meaning-making in APs.

The final semiotic resource afforded in conference presentation is the audio; for example, the acoustics, the voice quality and other resources related to sound. However, studies related to the audio resources in APs are limited. These three elements – linguistic, visual and audio – co-construct the meanings made, and are only isolated for discussion purposes to deconstruct the text and better understand the choices made by the speaker. Although these are all resources found in APs, a discussion of the full range of linguistic, visual and audio semiotic resources will not be possible.

In this chapter we focus on one of the most salient features that distinguishes the conference presentation from other EAP modes: the dialogic nature of conference presentations and the issue of tenor. We illustrate, with reference to data, the semiotic spanning of the linguistic, visual and audio which together co-construct to engage the audience. Adopting this semiotic discursive perspective allows us to use the social semiotic

tools that are so well developed for systematically analyzing meaning construction in linguistic and multimodal discourse. From the perspective of multimodal studies, for empirical research of APs, we need a framework that is explicit enough to support reliable description and fine-grained enough for the description to be informative. In what follows, we outline a semiotic framework to elucidate the array of multimodal choices that are available for a speaker to engage with his/her audience.

Engagement in academic presentations: an integrated framework

The combination of discourse analysis, in particular MDA, and appraisal analysis is useful to deconstruct the complex reality of APs. Interpersonal meaning is a key resource in the introduction (Hood & Forey, 2005) and discussion section (Quel-Julian & Fortanet-Gomez, 2012) of a presentation, and interpersonal meaning is particularly important when the speaker is convincing the audience of the position in the body of the AP. Engagement is a key resource the speaker adopts to develop a positive relationship with the audience throughout the talk in order to strengthen his/her argument. Martin and White's (2005) appraisal analysis, and particularly the engagement system, provides a framework to understand the space that is opened up or closed down within the text by the speaker in an AP. For example, in what has perhaps been incorrectly referred to as the 'monologic' section of the talk – the body – in this section, along with all other stages of the AP, the speaker continues to make choices that involve and persuade the audience. Thus, even though there is only one speaker when choosing what to say, the speaker engages with the audience to create solidarity through speech functions chosen (e.g. using interrogatives or imperatives), involvement through gaze, body direction, gesture or movement, and the proximal social distance that is selected: is the speaker at a close, median or distant position in relation to the audience.

For the systematic description of the discourse of an AP and to unpack the dynamic relationship between speaker and audience, it is useful to adopt the social semiotic notions of stratum and system, which have been developed for language in SFL (Halliday, 1978; Halliday & Matthiessen, 2014; see Hood, this volume, for an overview), and are extended to nonlinguistic semiosis (e.g. Kress & van Leeuwen, 2006; Martinec, 2001; Bateman & Schmidt, 2012). The APs which we are referring to are closely related to the research article and provide an opportunity for the speaker to showcase their current research and argue the feasibility of their work (Thompson, 1997, 2003). Therefore, an AP can be seen as a social activity with a particular purpose and structure (Martin, 1992; Hood & Forey, 2005). This genre is realized through the configuration of field, tenor and mode, which incorporate what the speaker presents, how he/she engages audiences' attention and interest, and what is the mode of communication respectively. Viewer engagement is in turn realized through various parameters of interpersonal semantics; for example, speech functions (Halliday & Matthiessen, 2014) and appraisal resources in language (Martin & White, 2005), and interactive meaning in visual images (Kress & van Leeuwen, 2006). These aspects of meaning are then realized by multi-semiotic resources of language, gesture, gaze, movement, and so on. The notion of strata, which is illustrated in Table 32.1, allows us to elucidate how AP discourse is semiotically constructed and how the social purpose of AP discourse is realized. To describe exactly how interpersonal meaning is constructed, an integrated framework of the dimensions of interpersonal semantics that contribute to the construction of viewer engagement is provided in Figure 32.1.

The 'systemic' principle regards grammar as systems of paradigmatic choices, and meaning is created through making and combining choices from the systems, which are

Table 32.1 Strata in the analysis of viewer engagement in AP discourse

Strata	Realization
Genre	Argumentation
Register	Tenor – viewer engagement Mode – multimodal Field – object of study
Discourse semantics	Prosodic features of interpersonal meaning
Lexicogrammar	Multi-semiotic <ul style="list-style-type: none"> • linguistic resource • visual resources • acoustic resources

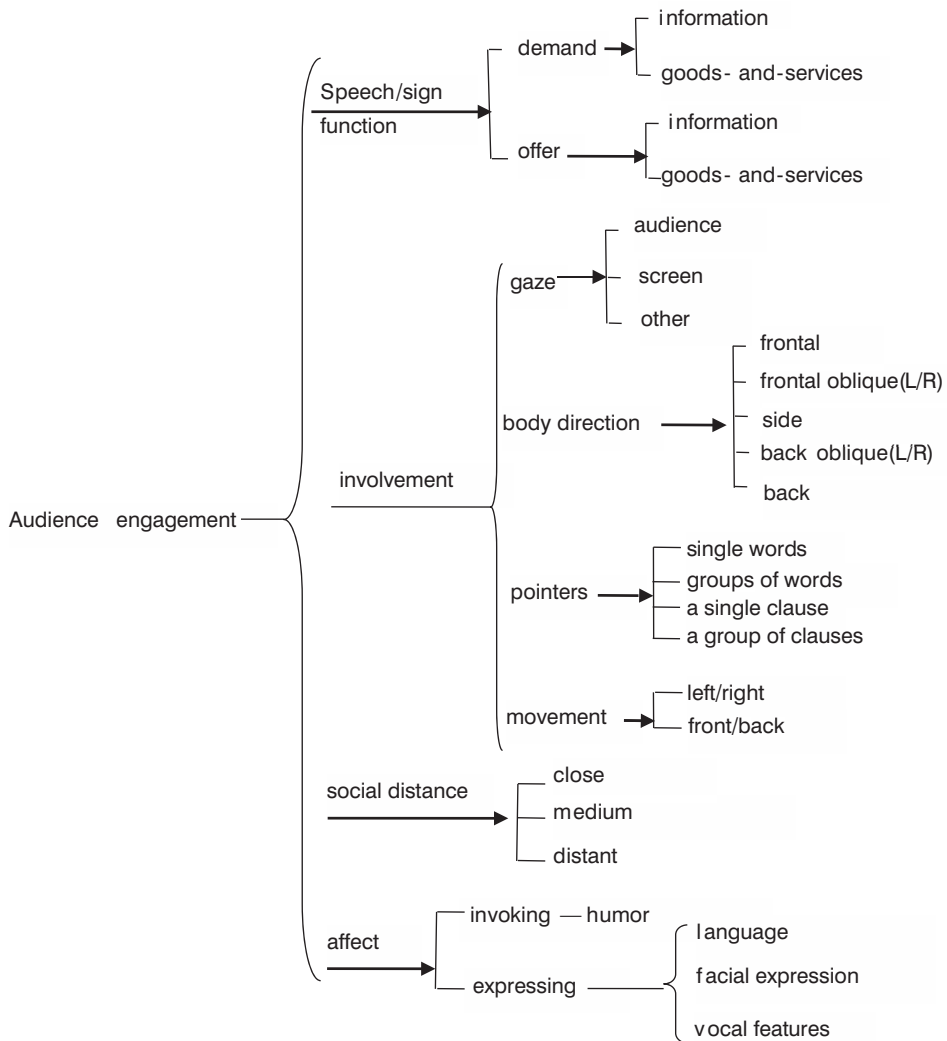


Figure 32.1 System network: choices of engagement identified in academic presentations

represented as system networks. Extending the notion of choice to the multimodal discourse of APs, we are able to classify the exact choices made by a speaker. With these two semiotic tools, we propose the system network as shown in Figure 32.1, which models the choice of multi-semiotic resources for the construction and negotiation of meaning in AP discourse. Synthesizing the work of Halliday and Matthiessen (2014), Kress and van Leeuwen (2006) and Martin and White (2005), our framework includes four parameters of interpersonal semantics, namely, speech function, involvement, social distance and affect, which are explained in detail in the following.

The speech function framework is based on Halliday and Matthiessen (2013) for language and Martinec (2001) for gesture. Halliday and Matthiessen (2013) categorize speech functions into four types: demanding information, demanding goods/services, offering information and offering good/services. In language, these four speech functions are generally realized respectively by the mood types of interrogatives, imperatives, indicatives and any of these for the last category. As language is a fundamental resource for establishing speaker–audience relation, the analysis of mood types can offer insights into how a speaker negotiates meaning for optimal engagement. Another important resource for exchanging meaning is gesture, as shown in Figure 32.1. Martinec (2001) argues that gestures can perform these four functions as well and terms it ‘sign function’. The questioning function is mainly realized by an upward movement of the head and/or eyebrows; the commanding function can be realized through emblematic gestures (e.g. gestures of stopping, summoning, etc.) and pointing gestures; the offering function is typically realized by stretching an arm and a hand (offering an actual object or virtual one); the statement function is realized through the representation of things or concepts (e.g. the iconic gestures in McNeill (1992), for example, hands moving up to describe other upward movements). We will also term these functions ‘sign functions’ to refer to both the speech and the gestures in exchanging information. This framework affords the description of how a speaker uses language and gesture to negotiate meaning with the audience.

The involvement function is mainly realized by nonverbal resources, including gaze, body direction, posture, the use of a pointer (as an extension of body gesture) and movement (see Figure 32.1). In terms of gaze, we distinguish three targets in APs: the audience, the screen and other objects. When there is eye contact between the speaker and the audience, it is possible for the speaker to communicate affective or attitudinal information to engage the audience, and at the same time, the speaker can notice affective or attitudinal reactions from the audience. When the speaker looks at the screen, he/she directs the audience’s attention to it and can maintain a satisfactory degree of interaction; when the speaker looks at his/her own computer or notes, speaker–audience interaction is minimized. By calculating the time distribution of different speakers’ gaze, we can tell the degree of his/her interaction with the audience. Body direction, as one of the variables of involvement, can be categorized into different positions/angles. If we take the screen as the point between 0° and 180°, then a frontal angle is facing the audience at 90°; back is facing the screen at 90°; side is facing to the audience at 0° or 180°; frontal oblique, which is halfway between frontal and side at 45° with two categories of frontal oblique left and frontal oblique right; and back oblique left and back oblique right, which is what is in between the back and side. The frontal angle of the presenter’s body direction embodies an elicitation for the presenter, inviting the audience’s attention. The third resource is the pointer, which can be used to point at a single word or a group of words (up to a whole paragraph) through moving the pointer. The last category of involvement resource is movement, which includes the directions of left/right and front/back from the audience’s perspective. As human beings tend to focus more attention on moving objects, the speaker’s movement can attract

the audience's attention. Movement also allows the speaker to adjust his/her distance with the audience at different locations of the room.

The parameter of social distance is mainly realized through the physical distance between the speaker and the audience. Studies in proxemics suggest that closer physical distance impacts the closeness of the social or affective distance (e.g. Hall, 1966). Based on these findings, Lim (2010) proposes a framework of space in his analysis of classrooms, and the distinction between personal space, authoritative space and interactional space is adopted here. The speaker stays within her personal space if he/she stands/sits behind the computer (normally in the corner) with half of his/her body hidden. In this case, the social distance between the speaker and the audience is distant, and if the speaker stands right in front of the audience without any object blocking his/her body, he/she is using the authoritative space, which constructs the speaker–audience relation as an institutional one of medium distance. If the speaker stands among the audience (e.g. checking how tasks are done, talking to individual audience members, etc.), he/she establishes an interactional space in which the speaker–audience relation is close. In public lectures, the speaker normally just stands on the platform or sometimes behind a lectern, but in regular classroom teaching, or in our case an informal AP, the strategic balance of authoritative space and consultative space is crucial for the construction of ideal speaker–audience relation for effective engagement.

Affect refers to the speaker's engagement of audiences' emotions. We distinguish between the emotional engagement achieved by provoking audience's emotion and by inviting audience to empathize with the speaker, following Martin and White's (2005) framework of appraisal. In APs, the range of affect is quite limited and we will only briefly talk about the use of humor (i.e. telling jokes) for the category of provoking emotion in the following section (identified through audience laughter) (e.g. Knight, 2010; Reershemius, 2012). The speaker may also just express his/her own emotions to invite the audience's empathetic emotions. The primary and most effective resource for emotional engagement is facial expression (Ekman & Friesen, 1975). In addition, this is also achieved through the linguistic recounting of an event (e.g. sharing a happy event, an anecdote), and the vocal features along with it (e.g. pitch level and loudness) (see Feng and O'Halloran, 2013 for a comprehensive discussion of emotion expression).

To summarize this section, we have outlined a framework which captures the verbal and nonverbal resources that speakers use to engage the audience. With the framework, we can describe accurately what choices experienced speakers make. Echoing Bateman's (2014) argument for empirical research in multimodal studies, the framework is explicit enough to support reliable annotation of a large quantity of data, as exemplified below.

Data and analysis

The AP examined in this chapter, titled *Literature Meets Grammar*, was delivered by an expert speaker. The talk focuses on the exploration of how an SFL approach to grammar can contribute towards an informed appreciation of literary works. The AP was audio and videotaped. However, the angle of the camera was not ideal as it was shot from an oblique angle, rather than a preferred frontal angle. Informed consent to use the data from the speaker was confirmed. The presentation was viewed multiple times and extracts that were seen to be highly interpersonal were identified, and the linguistic, visual and acoustic resources used in these extracts were transcribed and annotated. Due to space, we use one short extract from the talk to illustrate the range of engagement resources found in the AP, based on the framework set out in the previous section.

In order to be able to explore the co-deployment of multiple semiotic resources, we need a multimodal annotation tool that can time-synchronize the transcription and annotation with linguistic, visual and acoustic data. Among the available multimodal annotation tools (e.g. ANVIL, ELAN and Multimodal Analysis Video (MMAV)), MMAV, developed by the Multimodal Analysis Company in 2013 (<http://multimodal-analysis.com/>), was selected. MMAV provides greater opportunity to annotate and generate descriptive results across a range of data (see Smith et al., 2014 for a detailed discussion of the available functions). The software provides a range of graphical user interfaces (GUIs) so the analyst can import and view different media, enter systems networks, create time-stamped tier-based annotations and overlays and other useful analytical approaches for multimodal analysis (Smith et al., 2014, p. 273).

The interface is illustrated in Figure 32.2, where area (A) is the film strip and sound strip visualization area; (B) is transcription of verbal text; (C) is the system choices that we input in the software library (that is, the framework in Figure 32.1); and (D) is the annotated area where the systems are rendered as different tiers, and time-stamped annotation of the unfolding video can be conducted by choosing from the systems in (C) area. Using MMAV as an annotation tool and the explicit framework in Figure 32.1 as the annotation scheme, an analysis of extracts from the speaker was undertaken. The annotation can be exported to an Excel spreadsheet for statistical description, so that a synoptic view of the patterns of choices made can be generated (e.g. the percentage of a certain gesture and a certain speech function). Moreover, the time-stamp multi-tier annotation allows us to examine the multi-semiotic choices made at each point and the inter-semiotic relation based on empirical data, and to analyze dynamic change of the choices in the logogenetic development of the

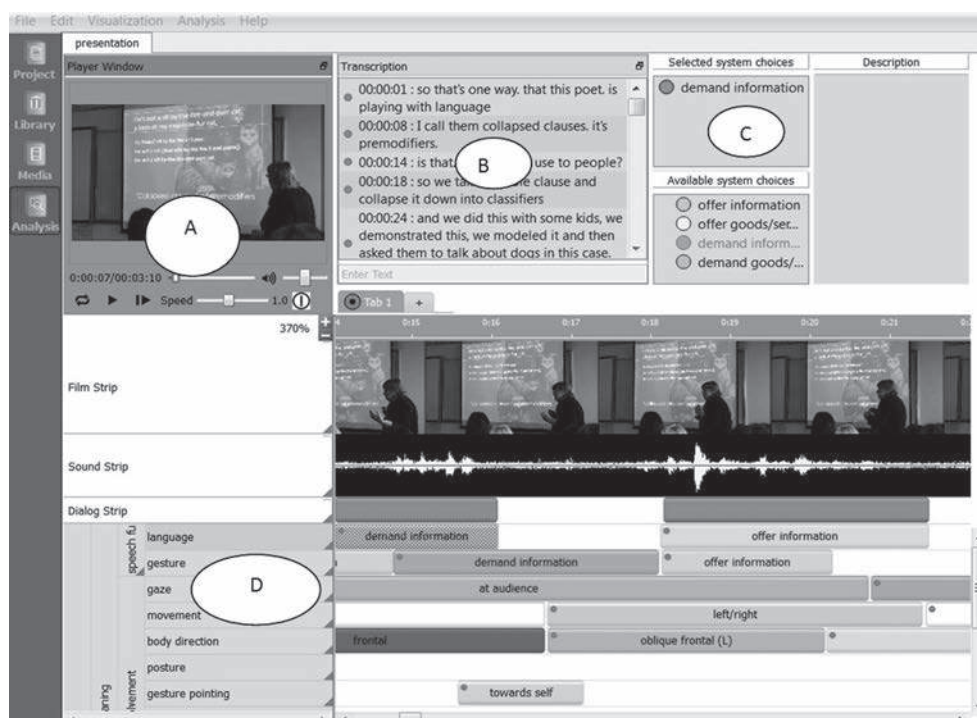


Figure 32.2 Sample view of multimodal annotation in Multimodal Analysis Video

video (that is, the semiotic choice according to the contextual demand of each stage of the discourse). In the following section, we will briefly report some findings from our analysis.

As shown in Figure 32.2, the annotation includes the dimensions from the system network in Figure 32.1. In this section, we will briefly discuss our findings from the annotation of a three-minute clip about the role of grammar in teaching poetry, and specifically the development of the nominal group from the talk. The transcript is provided here for easy reference. We will first discuss the speech functions of the speaker's utterances, focusing on how she unpacks and communicates abstract linguistic knowledge. Then we elucidate how different semiotic resources are co-deployed to maximize audience engagement.

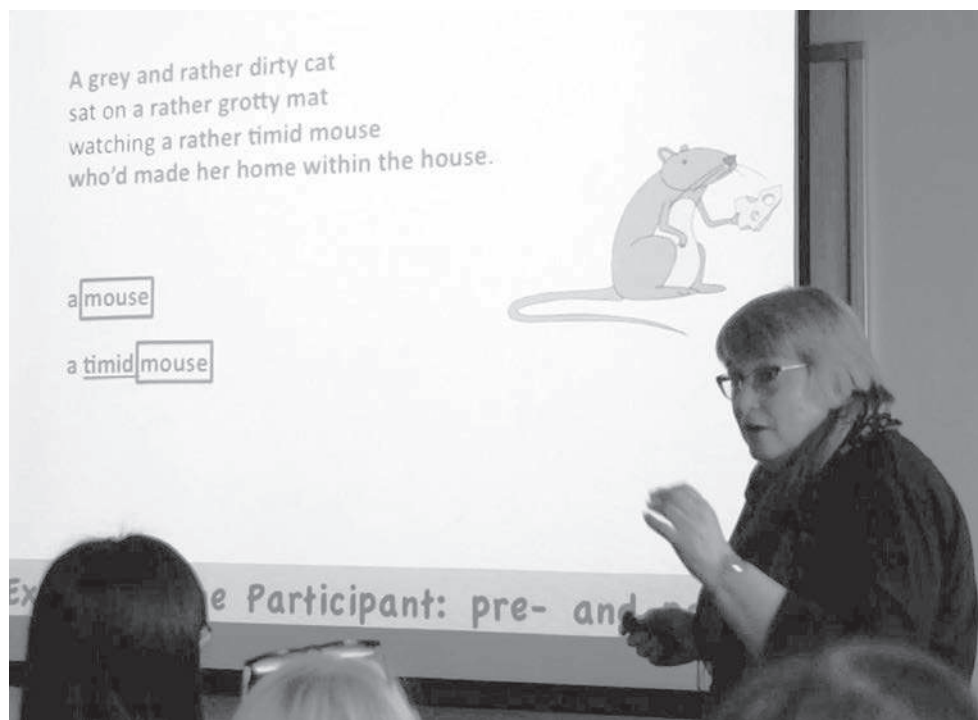
Text 1

- 00:01: so that's one way. that this poet. is playing with language
00:08: I call them collapsed clauses. its premodifiers
00:14: is that. are they any use to people?
00:18: so we take a whole clause and collapse it down into classifiers
00:24: and we did this with some kids, we demonstrated this, we modeled it and then asked them to talk about dogs in this case. and then we came up with these premodifiers
00:36: 'an elegant, spotted, fluffy-bottomed, tootsie-feet, shiny-eyed, smelly-ankled, sley-pulling police Husky who was highly toilet trained'
00:51: 'a jaw-shattering, drool-making, mouth-waterying bone'
00:57: 'a scrunchy-faced dog with vampire-like teeth'
01:06: and then we could look at this, looking out at both premodification and postmodification in a nominal group so building up the description
01:16: so we could have just said. 'a mouse', but that wouldn't have really built up much the picture about this mouse
01:25: but if it were 'a timid mouse', now we know a bit more about the mouse, don't we?
01:30: (whispering) a timid mouse
01:32: 'a rather timid mouse'
01:36: so we start to know this mouse a little bit better, but we could say more about it
01:41: 'a rather timid mouse who'd made her home within the house'
01:47: so you can see how it's building up the meanings around the nominal group
01:56: here's another one, 'we had birds, gold-fish, a fine dog, rabbits, a small monkey, and a cat. This latter was a remarkably large and beautiful animal that was entirely black, and sagacious to an astonishing degree.'
02:14: so again, here we got animal, at the heart of the nominal group
02:19: what can we see about this animal?
02:20: well it was beautiful
02:23: it was large and beautiful
02:27: it was a remarkably large and beautiful animal
02:32: and what more can we say about it?
02:35: well we could keep adding information... afterwards ... as a 'qualifier'
02:42: 'a remarkably large and beautiful animal that was entirely black, and sagacious to an astonishing degree'

- 02:50: so again it's that...the availability of...resources...ways of adding and enriching the description through the nominal group and that's what it's good for
- 03:04: it's good for developing erm the description

Initially if we simply look at the speech functions of the text, we can see that there are a number of linguistic features that realize engagement; for example, the use of interrogatives, whether they are yes/no or tag or more open questions (e.g. *are they any use to people? don't we? what more can we say about it?*). The speaker does not expect a response, and interrogatives are posed more as a rhetorical device for emphasis and to engage the audience. As the primary purpose of APs is explaining abstract concepts and findings (i.e. offering information), we will examine in detail how a skilled presenter unpacks linguistic knowledge and communicates to the audience. Two notable features include the use of pronouns, and the development of nominal groups. In terms of pronoun, the speaker often uses the personal pronoun *we* to involve the audience. It is possible that the speaker explicitly chooses *we* in order to be inclusive and embrace multiple potential listeners – e.g. *we* the research team, teachers and students and the audience of applied linguists – perhaps?

As the speaker highlights how learners developed control of the nominal group and when referring to examples from the learner's texts, the speaker gestures frequently to elucidate and clarify information. When the body language is co-expressed with spoken language, the body can play an important role in 'invoking attitude through the grading of the meanings' (Hood, 2011, p. 44). The findings demonstrate that the presenter used her body language accompanying verbiage to grade the meaning of intensity. As illustrated in Figure 32.3, the tension in the speaker's hand gesture and posture co-expresses the intensification of meaning



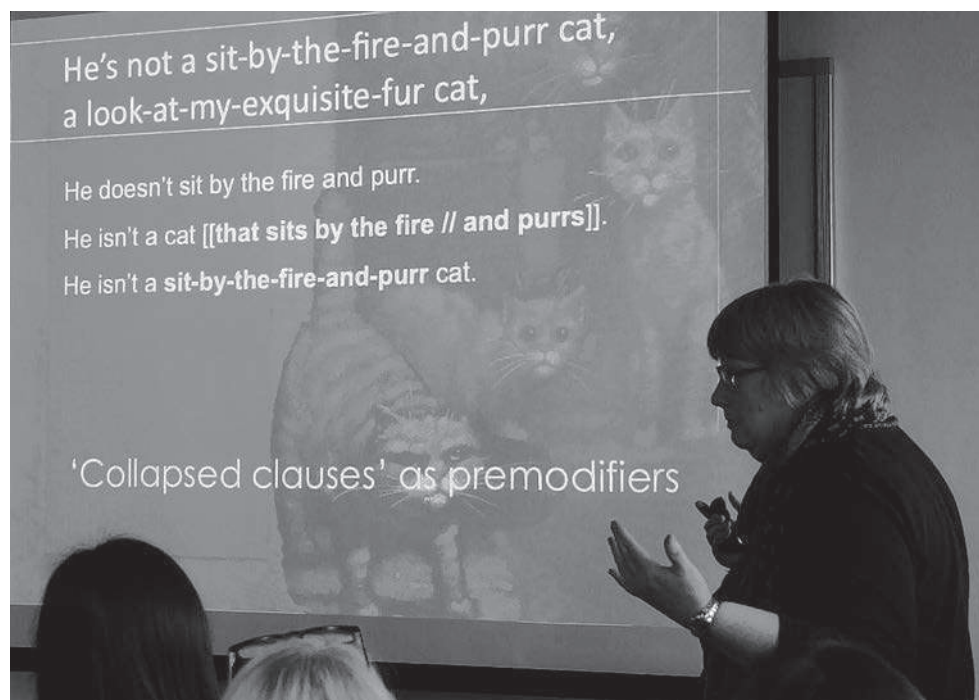
now we know a bit more about the mouse, don't we?

Figure 32.3 Hand gesture and posture expressing intensification

together with verbiage *a bit more*. At the exact same time that the speaker says *a bit more*, her facial expression changes, she beats her hand and the stress in the clause is on the three words *a bit more*. The semiotic spanning between the gesture and the linguistic intensifies the meaning. We find at a later point when the speaker is highlighting the development of the nominal group through another example (e.g. *it was beautiful, it was large and beautiful, it was remarkably large and beautiful*) that when the new lexis is introduced (e.g. *large* and *remarkably*), these words are accompanied with a particular hand movement, a beating of the hand as these words are spoken. Together, the word and the hand gesture realize an increase in the intensification. There are numerous other linguistic resources that contribute to audience engagement: the choices of process types, logical semantic relations of the clauses, the choice of the organization of information, the sequencing of the knowledge, etc., are all important areas that impact the engagement and are areas for further research.

The second dimension in our framework is involvement where the speaker uses gaze, body direction, pointing, movement, etc., to engage the audience's attention and interest. The co-deployment of the frontal oblique angle of body direction and gaze toward the audience characterizes the speaker's engagement with the audience, and at the same time saying *we did this with some kids, we modeled it, we came up with these premodifiers*, etc. The speaker follows this by shifting the gaze from the audience to the slides, and using the laser presenter to highlight specific words on the slide. Directing the audience's attention to the slide pulls them in to a point where they are encouraged to engage with the ideational features presented through the combined linguistic, audio and visual resources.

Although speech/sign function (i.e. exchanging information) and involvement are discussed separately in our framework (see Figure 32.1), it should be noted that these



are they any use to people?

Figure 32.4 Open arm horizontally to invite voices from the audience

two aspects of engagement functions are always correlated and co-constructed through multimodal resources. As shown in Figure 32.4, the presenter initiated engagement by standing in a frontal angle, with her gaze directly towards the audience in anticipation of the question *are they any use to people?*. This question, accompanied by the gesture of opening her arms horizontally and a rising tone, invites the audience to be involved and to assess the value of the information being offered. At this point, the speaker is not expecting a response of *yes this is very useful* or *no it's not useful*, but the onus for engaging with the object of study is on the audience. Or, perhaps the speaker was adopting a knower stance and using this interrogative more like an interpersonal metaphor where although a question is being raised, the speaker implicitly means *this should be useful to you*. However, in the nature of the speaker, we would argue that this is a true interrogative and that the speaker is actually saying *you may or may not find the information relevant*. By combining the linguistic with the visual body language and an additional pause for time to think, the speaker encourages participation and engagement within the talk.

The third salient feature about the talk is multimodal construction of humor to elicit brief moments of happiness from the audience. As shown in Figure 32.3, the speaker demonstrates the value of focusing on grammar when teaching poetry, and she highlights in her talk the student example '*an elegant, spotted, fluffy-bottomed, tootsie-feet, shiny-eyed, smelly-ankled, sley-pulling police Huski who was highly toilet trained*'. In the highly conscious selection of the example of the student's nominal group included on the slide, *smelly-ankled* was explicitly chosen in order to amuse and entertain the audience (i.e. invoking affect in Figure 32.1). At this point, there is a relative shift in voice quality and a noticeable difference when the speaker states *smelly-ankled* with a rise and fall tone, raising an ironic question or doubt about the choice of a dog having 'smelly ankles'. The irony of the *smelly ankles* is accompanied by specific body language, the presenter opens her arms and shrugs her shoulders – mimicking the semantics of 'why did the student choose smelly-ankled? What a strange choice? Wouldn't you agree this is a strange choice?' At this point, there is communal laughter heard from the audience, who appreciate the entertainment value of *smelly ankles* and support the presenter's suggestion that it was an odd choice. Humor is an element of a presentation that brings the audience together, and generates solidarity through the shared understanding of laughter (e.g. Knight, 2010; Reershemius, 2012). Summarizing our discussion of the short video clip, we can conclude that it is the multi-semiotic resources used by the presenter and the semiotic spanning of the linguistic, visual and audio resources that combine with each other to construe the meaning potential and the solidarity between the speaker and the audience during an AP. The combination of the linguistic, visual and audio choices made can realize textual, ideational and the interpersonal meanings in an AP, which can be further investigated. The semiotic choices can be used to construct inter-semiotic cohesion, that is, referring to certain words or images on the slide, links between stages in the talk, or other features related to the mode and organization of the talk. The ideational elements help to develop the content: the object of study. For example, in the short extract, when the speaker refers to *building up*, she opened and raised her arms to symbolically represent and reinforce the meaning. All these resources can be used as engagement resources to construct the intended relationship between the speaker and the audience.

Conclusion and future directions

To conclude, in classes focusing on improving presentation techniques, we often hear advice such as 'you have to connect with your audience', 'you have to use more body language

to engage your audience’, etc. (www.TED.com; Duarte, 2010; Gallo, 2014). However, exactly how this is achieved is unclear. We need to have a more explicit ‘metalanguage’ so that speakers know exactly how to design and combine their speech, gestures, movement, etc., to clarify ideas, to engage the audience and to organize the AP. Through an analysis of a small extract from the middle of an AP, we have identified how these meanings combine and demonstrated the value of a multimodal investigation into APs. We would like to highlight possible directions for future multimodal research related to APs:

- 1 As the semiotic theories that are developed to model meaning-making in multimodal resources are often criticized for being based on single illustrative cases, which lack an empirical basis, developing a rigorously annotated multimodal corpus is an important step towards empirical multimodal research (Bateman, 2014, p. 238). The potential for future research would involve collecting a wider range of APs, and analyzing through digital software the range of multimodal features used for meaning-making. The greater the number of APs analyzed, the greater the understanding of common linguistic, visual and audio features found in these texts.
- 2 The theoretical descriptions of nonlinguistic resources should be further refined based on the empirical data. The huge benefit of using software analytical tools is that they allow the researcher to archive, compare and generate statistical data focusing on and developing a shared framework. The development of a shared framework will enable studies to provide a more convincing picture of the meaning potential found within APs.
- 3 As Holsanova (2012, p. 251) observes, ‘given the dominant role that multimodality plays, there is still a lack of empirical studies on how recipients interact with multimodal messages’. In future research, we can use questionnaire surveys to ask the audience to comment on the multimodal features of different presentations, or use a focus group after a presentation to discuss the audience’s reaction to the use of gesture, gaze, etc.

We pose a question for further thought: ‘if the content is excellent, but the speaker does not engage with the audience – does this matter?’ We believe it does. We believe that EAP teachers are committed to teaching interactive, interpersonal features that help speakers engage with their audience in a classroom; that in the workplace and in academia, if a speaker can engage with the audience when presenting, the warrantability of his/her proposition will be strengthened. We also believe that if a speaker has excellent content plus effective presentation skills, his/her status within the academic community can be enhanced. Through research into a comprehensive understanding of the semiotic range and resources used to construe meaning in APs, we can better scaffold improvement in students, colleagues and others involved in giving presentations.

Further reading

Kress & van Leeuwen (2006)

Related chapters

- 15 Systemic functional linguistics and EAP
- 20 Multimodal approaches to English for academic purposes
- 26 Seminars

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33

RESEARCH BLOGS, WIKIS, AND TWEETS

Maria Kuteeva

Introduction

At the turn of the millennium, the internet was perceived as something to be used with caution, ‘a resource that is a mix of standards and near anarchy’ (Slaouti, 2002, p.107). The first generation of the web did not allow for much interaction, and any online content needed to be checked for errors before publication, particularly in academic settings. Over the past decade, control over the publishing domain has been irreversibly lost with the emergence of the so-called Web 2.0 (O’Reilly, 2005), which empowers the user to take an active role in the creation of content through social networking, blogs, wikis, YouTube, and Twitter. The development of digital technologies has resulted in the emergence of new academic genres and discourses, and the impact of these developments on English for academic purposes (EAP) needs to be explored.

This chapter provides a new angle in EAP research by discussing how blogs, wikis, and tweets are used by researchers worldwide, reviewing recent literature in the field, and providing suggestions for pedagogical applications. So far, EAP and English for specific purposes (ESP) research has focussed primarily on traditional research genres, as several chapters in this handbook testify. At the same time, as Barton and Lee (2013, p.2) point out, ‘academic writing has been reshaped in many ways with the rise of new technologies’. Today’s world is increasingly mediated through new types of text and, by combining semiotic resources in new ways, people create new relations between language and other ways of meaning making. Contrary to predictions of the internet becoming dominated by English made in the 1990s (e.g. Fishman, 1998, p.26), the internet and its users are increasingly multilingual. The multilingual encounters online contribute to shifting the relations between languages, and vernacular language practices are circulated more widely. At the same time, there is more tolerance towards non-standard language uses, and English is often used as a lingua franca in online contexts (Mauranen, 2013). Thus, language has become central to new forms of knowledge creation and self-representation online: there is more reading and, in particular, more writing taking place, as well as more tolerance towards language varieties and non-standard uses (Barton & Lee, 2013, p.183).

Applied linguistics research into academic discourse online is relatively new, and the fast developments in information technologies pose continuous challenges to researchers. For example, when Myers began studying the discourse of blogs in 2006, he was concerned about the short-lived nature of his findings:

By the time you read this, blogs may be over, replaced by various sub-genres and other ways of networking. And *Wikipedia* may be going downhill (though people have been saying it was going downhill since the very beginning, and it shows no signs of going away). We will still need to analyze whatever genres emerge, using some concepts linking the forms and the uses to which they are put.

(Myers, 2010, p.26)

By now, blogs, wikis, and more recently Twitter have become established media of communication in the research world. By analogy with Web 2.0, the Science 2.0 movement (www.science20.com) emerged, referring to ‘new practices of scientists who post raw experimental results, nascent theories, claims of discovery and draft papers on the Web for others to see and comment on’ (Waldrop, 2008). At the same time, Waldrop claims, in some disciplines such as biomedicine, there is still a strong reluctance to open up because of high competition. The authorship and credit problems remain major obstacles in disseminating research online. The traditional publication, most often in the form of the research article (see Samraj, this volume; Belcher, Barron Serrano and Yang, this volume), holds the most prestige in the academic world. Nevertheless, digital communication and social media hold a great potential to democratise science and to open it up to lay audiences. Thus, making use of blogs, wikis, and other social media in our EAP courses can play an important role in helping non-English-speaking researchers worldwide to become full members of their respective research communities.

Research blogs, wikis, and tweets

Science blogs have become an established channel of communication, both between scientists and with the general public. Many of the science blogs are written by journalists and belong to traditional publishers (e.g. SciTech Connect by Elsevier, the science blog network by *The Guardian*, Scientific American blog network). In the context of this article, however, the science blog is narrowed down to the research blog kept by active researchers. Luzón (2011, p.518) describes the research blog as ‘an online genre that enables self-presentation and usually incorporates social tools which support participation and conversation’. Thus, research blogs enable scientists to engage with their academic and other communities, present and discuss their work in progress, and receive feedback from their peers. Access to research blogs is not limited to a specific discourse community: both scholarly audience and the general public can read these blogs and contribute to discussions.

A wiki has been defined as a ‘freely expandable collection of interlinked web pages, a hypertext system for storing and modifying information – a database, where each page is easily edited by any user with a forms-capable Web browser client’ (Leuf & Cunningham, 2001, p.14). Its basic features include creating and editing texts, linking different pages through hyperlinks, inserting images and links to other sites, tracking changes and comparing different versions of the text, a history page, and a discussion page. Wikis can be used for collectively producing, organising and sustaining textual, visual, and auditory resources, and have been used in academic and EAP contexts (e.g. Kuteeva, 2011; Lund, 2008).

Applied linguistics research on the use of Twitter in the research world is still in its infancy. Myers (2013) has demonstrated that scientists on Twitter appear to be ‘an odd community’, different from others in personal narrative and stance (e.g. using many more links and citations). He further argues that tweets by scientists do not all fall into the same

generic category, as different research communities use Twitter for different purposes. Drawing on Gilbert and Mulkay (1984), Myers argues that communicating about science on Twitter reveals the ‘contingent repertoire’ which is used among scientists to talk about their work in informal settings. Scientists’ tweets provide an insight into day-to-day practices and problems, and show what is going on ‘behind the scenes’ in the research world. This kind of communication is different from the ‘empiricist repertoire’ (Gilbert & Mulkay, 1984), which is used in academic publications, popularisations, and in other formal settings where scientists are required to report on their research.

Blogs and wikis have been studied from different perspectives, both in applied linguistics and in other related fields. For example, the discourse of science blogs, and research blogs in particular, has been analysed by Luzón (e.g. 2011, 2013a, and 2013b), Mauranen (2013), Miller and Shepherd (2009), and Myers (2010). Most applied linguistics research on blogs has focussed on the discourse features of blog posts and discussion threads. As will be shown in the following section, Luzón’s studies, for example, have examined interactional discourse features on research blogs and how scientific knowledge is being repackaged to address different audiences. The discourse of wikis has received less attention in applied linguistics; see, for example, two chapters in Myers (2010) on ‘history’ and ‘talk’ pages in Wikipedia. Some studies have focussed on the pedagogical applications of blogs and wikis (e.g. Hewings, 2013; Lund, 2008; Miyazoe & Anderson, 2010), including EAP contexts (e.g. Kuteeva, 2011). Several forthcoming publications, such as Myers on the use of Twitter by scientists, Mauranen on reflexivity in science blogging, and McGrath on the collaborative writing of a research article on a maths blog, will add further insights into the study of online academic discourse. For example, drawing on the analysis of over 600 thread comments posted by maths blog participants, McGrath (under review) shows what aspects of research-based writing are important, and how decisions concerning genre and knowledge dissemination are reached. Her findings offer additional insights into the process of research article construction in pure mathematics. The following section will outline some of the critical issues raised in applied linguistics research.

Critical issues in research

Science blogs have been classified in different ways, based on content (e.g. Blood, 2000; Krishnamurthy, 2002; Herring et al., 2005), based on linguistic features such as register (Grieve et al., 2011), and based on typified social action (Miller & Shepherd, 2004). Research blogs are interesting for an applied linguist and EAP researcher for several reasons. These blogs provide data for exploring the effects of the medium on writing and its limitations, possess specific register features (mixing written and spoken), and develop specific multimodal discourse features. Bloggers tend to engage in interaction with the public by resorting to the ‘contingent repertoire’ of scientific discourse (Gilbert & Mulkay, 1984), including personal expressions of opinion, feelings, and emotional reactions. This combination of features distinguishes research blogging from other types of scientific discourse (Luzón, 2013a). In addition, blogs often mix languages and make use of English as a lingua franca, since many researchers are not using their first language when they write on the blog (Mauranen, 2013).

One controversial issue in the study of research blogs is whether they can be seen as a genre. Myers (2013) confesses that when writing his book on the discourse of blogs and wikis (Myers, 2010), he realised that blogs were not genres at all, comparing the blogosphere to the so-called ‘inkosphere’ of traditional publication. Similarly, Barton and Lee (2013, p. 29) argue that blogs provide space and structure for communication and developing different

genres depending on who is writing and what. Mauranen (2013) discusses the blog as ‘a cluster of genres’ and argues that research blogging is ‘neither academic nor popular’.

Some applied linguistics researchers (e.g. Biber & Conrad, 2009) connect genre to register variation. Due to its specific register features, Mauranen (forthcoming) views the science blog as a genre, a ‘basic level’ category (Lakoff, 1987), and the research blog as its sub-genre. She further argues that the initial blog posts tend to be written more carefully and focus on a particular topic, while the discussion thread appears to be more spontaneous and may contain both informal and relatively formal contributions. Thus, blog discourse is rather hybrid and incorporates features from spoken and written registers (Grieve et al., 2011). For example, the excerpt below illustrates how research bloggers mix written and spoken registers, empiricist and contingent repertoires (Gilbert & Mulkay, 1984), and refer to Wikipedia in their discussion of scientific matters:

[...] *Do we need to also consider* contaminants that might have banded at a specific density in the gradient? The centrifugation is powerful enough to cause the heavy Cs+ ions to move down in the tube, might it also affect the distribution of other ions? *What does Wikipedia say?* (*Ah, the correct term is ‘isopycnic centrifugation’.*) Nothing about other ions. CsCl gradients have typically been used to separate DNAs with different base compositions from each other (e.g. nuclear DNA from mitochondrial or plastid DNA); I don’t know if anyone ever used them to separate DNA from soluble contaminants. Bottom line: *If the LC-MS data shows* arsenic in the DNA, we can polish up these DNA purification steps. *If it doesn’t*, we won’t need to bother.

(RRR blog; cited in Mauranen, 2013, p.28; emphasis in the original)

Mauranen (forthcoming) finds the research blog discussion interesting both as a manifestation of open, digital expansions of research discourse, and as a facet of discourse reflexivity, a key property of language which enables people to reflect on language and its use. Linguistic reflexivity functions as powerful digital discourse (Barton and Lee, 2013, p.123). Mauranen (2014) shows that reflexivity in blog discussions, for example blog posts followed by threads, is closer to spoken dialogue than spoken monologue. There is more retrieving (referring to what had been said, e.g. *as I said; Just like you say*) than orienting (what will be said, e.g. *I would argue that; I must admit*), in particular retrieving with reference to the work/words of others rather than self. Thus, by making use of discourse reflexivity, interactive written dialogue in blog discussions helps in matching perspectives by increasing precision and sharedness, which in turn contributes to co-construction of ideas and knowledge among the participants (Mauranen, 2014).

Another issue in the study of research blogs concerns the uncertainty of their target discourse community. While the blog is recognised as a type of communicative action, Mauranen (2013) wonders what ‘community’ or ‘discourse community’ (Swales, 1990) it serves. Unlike the more traditional academic genres discussed in this volume (see Samraj, etc.), blogs tend to have very heterogeneous audiences and address no specific discourse community in the Swalesian sense. Rather, specific contexts create genres such as research blogs, and communities emerge around them (Mauranen, 2013). Along the same lines, Luzón (2011) argues that academics who interact through a specific blog form ‘communities of blogging practice’: groups of people who share certain routines and expectations about the use of blogs as a tool for information, identity, and relationship management’ (Schmidt, 2007).

Thus, the discourse of research blogs is neither strictly scientific nor adapted for the popular audience. As Mauranen (2013) shows, bloggers themselves manifest genre awareness of finer distinctions in blogging about science:

Not your typical science blog, but an 'open science' research blog. Watch me fumbling my way towards understanding how and why bacteria take up DNA, and getting distracted by other cool questions. (RRR)

There needs to be an easier distinction between journalism, press releases, blogging and what you (and we – actual blogging is a tiny 4% of our content) do, because your work is a lot more knowledgeable than journalism and way beyond blogging in credibility. What is that term? Science 2.0 doesn't work because you it can't end in -ism or -ing but someone will come up with something. (TD)

(Mauranen, 2013, p.26; emphasis in the original)

In other words, unlike the more traditional research communication channels, blogs provide space for personal expression and debate, and can be perceived as a highly social form of scholarly communication (Mortensen & Walker, 2002). For example, Luzón (2011) examined social presence and anti-social behaviour in research blogs. Having compiled a corpus of 98,000 words (based on 10 posts plus comments from 11 blogs from different disciplines), she identified 1,594 indicators of social presence (intimacy, solidarity, shared knowledge and values, engagement in personalised relations, mutual support), of which only 105 were anti-social, and these were found primarily in follow-up comments rather than initial posts. Anti-social behaviour was more common in blogs discussing controversial topics which triggered a large number of comments. Indicators of anti-social behaviour included negative socio-emotional behaviour (e.g. 'SHUT UP!!!'), group exclusion (e.g. 'You are an idiot'), and confrontational interaction (e.g. 'Your assumption is naïve'). On the whole, however, a high proportion of markers of affectivity, cohesiveness, and interactivity indicates the bloggers' efforts 'to create and maintain a blogging community and to identify themselves as authoritative and competent members of that community' (Luzón, 2011, p.535). Discursive strategies used by bloggers for expressing emotion, humour, phatic communication, and so forth are similar to other forms of computer-mediated communication and contingent academic genres. Thus, blogs function as social forums for self-presentation, networking, discussion, and idea testing, being more similar to face-to-face academic discourse than written genres (cf. Mauranen, 2013).

Some of the research on academic blogs has focussed on the recontextualisation of knowledge. Examining another corpus of 75 posts from 15 blogs of active researchers from different disciplines, Luzón (2013a) identified the rhetorical strategies used to recontextualise science information. She divided these strategies into two types of categories: those used to tailor information and those used to engage the reader (see Table 33.1). She concludes that research-commenting blog posts are 'hybrid discursive spaces that incorporate practices from public and personal/private discourses (self-reference, informality, expression of feelings), from popularized discourse (humor, metaphors, references to reader), and from different genres of specialist discourse' (Luzón, 2013a, p.453). She further argues that bloggers adopt rhetorical strategies from research papers, as well as strategies used to verbalise conflict and express criticism, typical of genres like peer reviews, book reviews, or editorials. When researchers blog about science, they evaluate and comment on the validity of others' claims, often taking sides and providing a personal view of scientific issues, in order to convince

Table 33.1 Rhetorical strategies to recontextualize science information

Strategies to tailor information
<ul style="list-style-type: none"> • Explanation of terms and concept (definitions, elaboration of terms) • Paraphrases/reformulations • Comparisons/metaphors • Examples from daily life • Links • Visuals conveying information
Strategies to engage the reader
<ul style="list-style-type: none"> • Titles • References to popular lore, beliefs • Self-disclosure (reference to the blogger's public or personal life) • Features of conversational discourse • Inclusive pronouns • References to reader • Questions • Humour • Positive evaluation of research or findings • Negative evaluation of research or findings • Personal expression of opinion • Expressions of feelings or emotional reactions

Source: Luzón 2013a, p.437

the reader to adopt their own views or interpretations. In other words, bloggers do not act as passive mediators of knowledge; rather, they actively promote their own opinions about scientific issues.

Luzón (2013a) also found that all selected blog posts in her corpus contained an announcement of a new finding (by other researchers) or the new contribution to the disciplines. The other most common rhetorical categories in research-commenting posts included presenting, explaining, and commenting on the results (93.3 per cent); drawing implications or highlighting the significance of the study (74.6 per cent); contextualising research (70.6 per cent); and describing and evaluation method (57.3 per cent). Interestingly, in presenting and evaluating the results, adopting a neutral or positive stance towards findings was more common (56 per cent) than questioning (16 per cent) or criticising the findings (21.3 per cent). In drawing implications and highlighting the significance of the study, the significance of the research for science (52 per cent) and implications for people's lives (34.7 per cent) were more common than discussing broader implications (16 per cent) and implications for involved actors (13.3 per cent). This proportional distribution suggests that, despite a clear attempt to communicate with wider audiences, the bloggers in Luzón's (2013a) study generally support their fellow researchers and interpret their findings within scientific contexts more often than within broader social contexts. Thus, although research blogs are meant to address a broader range of audiences and combine features of both written and spoken discourse, their discourse is determined primarily by research contexts.

Compared to blogs, wikis have received less attention in EAP and applied linguistics research. Although different kinds of wikis are available from different providers, Wikipedia, powered by MediaWiki, remains the largest wiki project to date. As far as personal stance

and voice are concerned, Myers (2010) regards wikis as different from blogs in the sense that these collaboratively created webpages are impersonal and require consensus between different authors, at least on the main page of the Wikipedia article, while blogs encourage personal expression and debate. At the same time, any controversial issues related to the topic of the article can be discussed in ‘talk’ pages (Myers, 2010, Chapter 10). Myers also identifies some rhetorical features of the Wikipedia articles and some common trends in its creation through ‘history’ pages. As the article grows, it becomes longer, more balanced, and cautious, and, in some cases, more coherent. Some edits are accepted while others are rejected immediately, and the text gradually emerges through this uneven process. As with blogs, the ‘talk’ pages contain records of discussion and disagreement among different editors. What goes on behind the scenes is reminiscent of blog discussions, where elements of written and spoken registers are used to express stance.

However, contrary to blog participants, Wikipedia editors are not supposed to write about their own new knowledge or findings: ‘The principle is invoked to exclude people with their own theories or speculations’ (Myers, 2010, p.148). Instead of producing new knowledge, Wikipedia aims to collect prevalent representations of knowledge through collaborative writing.

Different researchers in applied linguistics have commented on the quality of Wikipedia. Crystal (2007, in Myers, 2010, p.129) refers to the Wikipedia article as ‘a fascinating, unpredictable, dangerous selection of facts and fiction’. Myers (2010, p.129) claims that Wikipedia ‘gets things wrong, indulges in triviality ..., follows the biases of its users, and allows cults, flame wars and vandalism’. Dalby (2007, p.8) examined the use of English in Wikipedia and found it to be very variable due to a wide range of contributors, concluding that ‘Wikipedia is certainly not a reliable model of good English, nor of the English of native speakers... Wikipedia is an encyclopaedia for the world as it is’. Thus, like blogs, Wikipedia articles can provide interesting material for the study of English as a lingua franca in collaborative writing settings.

When referring to the high level of bias and inaccuracy in Wikipedia, both Myers and Crystal consider articles focussing on topics of relatively general interest. Contrary to their critiques, it seems that scientific knowledge is relatively well communicated in Wikipedia. According to Giles’ (2005) study commissioned by, and published in, *Nature*, Wikipedia is close to *Encyclopaedia Britannica* in terms of accuracy of its science entries, announcing that ‘Jimmy Wales’ *Wikipedia* comes close to *Britannica* in terms of the accuracy of its science entries, a *Nature* investigation finds’ (p. 900). Thus, Wikipedia is often perceived as a credible source by scientists (for example, note the reference in the excerpt from Mauraanen 2013 cited above; Luzón (2013a) also found that research-commenting posts often refer to Wikipedia). However, as the Wikipedia project grows, it keeps reflecting ‘the world as it is’ (Dalby, 2007, p. 8). A more recent study by Giles (2013) identified 25 million entries in 285 languages but adopted a far more critical stance towards the content, arguing that ‘great swathes of human knowledge remain absent’ in Wikipedia. There is also gender imbalance (90 per cent male editors), and the most active editors live in the US and Europe. This imbalance results in a severe under-representation of knowledge about certain geographical areas: for example, many countries in Africa have fewer articles dedicated to them than the fictional realm of Tolkien’s Middle Earth (Giles, 2013).

At the same time, wikis have been discussed as offering possibilities of combining collaborative writing with explicit authorship, providing authors with due credit, and strengthening the rigour of peer review (Hoffmann, 2008). Black (2008) explores the use of Wikipedia or similar systems for the review and dissemination of academic knowledge,

proposing a change in the methods by which academic knowledge is both constructed and disseminated. He argues that the traditional peer review process should be updated in favour of more dynamic knowledge creation and management supported by collaborative writing software, which by now has begun to take place, as evidenced by McGrath's (under review) research on the writing process of a pure mathematics research article.

As mentioned above, research on the use of Twitter in academic settings is still scarce. Some studies have explored the discourse of Twitter in different social and professional contexts (e.g. Gillén & Merchant, 2013; Zappavigna, 2012). As far as academic contexts are concerned, tweets have become very common in conferences and lectures (Barton & Lee, 2013, p.157) to keep participants connected during the talks and updated in parallel sessions. However, Twitter is also used by scientists all over the world on a daily basis. Myers (2013) argues that Twitter is used to connect scientists in different parts of the world and reveals how science is really done. Like research blogs discussed above, the tweets examined by Myers display tensions between empiricist and contingent repertoires (Gilbert & Mulkay, 1984); for example, communicating scientific versus everyday matters.

The top keywords in Myers' (2013) science tweet corpus included: *paper, scientists, research, data, evidence, style, journal*. Other salient features were the overuse of 'I' (not common in other tweets), 'of' (more complex noun phrases), 'but' (concession), 'may', 'maybe', 'some' (hedging), and 'love' (evaluation). Overall, scientists on Twitter present themselves as a single, rather closed, community, sharing norms and focussing on work. When they emphasise the moment, the everyday, they use what others do on Twitter. However, time references produce a different representation of science 'behind the scenes', different from academic journals and popularisations. Contrary to some popular stereotypes, the tweets in Myers' corpus reveal that science is like any other work, with its own routines and day-to-day problems. Thus, compared to research blogs, tweets display even more features of the contingent repertoire.

Methods in the study of research blogs, wikis, and tweets

Studying academic language online opens new possibilities for developing research methodology, as the internet provides free access to large amounts of textual data. Both quantitative and qualitative methods have been used in different studies of online discourse, including the above-mentioned research. A common approach in the study of research blogs, for example, has been to compile a sufficiently large but manageable corpus of posts and comments, and then qualitatively examine specific discourse features such as stance (e.g. Myers, 2010, Chapter 7), rhetorical strategies (e.g. Luzón, 2013a), or reflexivity (e.g. Mauranen, forthcoming). The design of the wiki software, with its 'history' and 'talk' pages, offers researchers possibilities to compare different versions of the same text and to relate its collaborative construction to interaction between different authors (e.g. Myers, 2010, Chapters 9 and 10; Kuteeva, 2011). Myers' (2013) corpus of science tweets has been examined for both frequencies and rhetorical functions.

Barton and Lee (2013, Chapter 12) provide an overview of three major phases in the study of language online. During the initial phase, researchers focussed on the structural features of computer-mediated communication (e.g. Ferrara, Brunner & Wittemore, 1991, Shortis, 2001), creating large corpora of data randomly collected from the internet in order to identify new varieties of language and its online uses. Barton and Lee (2013) believe that during this phase, researchers tended to overgeneralise their findings, and paid little attention to context and variation within the same type of discourse. During the second phase

(e.g. Herring & Paolillo, 2006; Lee, 2002), researchers focussed on specific types of language online and also complemented the findings based on corpus analysis with qualitative data, such as interviews, in order to acknowledge variation and context-dependency in language use. During a more recent phase, concepts and theoretical frameworks from the social sciences contributed to a broader view of language online in connection to language ideology. For example, Davies and Merchant (2007) analysed research blogging as social practice, adopting an auto-ethnographic approach (Anderson, 2006) in the study of their own blogging practices. Gillén and Merchant (2013) adopt a similar approach in their study of Twitter. Barton and Lee (2013, p.166) also view language online as ‘situated social practice’, with the overall methodological assumption that online texts should be studied in connection with social practices. The most recent development in researching language online concerns the use of concepts such as ‘superdiversity’ promoted by Blommaert and Rampton (2011) and inspired by Vertovec (2007) who characterised it by a dramatic increase in the categories of migrants as well as their motives, patterns, and itineraries of migration. For example, *Discourse, Context, and Media* dedicated its most recent special issue to the topic of digital practices in superdiversity (Androutsopoulos & Juffermans, 2014). Both Barton and Lee (2013) and Myers (2013) stress the importance of mixed methods and further qualitative research into online language uses.

The issues of research ethics and privacy have gained a new dimension in the study of language online. When Myers was writing his book (2010) on the discourse of blogs and wikis, he intentionally included the material that was meant to be read by the widest possible audience. Nevertheless, the issue of the bloggers’ copyright and ownership of their words arose, which led Myers to request permission from the most frequently cited bloggers. Most of them did not reply to this request but he managed to obtain written consent from a few (Myers, 2010, p.162). Ethics in the use of online material has been a subject of debate among researchers (e.g. Engesem, 1996; Herring, 2002), who have discussed the issues of privacy in what is considered to be an open and public space. The main challenge in studying language online is to keep a balance between protecting study participants and obtaining authentic data.

Pedagogical applications

EAP education in the digital age calls for new pedagogical paradigms which can help our students to develop new literacies and skills required for successful communication in academic and professional contexts (Yim and Warschauer, this volume). As was noted in the opening editorial of *Journal of English for Academic Purposes*, ‘the full implications of the communications revolution are not yet apparent or completely understood, and we still have a long way to go before we can be sure we are using its potential most effectively in our teaching’ (Hyland & Hamp-Lyons, 2002, p.8). The social web applications offer a greater potential for empowering learners to create online content. Thus, online collaboration can facilitate learners’ integration into given discourse communities or specific communities of practice (Wenger, 2006). Blogs, wikis, Twitter, and other social networking applications have been adapted in language teaching and learning (for an overview, see Barton & Lee, 2013, pp.153–163). They show how to adapt existing pedagogical practices in new ways by incorporating the use of blogs, wikis, YouTube, Twitter, and other social media in classroom-based teaching and learning. They also discuss how online practices can impact language teaching and learning, with a particular focus on autonomous language learning, understanding learners’ and teachers’ everyday practices, new pedagogies, and language policies.

In her review of studies focussing on the development of students' stance and voice in academic discourse online, Hewings (2013) concludes that digital media provide space in which students can experiment with their voices and rehearse arguments in collaboration with peers. However, the change of writing medium per se does not automatically result in any improvement: EAP instructors still need to ensure a careful task design, to monitor and moderate interaction, and to introduce assessment of online writing tasks. Using blogs, wikis, and other Web 2.0 applications, students can either maintain their traditional 'academic persona' or can be more experimental by trying out multiple different voices in their academic writing. For example, Murray, Hourigan and Jeanneau (2007) report on integrating blog writing for academic language learning purposes. The students in their study were required to write academic blogs as a compulsory element in their language module assessment. The data provided by these students raised several pedagogical questions related to integrating, assessing, and rewarding student creative expression on the blog, their self-reflection as languages learners, and the role of blog writing in language acquisition. Kuteeva's (2011) research on the use of wikis in an EAP writing course demonstrates the constructive potential of wikis in creating knowledge and in helping students become better writers by considering their target audience. Similarly, Windsor and Park (2014) explored their experience of designing wiki tasks aimed at developing the processes involved in reading when preparing for academic writing. In her book-length study of collaborative L2 writing, Storch (2013) dedicates an entire chapter to computer-mediated collaborative writing with a particular focus on wikis.

Interestingly, instruction on how to use social networking for knowledge dissemination has moved beyond the traditional EAP classroom. For example, in spring 2014, *The Guardian*, a leading British newspaper, was offering a series of lectures on science blogging. Their course involved both scientists and journalists, and focussed on different aspects in blog writing, such as the rules of scientific writing (and when to break them); the flexibility of the blog format; building a community and an audience; covering very technical subjects; using humour in blogs; and developing your own voice. The newspaper found a niche for this type of course because blogs 'offer a much larger range of voices that have enriched the scientific conversation online and engaged new readers with a depth and style that is sometimes missing from mainstream media' (*The Guardian*, 2014).

Summary and further directions

This chapter has sought to show how the development of digital media has impacted academic discourse online, with a particular focus on blogs, wikis, and Twitter. By now, science blogs have branched out in different directions, in particular blogs by scientists themselves and blogs by science journalists and publishers. Blogs kept by active researchers are often part of the open-access movement and often challenge the academic establishment (e.g. Chembark www.blog.chembark.com). Research blogs also display features of the contingent repertoire and are used by researchers for fun and witty comments. As far as wikis are concerned, Wikipedia has no comparable rival and is increasingly accepted in scientific circles although still unbalanced in content. In addition, project wikis are often used as alternatives to homepages because they are collaboratively constructed and more frequently updated (e.g. the OpenWetWare project started by students at the MIT www.openwetware.org). Twitter is used to mediate the daily routines of scientific work and to keep researchers and collaborators connected, often at academic events. Like blogs, tweets also combine features of the empiricist and contingent repertoires.

Thus, digital media provide new venues for academic and scientific communication, and contribute to the development of new academic genres. At the same time, they also offer a potential to connect researchers in ‘the kind of openness and community that were the supposed hallmarks of science in the first place’ (Waldrop, 2008, p.73). There is a wide scope for further EAP research on online discourses in academic settings, and, due to their fast development, the integration of new technologies in EAP courses will always remain work in progress.

Traditional EAP instruction relies on a vast body of ESP research on academic genres (see Shaw, this volume), which has been fundamental in empowering researchers worldwide. At the same time, the communicative practices in academia keep evolving, and we need to pay more attention to the social actions that our students will need to perform when they join their respective research communities. Since the online genres tend to be more dialogic and make more use of English as a lingua franca compared to traditional research genres, EAP instruction needs to consider introducing more focus on interactional pragmatics than we have done so far. Despite added challenges associated with any innovation, increasing uses of digital media in our classrooms can result in the development of new teaching methods and provide opportunities for further research in the field.

Further reading

Barton and Lee (2013); Myers (2010); Zappavigna (2012)

Related chapters

44 CALL and electronic media

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PART VII

Pedagogic contexts

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34

EAP IN SCHOOL SETTINGS

Sally Humphrey

Introduction

While studies investigating English for academic purposes (EAP) have traditionally focussed on higher education contexts, there is growing recognition that the years of schooling, and particularly the middle years, are vital contexts for developing academic literacies (Freebody, Maton, & Martin, 2008). The concern for investigating middle years literacies can be associated with recognition that critical language patterns for meaning making in higher education contexts have their foundations in developments that typically occur during these years (Christie & Derewianka, 2008). For example, in the middle years, literacy practices become reliant on language beyond the 'here and now of you and me' (Macken-Horarik, 1996, p. 247) and increasingly responsive to specialized discipline goals. In common with the results of EAP research in tertiary contexts (Hood, 2010; Hyland, 2004; Wingate, 2012), learning English within school disciplines has been found to provide access not only to 'high stakes' literacies (Byrnes, 2013; Maton, 2013), but also to understandings of the way discipline knowledge, understandings and dispositions are developed (Freebody, 2013).

From the perspective of socio-cultural research, developing control of academic English is by no means automatic. There is a wealth of evidence to show that socio-cultural, economic, pedagogic and political constraints and opportunities have a significant impact on the development of academic language, as demonstrated in curriculum learning and performance on standardized measures of literacy (Caro, McDonald, & Willms, 2009; Teese & Lamb, 2009). From the perspective of students with English as an additional language or dialect (EAL/D), there is a danger of assuming academic language competence from evidence of fluency in everyday language, which may be learned quite rapidly in conversational contexts (Cummins, 2000; Gibbons, 2009).

To support EAL/D students and other marginalized groups to access and use academic English, educational researchers from a number of perspectives have called for literacies to be repositioned as central, and their multimodal affordances to be made 'visible' within subject pedagogy (Clark, 2014; Freebody, 2013; Jewitt, 2008; Kress, 2003). Such visibility includes direct or 'overt' instruction for developing shared 'metalanguages of design' (Jewitt, 2008, p. 248). Metalanguages informed by systemic functional linguistics (SFL) and multimodal discourse analysis (MDA) have been found to be particularly supportive for teachers, 'in unpacking and sharing with students, the discourse practices and ways of viewing and communicating about the world that are characteristic of their academic disciplines' (MacMahon, 2014, p. 13). Crucially, however, socio-cultural researchers argue that control of academic literacies alone cannot guarantee social success. Pedagogies must provide

support to challenge and transform the discourses which sustain inequities (Lea & Street, 2010; Rogers & Schaenen, 2013), and must be accompanied by ‘a complementary shift in the power distributions of other fields’ (Carrington & Luke, 1997, p. 109).

In this chapter, I review recent theory, research and practice that has responded to the above concerns of contemporary, middle years EAP educators. In its focus on pedagogies influenced by Australian and European theorists (Bernstein, 1990; Callaghan & Rothery, 1988; Fairclough, 2002; Fowler & Kress, 1979; Halliday & Matthiessen, 2004; Kress & van Leeuwen, 2006; Lea & Street, 2010; Martin & Maton, 2013; Martin & Rose, 2007, 2008), the chapter complements Johns’ focus on changing standards and assessment in the US, and particularly on ‘expert consensus about the skills necessary for academic and professional success’ (Johns, this volume, p. 474).

Models of EAP in school settings

In contrast to higher education and pre-tertiary contexts, the field of EAP is rarely identified in schools through this nomenclature. Research and practice which falls within the scope of EAP can be identified in terms of its focus on: content area literacy (CAL); literacy across the curriculum (LAC); academic literacies and discipline literacies; content and language integrated learning (CLIL); and content-based instruction (CBI). These fields can be distinguished to some extent by the theories that underpin them; however, boundaries between EAP approaches are often not well defined, and teachers frequently draw on understandings and strategies from across traditions. A number of frameworks have been used to delineate EAP pedagogies in terms of informing theories, assumptions and practices (e.g. Fang, 2012; Lea & Street, 2010; Martin, 1999). Martin’s topological perspective, informed by social realist theories of Basil Bernstein (1990), allows for distinctions and fuzzy boundaries to be accounted for in theoretically principled ways. Two distinctions are particularly important in broadly situating relevant contemporary pedagogies. The first is the degree to which knowledge, including knowledge of textual features and practices, is made visible in models and teaching. The second is the degree to which the pedagogies account for context, including the socio-cultural context of the text and learners. Figure 34.1 shows these dimensions and the four types of pedagogy which they frame. Adaptations to Martin’s framework have been made to facilitate dialogue with contemporary critiques related to middle years EAP (e.g. Fang, 2012; Kalantzis & Cope, 2012; Lea & Street, 2010).

Cognitive pedagogies where knowledge is visible or invisible

Much of the debate around language education in school contexts has traditionally concentrated on pedagogies which focus on the cognitive development of the individual learner. These pedagogies are distinguished in Figure 34.1 as more or less ‘visible’. In Bernstein’s (1990) terms, a visible pedagogy is one where the knowledge to be learned is made explicit, as are the rules of sequencing and criteria for assessment. In an invisible pedagogy, these aspects are left largely implicit and the teacher plays a facilitator rather than interventionist role.

In the contemporary middle years EAP context, more ‘visible’ cognitive pedagogies such as CAL and LAC include routines, mental procedures, knowledge and skills, which are deemed to be shared across curriculum areas (Fang, 2012, p. 103). One concern with such pedagogies, however, is the assumption that generic skills and strategies such as concept mapping, predicting and inferencing can be transferred ‘unproblematically from one context

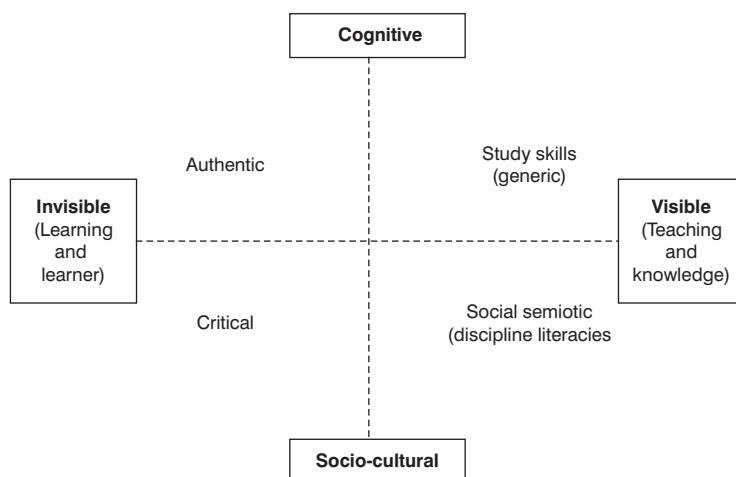


Figure 34.1 Types of pedagogy (adapted from Martin, 1999)

to another' (Lea & Street, 2010, p. 368). A further concern is that making visible cognitive strategies still presupposes that students have knowledge of the textual features needed to comprehend and construct texts.

Cognitive approaches at the invisible end of the continuum, referred to in the literature as progressive, or authentic pedagogies (Kalantzis & Cope, 2012), often reference constructivist theories to support their focus on the learner and on centrality of language for learning. These pedagogies promote student-centred activities, including those developed around multimodal and digital technologies, which actively encourage the use of students' own language (Bunch, 2006; May & Wright, 2007) and are oriented towards learner engagement and motivation rather than distinctive curriculum knowledge (Freebody, Maton, & Martin, 2008).

Critiques of constructivist approaches in EAP contexts have long been expressed by those concerned with discipline literacies and reducing educational inequities (Delpit, 1986; Kalantzis & Cope, 2012). Many secondary curriculum teachers argue that the focus on everyday language dilutes the academic content of the discipline (May & Wright, 2007), while others argue that the focus on the learner's internal processes matches 'the moral temper and cultural aspirations of white, middle-class children from households whose sensibilities are child-centred' (Kalantzis & Cope, 2012). Despite the wealth of evidence that academic English is unlikely to be 'picked up' by EAL/D learners, however, prominent advocates of such pedagogies continue to maintain that written language does not need to be explicitly taught but will be most easily and meaningfully acquired by surrounding a child with books and giving them 'fun things to do with books' (Rosen, 2011).

Socio-cultural approaches where knowledge is visible or invisible

The term 'socio-cultural' is often used in the literature to refer to pedagogies, including some constructivist approaches, which acknowledge the influence of socio-cultural background on literacy practices and which value out-of-school uses of language (Fang, 2012). In the tertiary EAP literature, distinctions are drawn between socially oriented approaches in terms of 'academic literacies' and 'academic socialisation' (Lea & Street, 2010); but in school contexts, similar boundaries are difficult to draw. In this chapter, socio-cultural is used as an umbrella

term for pedagogies informed, to varying extents, by critical and/or social-semiotic theories of text and context. Visibility in these pedagogies is interpreted as the degree to which the semiotic patterns that construe meaning in texts are foregrounded.

Critical literacies, including New Literacies, situated literacies and some forms of multiliteracies (Jewitt, 2008; New London Group, 1996) typically embrace everyday practices beyond schooling (Street, 2012), and foreground contextual features of texts rather than their semiotic construal. Critical literacies pedagogies are further distinguished from social semiotic approaches by the facilitator role typically taken by the teacher and by the focus on deconstruction, including attention to global institutional requirements beyond the subject (Lea & Street, 2010). Many researchers, however, perceive critical literacy as enhancing rather than replacing approaches that focus on skills and socialization (Cummins, 2000; Schleppegrell & Colombi, 2002), and acknowledge that the metalanguage provided by social semiotic models invigorates ‘critical literacies and multiliteracies in fundamental ways’ (Morgan & Ramanathan, 2005, p. 158).

Finally, in the quadrant represented in Figure 34.1 as social semiotic, are practices which most immediately focus on opening up access to discourses of power through explicit teaching of text (see Hood, this volume, for a discussion of social semiotic approaches in higher education EAP). These include various genre traditions (Johns, 2002), and, particularly in school contexts, the so-called ‘Sydney school’ tradition, informed by theories of Halliday and Matthiessen (2004) and Martin (Martin & Rose, 2007, 2008). In this tradition, genre is defined as ‘a staged, goal oriented social process’ (Martin & Rose, 2008, p. 6); however, identification of the linguistic patterns of genres draws on SFL understandings of register to account for their relationship to their context of situation.

In addition to the numerous applications of Sydney school-genre approaches in Australia reviewed by Rose and Martin (2012), and increasingly in the US (Brisk, 2015; de Oliveira & Iddings, 2014; Gebhard & Harman, 2011; Schleppegrell & Colombi, 2002), genre and register theories have informed an increasing number of international innovations in middle years English teaching. Space does not allow these studies to be reviewed in depth; however, evidence of the global reach of early SFL-informed research in recent classroom applications and in some cases, broader school educational policy, can be found in Indonesia (Emilia, 2010); Great Britain (Clark, 2014; MacMahon, 2014; Walsh, 2006) and Europe (Llinares, Morton, & Whittaker, 2012; TeL4ELE, 2013); China and Hong Kong (Polias & Forey, 2014); South Africa (Kerfoot & Van Heerden, 2015); Canada (Mohan, Leung, & Davison, 2001); and within South America (Oteíza, 2003). This geographical reach, and the breadth of pedagogies developed, attests to the evolving design of SFL-informed models in response to particular contextual constraints and opportunities. For this reason, and to account also for the productive dialogue with complementary genre approaches (Johns, 2006, this volume) and multimodal literacies (see for example, Kalantzis & Cope, 2012), the umbrella term ‘social semiotic’ will be used to include approaches emanating from Sydney school-based research projects.

Critiques and dialogue within early socio-cultural approaches

Although there is wide acknowledgement within the socio-cultural research community of the value of SFL as a resource for interrogating and/or modelling language in context (Jewitt, 2008), pedagogies emerging from collaborations in and around Sydney during the 1980s and 1990s have received considerable criticism. Kalantzis & Cope (2012) provide an extensive overview of the debate around and within what they refer to as ‘functional

linguistic approaches'. Within the EAP literature, genre 'schemas' have been acknowledged as valuable stepping stones (Johns, 2008, p. 245); however, attempts to make SFL theories 'accessible' to teachers have frequently led to reified versions of its rich model of context and text (Walsh, 2006). SFL and related text-oriented approaches have therefore been most commonly associated with and critiqued as reductive practices of academic socialization (Lea & Street, 2010).

From a critical perspective, representations of genres have been challenged as 'principally geared for doing intellectual work' rather than as '*always* sites for contestation' (Luke, 1996, p. 318). Kamler's (1994, p. 17) evidence of a teacher's attempt to teach a procedural genre through a text instructing readers how to turn 'Girls into Concrete' highlights the dangers of foregrounding linguistic readings without questioning the relationship between text and social context. SFL theorists themselves (e.g. Hasan, 1996) have argued that reflective elements of genre pedagogy, which encourage the production rather than reproduction of knowledge, need to be made more explicit. While genre-based pedagogies were conceived with the 'faith' that redistributing discursive resources 'would involve recontextualizations by non-mainstream groups which would realign power' (Martin, 1999, p. 124), EAL/D educators argue that simply reproducing genre structures 'is not likely to close the achievement gap between speakers of dominant and non-dominant varieties of English' (Gebhard & Harman, 2011, p. 46).

As will be discussed in the following section, more recent social semiotic pedagogies do indeed draw attention to the possibilities of innovation, redesign and subversion of genres (e.g. Kress, 2003; Martin, 1999, 2002). However, Martin (2002) argues that innovations such as mixed and hybrid genres can be problematic without sufficient understanding of the practices and elements involved; and subversive practices are not always rewarded or valued in the culture (Martin, 1999).

In summary, despite real differences in informing theories of both language and pedagogy, complementarities between approaches have long been noted, particularly between social semiotic and critical literacies in Australia (Luke, 2000). Recent pressures and opportunities emanating from international curriculum development, research collaborations, policy imperatives and testing regimes have resulted in increased productive dialogue at the boundaries of traditions (Cope & Kalantzis, 2000; Gebhard & Harman, 2011; Johns, 2002; Lea & Street, 2010). However, to address the contemporary issues of English for school curriculum learning, socio-cultural pedagogies need to be underpinned by knowledge of and attention to social semiotic affordances. It is to recent research in the social semiotic tradition that I now turn.

Social semiotic developments in middle years EAP contexts

Developments in social semiotic research and practice most relevant to contemporary contexts of EAP have included: work on distinguishing features of academic language; a sharpening focus towards cumulative learning within disciplines; and extensions of genre and register theories to include critical and multiliteracies perspectives. As will become clear in the overview to follow, research into these areas frequently overlaps and interfaces with research in the broader socio-cultural research. Much of this research has been enriched and in some cases enabled by productive dialogue between social semiotic theories and those from the sociology of education (e.g. Bernstein, 1990, 1999; Martin & Maton, 2013).

Distinguishing features of academic language

Alongside the identification of key genres for learning, social semiotic researchers working closely with teachers in middle years contexts have drawn on genre and register theory to distinguish the ‘everyday’ social environment from the academic environment (Coffin, 2006; Macken-Horarik, 1996). A summary of linguistic features which these researchers argued need to be made visible for students to access curriculum learning is provided in Table 34.1.

Recognition of relationships within genre families has enabled researchers to account for the expanding repertoires of semiotic resources needed for curriculum learning (Christie & Derewianka, 2008; Coffin, 2006; Martin & Rose, 2008). Christie and Derewianka (2008) pay particular attention to the development of writing across the adolescent years, identifying a number of points of development towards more academically valued genres and registers in the context of curriculum learning. One pathway concerned with the evaluation of texts in subject English, for example, begins with personal response and review genres which privilege everyday observations and tastes and moves in the middle years to more generalized

Table 34.1 Summary of contextual dimensions of everyday and educational contexts

	<i>Everyday contexts</i>	<i>Academic contexts</i>
	<ul style="list-style-type: none"> typical linguistic realisation 	<ul style="list-style-type: none"> typical linguistic realisation
Purpose (genre)	Familiar everyday spoken genres <ul style="list-style-type: none"> instruction, observation, anecdote, personal response, commentary, personal recount 	Institutionalized socially valued and socially valuable written genres <ul style="list-style-type: none"> report, explanation, procedure, analytical exposition, discussion, narrative, historical recount
Subject matter (field)	Understanding of personal issues disconnected from society at large <ul style="list-style-type: none"> specific human participants everyday lexis in simple nominal groups action verbs 	Technicality bounded by academic disciplines; focus on issues of collective <ul style="list-style-type: none"> generalized participants technical lexis, defined and classified in complex nominal groups grammatical metaphor (science) relational, defining verbs
Reader relationship (tenor)	Personal (evaluative) Strong solidarity Familiar roles – emoter <ul style="list-style-type: none"> high frequency of personal pronouns active voice subjective personal modality & attitudes variety of mood choices (questions, statements, exclamations, commands) 	Impersonal (objective) Decrease in solidarity Expert roles – interpreter & adjudicator <ul style="list-style-type: none"> low frequency of personal pronouns passive voice objective impersonal modality and attitudes statements –except in procedural texts
Channel (mode)	Spoken dialogue (concrete) <ul style="list-style-type: none"> low lexical density high grammatical intricacy variation in theme choice 	written monologue (abstract) <ul style="list-style-type: none"> high lexical density low grammatical intricacy grammatical metaphor (science and humanities) clear progression of themes

and abstract uses of language in character analyses and thematic interpretations. Emerging descriptions of semiotic resources led by Kress and Van Leeuwen (2006) have allowed for informed and often technical discussions of the ways in which multimodal texts such as film are constructed; however, the relative paucity of metalanguage related to verbal language continues to limit students' capacity to discuss style and composition of literary texts (Christie & Derewianka, 2008, p. 67).

Also contributing greatly to understandings of language and context have been theoretical developments within SFL at the level of discourse semantics (Lemke, 1998; Martin & Rose, 2007; Martin & White, 2005). Discourse systems of ideation (field), appraisal (tenor), periodicity and conjunction (mode) have been particularly useful in distinguishing meanings 'above the clause' in academic discourse. In the context of historical argument, Coffin (2000, pp. 13–14) draws attention to the role of interactions of choices from interpersonal and textual systems in creating and strengthening mini-deductions at the ends of paragraphs, thereby building the overall position prosodically across the text. For example, the following excerpt from the closing generalization of an argument is placed in the textually prominent position known as 'hyper-New', and includes a number of evaluative resources from the discourse semantic system of appraisal to strengthen the argument. Appraisal resources include attitudinal vocabulary from the more objective category of social valuation (i.e. significant), amplifying choice from the graduation system (i.e. very) and an endorsing verb (i.e. showed) from the system of engagement, which contracts space for alternate perspectives.

This was very significant because firstly it showed that the other nations accepted Germany as a country.

Research and application of such patterns has contributed to growing understandings of discipline literacies and critical and multimodal literacy practices in middle years EAP contexts.

Discipline literacies

While social semiotic research and practice has long been conducted in the context of particular curriculum areas, the characterization of discipline literacies (Fang & Coatham, 2013) or disciplinarity (Martin, 2013) is comparatively recent. Increased research in this area recognizes that greater understanding of the specialized discourse patterns, knowledge structures and habits of mind will enhance support for discipline learning (Fang & Coatham, 2013, p. 628).

A discipline literacies perspective sees literacy as 'an essential aspect of disciplinary practice, rather than a set of strategies or tools brought in to the disciplines to improve reading and writing of subject matter texts' (Moje, 2008, p. 99). Successful application of discipline literacies depends on teachers' understandings of knowledge building in their subject area, as well as how particular discipline identities are constructed semiotically.

Conceptual research into discipline literacies and pedagogies has built on the work of Sydney-based researchers (Halliday & Martin, 1993; Kalantzis & Wignell, 1988) within projects such as Write it Right. This research, which is well documented in the literature (Martin & Rose, 2008; Rose & Martin, 2012), has since been drawn on by international scholars to investigate an increasing number of areas related to EAP in the middle and secondary years of schooling. Recognizing the limitations of generic cognitive reading strategies in providing access to 'high stakes' discipline knowledge (Carnegie Corporation

of New York & CIRCLE, 2003, p. 2), a particular research focus has been on exploring classroom interactions involved in effective scaffolding of reading (Rose & Martin, 2012). A recent major European project, Teacher Learning for European Literacy Education (TeL4ELE), involving teachers from Sweden, Denmark, Scotland, Portugal and Spain and led by Australian researchers David Rose and Claire Acedevó, has found a significant positive impact of a genre-based professional learning programme on students' learning (TeL4ELE, 2013).

While discipline research has included a wide range of discipline areas, it is the subjects of English, history and science which have provided the most fertile ground for ongoing explorations of distinctive discourse patterns and for ways of talking about those patterns in meaningful ways. In school English, Macken-Horarik, Love and Unsworth (2011) have focussed on the effect of the study of grammar (or grammatics) on teachers' and students' knowledge and know-how, and on students' written and multimodal compositions. Through their project, Good Enough Grammatics, teachers across multiple sites have been introduced to a robust and multi-dimensional model for examining grammatics of narrative, persuasion and text response – including multimodal representations. Humphrey (2013) has adapted metasemiotic frameworks developed in higher education contexts (Humphrey et al., 2010) as '4×4 literacy toolkits' to support teachers to consider resources pertinent to their discipline context across language levels and metafunctions. A growing number of empirical studies (Clark, 2014; Macken-Horarik, Love, & Unsworth, 2011; Schleppegrell, 2013) attest to the effectiveness of an SFL-informed metalanguage on students' writing, both for curriculum learning and for high-stakes testing.

Developments within SFL theory have also allowed for an expansion of research in the areas of science and history. In addition to the extensive research by US scholars informed by projects such as Write it Right and the California History Project (CHP) (Schleppegrell & de Oliveira, 2006), international researchers have drawn on SFL to better understand the scaffolding needed by EAL/D and bilingual students. In science education, for example, Mohan and Slater (2006) break down teaching steps of a lesson sequence, bringing to teachers' attention the linguistic resources involved in constructing knowledge and engaging in practical scientific experience. Linguistic resources at stake in this sequence included definitions and technical terms to introduce the topic; relations of comparison and cause and effect to build scientific taxonomies and link properties logically; and carefully constructed lexical chains to enable students to apply theoretical knowledge to practice.

In history, Universidad Autónoma de Madrid's Content and Language Integrated Learning (UAM-CLIL) research project (Llinares, Morton, & Whittaker, 2012) has been designed to respond to the need for information on content and language integrated learning, or CLIL. A particularly interesting feature of the corpus collected for this project is the secondary spoken and written sub-corpus, following the same students throughout the four years of obligatory secondary education in History classes. Like Coffin (2006), these researchers have found that the interpersonal function of language is central to development of historical language and knowledge. The blurring of boundaries between critical and social semiotic research in history is evident particularly in South American and Asian scholarship (Barnard, 2000; Oteíza, 2003). Oteíza, for example, shows how evaluative resources of appraisal – working with lexico-grammatical resources – obscure arguments related to contested historical events and, crucially, omit the knowledge needed to objectively evaluate these events.

In recent years, understandings of the nature of discipline literacies and appropriate pedagogies for supporting access to those literacies have been further enriched through the development of legitimation code theory (LCT), which builds on many areas of Bernstein's

social realist theories (Maton, 2013). Current large-scale research involving scholars from LCT, SFL and ethnomethodology (Freebody, Maton, & Martin, 2008; Martin & Maton, 2013) has explored the social and semiotic implications of cumulative knowledge building in history and science. One premise of this work is that it is in the exploration of literacies that school work is best understood, particularly in the secondary years of schooling. The project, *Disciplinary, Knowledge and Schooling (DISKS)*, focussed on Year 8 and Year 11 classrooms, and led to the design of what promises to be a powerful theoretical and practical frame, called 'semantic waves' (Maton, 2013).

The concept of 'semantic waves', including 'semantic density' and 'semantic gravity', describes the way cumulative knowledge building is enacted by effective teachers. Using the metaphor of surfing a wave, waves are 'caught' in classroom discourse through teachers and students engaging with specialized discipline concepts, which are packed in (typically written) text as decontextualized condensed meanings. Riding 'down the wave', concepts are unpacked to relatively simplified contextualized meanings in classroom discussion through explanation and examples. Crucial to cumulative knowledge building, however, is the move back 'up the wave' to support students to repack meanings into the condensed forms which will allow relationships to be made with broader discipline concepts. Martin (2013) introduces key linguistic means for riding semantic waves in discipline specific text, using a practical metalanguage of 'the power trio'. The trio includes power words (technical terms), power grammar (grammatical metaphor) and power composition (discourse semantic resources of periodicity). Martin relates the concept of power composition to organizational features referred to in American composition studies as 'a rhetorical sandwich' or 'hamburger writing'.

In addition to confirming the centrality of grammatical metaphor for cumulative knowledge building in both disciplines, an interesting finding of this work has been recognition that technicality is far more prominent in History than originally recognized in early analysis. For example, Martin (2013, p. 30) points to the relatively technical divisions of history into periods, societies and archeological sites, and the condensed technical meanings achieved by '-isms' such as capitalism and communism. These terms may be organized into taxonomies; however, these taxonomies are typically less well developed and precise than those in biology and can, therefore, be used more flexibly. Adding to the semantic loading of 'isms' is that they typically also include evaluative meanings and may be ideologically contested. According to Martin (2013, p. 34), explicit unpacking of the multiple meanings of technical terms, followed by teacher-led support for students to use the terms to explain and evaluate historical phenomena, is a more efficient way of building cumulative knowledge than what he terms 'guess what's in my head' classroom questioning routines prevalent in much classroom discourse.

Developing theories and practices of critical and multiliteracies

Extensions to genre and register theories in the middle years context have allowed for more visible practices of critical literacies in teaching, and for the affordances of modes beyond verbal language to be fully accounted for in academic discourse. From the perspective of genre, topological perspectives have drawn attention to the 'fuzzy boundaries' between genres and led to the positing of a category of genre family (Martin, 2002), with regions of 'family resemblances'. This work, which also relates to Bakhtin's (1953/1986, p. 82) theorizing of relationships between primary and secondary genres and the associated concept of macrogenre (Rose & Martin, 2012), has allowed for considerations of reader positioning

and genre appropriation and recontextualization to be considered when assigning texts to genre (Martin & Rose, 2008). Genre, thus, remains a powerful resource for making visible the patterns of meaning in the extended and so called 'mixed' or 'hybrid' texts in secondary contexts (Martin, 2002).

From the perspective of register, work begun by Macken-Horarik (1996) has led to expanded models which account not only for the shift from everyday to specialized curriculum domains foregrounded in early models of academic register, but also shifts from the specialized to the critical or 'reflexive' domain. In contrast to many socio-cultural models of critical literacy, however, the powerful resources needed to enact critical literacies are seen in Macken-Horarik's model as dependent on the cumulative knowledge building which occurs in the specialized domain rather than interfacing directly with everyday uses of language. Macken-Horarik (1996; Macken-Horarik & Morgan, 2011) demonstrates the careful choices made by teachers to build foundational knowledge, including knowledge of primary genres and specialized language, to enable such reflexivity. For example, developing semiotic knowledge of how nominalization and appraisal can work both to create 'reasoned' argument and to efface the source of the message and the identity of the writer has greatly enhanced pedagogic applications of critical literacy (Ivanic, 1998; Martin, 1995). However, the current paucity of foundational knowledge of language in school contexts continues to challenge teachers wishing to incorporate critical literacies.

Models of visual literacy and multimodality developed by Kress and Van Leeuwen have also been recontextualized for professional learning and classroom application to explore image-text relationships in school contexts (Callow, 2013; Unsworth, 2006), including symbolic notations in mathematics (O'Halloran, 2015). In ongoing study of multiliteracies, multimodal and digital resources affordances, Unsworth has included an explicit focus on building semiotic resources within the mode dimension and included analysis of shifts in the relationships between teachers and students to enable students to problematize and critique their learning. In one example of classroom practice, Unsworth (2008) demonstrates how teachers motivated explicit teaching of semiotic resources by engaging students with a critical comparison of versions of a story in print and digital formats. Using readily available multimedia authoring technologies, which are designed to develop knowledge of effects such as camera angles, students are enabled to use their metacommunicative knowledge to engage in creative transformations of the story in 3D mode.

A crucial contribution of both critical literacies and social realist researchers has been critiques of broader educational discourses in perpetuating unequal distributions of power (Bernstein, 1999; Rose, 2005). Recent critiques relevant to the EAP context include those of high-stakes testing regimes, which influence the provision and evaluation of language curricula, and which often focus on the development of decontextualized basic skills (Comber & Nixon, 2014). Unsworth (2014), too, has drawn on semiotic accounts of image and language interactions to interpret national tests of literacy in Australia, and has pointed to ways in which they could be made more responsive to school based reading materials.

Conclusion

As with genre and broader socio-cultural pedagogies developed internationally in the late twentieth century, more recent social semiotic approaches to critical, multimodal and discipline literacy knowledges and practices have provided teachers with valuable resources to address the literacy demands of curriculum area learning, particularly in providing access to the privileged discourses of disciplines. Resources developed from systemic functional

linguistics and multimodal discourse analysis have enabled teachers and students to build the necessary metasemiotic knowledge to reconfigure everyday experience to access the valued genres and registers of school curricula, as well as to challenge and transform discourses of school and other institutions. Social semiotic approaches have thus supported the empowerment of many groups of students previously marginalized from powerful discourses by invisible pedagogies and left ‘stranded’ in the everyday domain of learning (Macken-Horarik, 1996). The challenge for social semiotic pedagogies, particularly in the present climate of high stakes standardized testing, is to ensure that access to specialized discourses provides a visible pathway to realignments of power.

Further reading

Gebhard & Harman (2011); Johns (2002); Rose & Martin (2012); Whittiker, O'Donnell, & McCabe (2006)

Related chapters

- 15 Systemic functional linguistics and EAP
- 35 The Common Core in the United States

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35

THE COMMON CORE IN THE UNITED STATES

A major shift in standards and assessment

Ann M. Johns

Most of the published works on English for academic purposes (EAP) theory, research, and practice have focused upon graduate (e.g., Swales, 1990) and, to a lesser extent, undergraduate (e.g., MacBeth, 2006) English as a second language (ESL)/English as a foreign language (EFL) or novice students and their literacies; however, as Charles (2013) notes,

the [EAP] term is very broad, covering, for example,....the requirements of native-speaker secondary school students who have read textbooks and write essays.

(p. 137)

Not surprisingly, Humphrey (this volume) points out that in many parts of the world, particularly in areas where systemic functional linguistics (SFL) is the major theoretical guide, as in Australia, students at all levels of instruction fall under the EAP rubric. Although “EAP” may not be a familiar term in North America, the topics discussed in works for public school¹ teachers (e.g., Dean, 2008; Schneider, 2003) overlap, in many cases, with those that relate to post-secondary education. In this region, college and university education differs significantly in terms of structure, instruction, and administration from the public schools; nonetheless, many of the classroom EAP issues are shared across the educational spectrum.

K-12 public education in the US has always been the province of the states, with standards and assessments developed in state departments of education. Thus, for this country, the idea of having national academic standards and examinations for all public school students, grades K-12, has long been an anathema. The US Constitution, passed in 1789 and still in force, was the product of negotiation among vociferous “states’ rights” advocates and those who desired to create a powerful federal government. Because there was no agreement, public education of K-12 students was not specifically mentioned in the original document; but the 10th amendment, written immediately following (1791), stated that “powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively.” Therefore, in the intervening years, though the federal government has contributed public lands to schools, supported them financially in a variety of ways, and prodded them into compliance with basic tenets of the Constitution,² states have always been

responsible for their own sometimes unique and unusual educational standards, teaching, and testing for kindergarten to twelfth grades.

In the intervening years, various factors other than discrimination on the basis of race, gender, or disability,³ have been increasing matters of interest to the federal government. The Cold War and Russia's Sputnik led to the belief that America's public educational system was falling behind that of other countries, so the National Defense Education Act (1958) was passed to support teachers of science, mathematics, and foreign languages. A widely circulated report, written by some of the country's educational leaders, *A Nation at Risk: The Imperative for Educational Reform*, commissioned by President Reagan in 1983, warned citizens that the USA was falling behind educationally and made a number of recommendations regarding standards and testing. Based particularly on the "falling behind" claim, the demand for improved educational practice as realized in high-stakes assessment has become more insistent. The resultant "high-stakes" exams, often administered from the state level, measured student progress in English language, reading, writing, and mathematics. Scores for each school, and often each student and teacher, have frequently been published.

Since the 1990s, the federal government, under the leadership of various presidents, has both incentivized and threatened states in an attempt to improve high-stakes test scores as the primary measure of student success. For example, George W. Bush's administration (2001–2009) imposed, and attached directly to funding formulas, the No Child Left Behind (NCLB) policy, in which states and districts were required to "be accountable" through frequent assessment of mathematics and reading, and to make "adequate yearly progress" toward the goals of grade level proficiency by 2014. Under NCLB, districts, schools, administrators, and teachers were denied funding, schools were closed, and teachers were evaluated based upon the results of the yearly state examinations. Still, the actual setting of standards as well as the writing and administration of the high stakes examinations remained with the states, as had been the case for more than two hundred years. As a result, there was a lack of uniformity of standards and assessments from state-to-state—even zip code to zip code—which made it impossible to tell how well all students were actually performing compared to students in other areas (see League of Women Voters, n.d.).

Results in 2012 from the Program for International Student Assessment (PISA), administered in 64 nations, indicated that more than 20 countries' students achieved better scores in math and science tests than their US counterparts. The US National Assessment of Educational Progress (NAEP, n.d.) indicated that in 2013, 26 percent of all students were at their grade proficiency levels in mathematics and 18 percent were at grade level in reading. Perhaps most influential in the lead-up to the Common Core has been the research conducted over the years by a venerable non-profit assessment organization, the ACT, which has long bench-marked students' college readiness. Repeatedly, ACT studies have shown that many students who complete secondary school in the United States are not prepared to take entry-level college courses "with a reasonable chance of succeeding." In their 2007 research report (ACT, 2007), ACT made this widely-circulated statement, greatly influencing what has followed:

ACT's findings suggest the ability to read complex texts is the clearest differentiator between those ready for college-level reading and those not. Only about half (51%) of the nearly 1.2 million 2005 high school graduates who took the ACT college admission and placement exam met the College Readiness Benchmark for reading on the exam. Students who reach or exceed the benchmark are likely ready to handle the reading requirements for typical credit-bearing first-year college social

science courses. Students college-ready in reading are also significantly more likely to be college-ready in English, math, and science as well. Further, students who are ready for college-level reading are more likely to enroll, earn better grades, and stay in college.

Responding to these findings, President Obama's administration initiated the "Race for the Top" (2008), providing grants for innovation under the newly designed Common Core State Standards (CCSS). However—and this is important—the CCSS were not federally imposed or created. Instead, they originated in 2008 with the National States' Governors Association which established a task force of commissioners of education, governors, corporate chief executives, and educational experts, a prestigious group that sponsored the production of a skills-focused report on what American students should know and be able to do, particularly in terms of reading and math, to eventually succeed in college and careers in the twenty-first century. The proponents of the CCSS argue that these standards have been long in the making, involving consultation with organizations such as the International Reading Association and the National Council of Teachers of Mathematics, as well as the major teacher unions (Bidwell, 2014). However, Diane Ravitch, an educational leader and major opponent of the CCSS standards, maintains that the process of standards creation was flawed, for it involved fewer than thirty individuals, principally from testing consortia (ACT and NAEP) and the corporate world, and was funded by the Gates Foundation. She goes on to say that the CCSS

were written in a manner that violates the nationally and international recognized process for writing standards. The process by which they were created was so fundamentally flawed that these "standards" should have no legitimacy. Setting national academic standards is not something done in stealth by a small group of people, funded by one source and imposed by the lure of a federal grant in a time of austerity.

(Strauss, 2014b)

Whatever the case, most governors backed the project while the federal government provided financial support; and as of December, 2014, departments of education in 43 of the 50 states had adopted the CCSS. Growing evidence suggests that most teachers around the country approve of the standards (*Huffington Post*, 2012) and are quite willing to attempt their implementation (see also Cassidy & Grote-Garcia, 2014), though they are justifiably concerned about assessment difficulty and how scores of CCSS high-stakes tests will be used (see *Rethinking Schools*, 2013).

What are the Common Core State Standards?

Simply put, the CCSS is a set of end of the school year assessment targets focusing on relatively few, generalizable high-quality academic abilities; that is, what the originators assert students should be able to do (e.g., summarize, identify appropriate language in a text, solve a problem) in mathematics and English/language arts, and, by extension, in other content areas, in order to be college and career ready. The standards are horizontally-imposed: in all content areas (history/social studies, science, and technical subjects) at each grade level (e.g., ninth grade), teachers are held responsible for the standards for that grade. The CCSS for literacies are also aligned vertically, from kindergarten (age 5) up to grade 12 (age 18), with

Box 35.1 College and career readiness anchor standards for reading

(<http://www.corestandards.org/ELA-Literacy/CCRA/>)

Key ideas and details:

- 1 Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
- 2 Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
- 3 Analyze how and why individuals, events, or ideas develop and interact over the course of a text.

Craft and structure:

- 4 Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
- 5 Analyze the structure of texts, including how specific sentences, paragraphs and larger portions of text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
- 6 Assess how point of view or purpose shapes the content and style of a text.

Integration of knowledge and ideas:

- 7 Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
- 8 Delineate and evaluate the argument and specific claims in a text, including the validity of the reasoning as well as the relevance and sufficiency of the evidence.
- 9 Analyze how two or more texts address similar themes or topics in order to build knowledge or to compare the approaches the authors take.

Range of reading: Read and comprehend complex literary and informational texts independently and proficiently at grade level.

Note: Each of the standards is classified with a long ID, e.g., for Standard 9, CCSS.ELA-Literacy.CCRA.R.9. For simplicity's sake, these IDs are not included here.

the Anchor Standards providing the core skills for increasingly difficult tasks. Mathematics, not discussed in this chapter, is organized and articulated through “mathematical practices.”

The Anchor Standards for reading (Box 35.1), identified by ACT as the most important academic skill, list nine core abilities (Anchor Standards), which, when articulated horizontally at each grade level, extend to all of the content areas, excluding mathematics; and when aligned vertically, become increasingly demanding as students progress through the grades.

The Anchor Standards are general skills, of course; so at each grade level, these Anchor Standards are further delineated to explain to teachers and assessors for all content areas the

Box 35.2 CCSS vertical alignment across grades

Vertical alignment example:

Grade 1: Know and use headings, tables of contents, glossaries...

Grade 5: Compare and contrast overall structures (cause/effect, problem/solution...)

Grade 9-10: Analyze in detail how claims are developed in a portion of a text.

Grade 11-12: Evaluate the effectiveness of a specific text structure.

Reading Anchor Standard 5:
English/LA

Analyze the **structure** of texts, including how specific sentences, paragraphs and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.



subskills that students should be able to master at that academic level in all content areas. This is called “horizontal” alignment in that teachers in all content areas, but mathematics, are to be working on the same subskills. Box 35.1 indicates the Anchor Standards for reading, the most important EAP skill in the CCSS.

How is each Anchor Standard aligned vertically, from grade 5–12? In Box 35.2 are examples of this grade-level subskill alignment for Informational Reading Anchor Standard 5.

The Anchor Standards for writing, divided into the general categories of informational, narrative, and persuasive texts, increasingly emphasize expository and persuasive written, visual, and digital texts over fiction and student narratives: due, in large part, to the perceived literacy demands of the sciences and social sciences as well as the literacies required in the students’ future college and professional lives. Personal writing (such as reflection) and text-to-self connections, earlier common in K-12 pedagogies, are downplayed. Research writing and the use of technology are also integral to the standards, while speaking and listening Anchor Standards, which mirror some of those in reading and writing, emphasize comprehension and discourse analysis, collaboration, logical presentation of ideas, evaluation, and sophisticated uses of technology. The language standards are quite general, typical of some of the more common tests of English as a second or foreign language, as they require grammatical accuracy and appropriate word choice. For language use, context is important; students are asked to recognize and employ domain-specific language and understand how language functions in different academic contexts.

Mathematics standards, which are not the subject of this chapter, are demanding linguistically, as students reason abstractly and quantitatively, constructing arguments for

their mathematical processes and critiquing the reasoning of others. The principal emphasis is upon a deep understanding of math concepts and procedures, as the purely computational aspect is deemphasized.

It is important to note that the CCSS Anchor Standards do *not* prescribe curricula or pedagogies; they are standards for skills achievement to be assessed, as aligned subskills, at specific grade levels. How classrooms are organized, pedagogies are written, and instruction is differentiated for ESL/EFL or students with disabilities are all the responsibility of the states and school districts. As a result, many states, such as California, provide resources for instruction (see, for example, www.cde.ca.gov/re/cc/). Some state websites carefully point out that CCSS is the “what” of student skills and strategies. “How” students are taught is still local option (www.polkio.com/news/2014/jul/16/adoption-curriculum-varies/).

With this major sea change, the textbook companies have jumped on board; however, some school districts have refused to adopt commercial volumes because in a number of cases, companies merely sell the old books with new covers, according to Cindy Marten, the San Diego Unified School District Superintendent of Schools (2014). Two of the most important CCSS writers, David Coleman, president of the College Board and Susan Pimentel, an educational analyst, have created *Publishers’ Criteria for the Common Core State Standards in English Language Arts and Literacy* (2011) to give the publishers direction.

Why support the Common Core?

What are the principal arguments in favor of the CCSS? As is the case in many parts of the world, Americans are increasingly mobile. Within the United States, the CCSS guarantees that students will be tested with the same standards throughout most of the country, with the exception of those states that refuse to participate. It is also argued that the standards are more relevant to the literacy practices of colleges and careers than were many of the previous ones, and the creators maintain that there is sufficient research to support this claim (Rothman, 2012). Though there is some overlap with standards of the past, differences related to this relevance to students’ futures are evident, even in the lower grades. Box 35.3, for example, compares sections from the previous California standards for third grade (age 8) and those of the Common Core.

The differences shown in Box 35.3 are clear. Informational and persuasive texts predominate in writing standards, particularly as students become more mature. Students’ opinions (arguments) must be based at least partially on sources outside of the students themselves. In addition, there is increased focus on higher order thinking, e.g., about how ideas are developed and carried by a writer through a text.

How are the standards assessed?

Rather than work through a single agency (e.g., Cambridge, Educational Testing Service, a university), most state boards of education have contracted with one of two private consortia, PARCC or Smarter Balanced Consortium (SBAC), to create and administer the assessments, almost all of which will be online. There are some differences between the two consortias’ approaches; however, they are sufficiently similar to discuss only one here. SBAC (www.smarterbalanced.org/), which serves 21 of the states, has been selected. On its homepage, SBAC claims that it “is developing a system of valid, reliable, and fair assessments aligned with the Common Core.” Although extensive research measuring these assessment concepts has yet to be conducted, the writers claim that the CCSS Anchor Standards based on the

Box 35.3 Standards for writing, grade 3: past and present

<i>Grade 3: California Standards (2000), previous to the CCSS</i>	<i>Grade 3: Common Core State Standards</i>
Writing applications (genres and their characteristics)	Text types and purposes*
General description: Students write compositions that describe and explain familiar objects, events, and experiences. Student writing demonstrates a command of standard American English and drafting, research, and organizational strategies.	
<i>{i}2.1 Write narratives:</i> <i>{/i}</i> Provide a context within which an action takes place, include well-chosen details to develop the plot, provide insight into why the selected incident is memorable.	CCSS ELA-LiteracyW.3.1A: <i>{i}Write opinion pieces on topics or texts, supporting a point of view with reasons.</i> <i>{/i}</i> Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons; provide reasons that support the opinion, use linking words or phrases, and provide a concluding statement.
<i>{i}2.2. Write descriptions</i> <i>{/i}</i> that use concrete sensory details to present and support unified impressions of people, places, things, or experiences.	CCSS ELA-LiteracyW.3.2: <i>{i}Write informative/explanatory texts to examine a topic and convey ideas and information clearly.</i> <i>{/i}</i> Introduce the topic and group related information together; include illustrations when useful to aiding comprehension; develop the topic with facts, definitions, and details; use linking words or phrases to connect ideas within categories of information; provide a concluding statement.
<i>{i}2.3 Write personal and formal letters, thank-you notes, and invitations.</i> <i>{/i}</i> Show awareness of the knowledge and interests of the audience and establish a purpose and context. Include the date, proper salutation, body, closing, and signature.	CCSS ELA-LiteracyW.3.3: <i>{i}Write narratives</i> <i>{/i}</i> to develop real or imagined experiences or events using effective techniques, descriptive details, and clear event situations. Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally; use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations; use temporal words and phrases to signal event order; provide a sense of closure.

* With Charles Bazerman, the author of this chapter helped to convince the National Assessment of Educational Progress (and the CCSS) that “text types” was a better term than “genres,” which is contested.

demands of college and career and the text items themselves demonstrate predictive validity. Reliability and fairness claims cannot be determined as of this writing.

What do the tests look like? There are four types of test items in all content (English, science...) and skill (reading, writing, language, speaking, and listening) areas, three of which appear here.⁴ The first is the *selected response*, multiple choice questions with a difference. More than one answer may be correct, so students are asked to indicate all of those that they believe to be right (or wrong). Box 35.4 is an example of a selected response question for eighth grade students, aligned at that grade level with the Anchor Standard 1 for reading informational texts. Identified as LA.8.RI.1,⁵ the standard is realized for grade 8 in this way: *Cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.*

A second item type is *constructed response*. For reading in all content areas, these items consist of single questions in which students are to provide an answer and then give textual evidence to support it. In tests designed for younger students, no more than three sentences may be required; but as the students progress through the grades, they might be asked to provide a three- to four-paragraph response to a task or prompt. Box 35.5 is an example for (Literary) Reading Anchor Standard 2, aligned for the 4th grade: CCSS.ELA-Literacy.RL.4.2: *Determine a theme of a story, drama, or poem from details in the text; summarize the text.*

The final test item type that appears in all literacy content and skill areas is the *performance task* for which students are allotted time to write a “structured process” text (Smagorinsky, et.al., 2010). The CCSS website tells readers that:

Performance tasks measure a student’s ability to integrate knowledge and skills across multiple standards—a key component of college and career readiness. Performance tasks will be used to better measure capacities such as depth of understanding, research skills, and complex analysis, which cannot be adequately assessed with selected- or constructed-response items. Some constructed-response items and performance tasks can be scored automatically; many will be hand-scored by professionally trained readers.

(Smarter Balanced, n.d.)

Some central elements of performance tasks for writing are listed in Box 35.6. The number of stimuli provided in the task depends upon the grade, with one or two for grade 3 and up to five for grades 10–12.

According to the Smarter Balanced homepage, these tasks are divided into two parts which can be extended to 35 minutes or more, depending upon a number of factors established by the test instructions. Box 35.7 shows a few task examples, indicating the cross-curricular purposes of CCSS (Smarter Balanced Appendix B, pp. 36 & 183). The assumption appears to be that students will discover differences among disciplinary discourses through the activities leading up to the final writing tasks.

How do social semiotic approaches and the US Common Core Standards and Assessments compare?

At the most abstract levels, goals of the two approaches appear to be quite similar. Humphrey (this volume), quoting Macken-Horarick (1996, p. 247), notes that students in Australia and elsewhere, influenced by the long history of systemic functional linguistics research and curriculum development, are being asked to work with language “beyond the here and now—beyond the me and you” —to examine and write from texts that are deemed academic

Box 35.4 Selected response: informational text

Instructions: Read this sentence from paragraph 8 in your (online) text:

Our contemporary situation demands that we help our young people find their way by marrying the cultivation of self-knowledge to a worldly capacity to see practical opportunities.

Which detail (s) does the author provide to support this claim? Check the boxes of all that apply:

- ☐ A. "...understand who we are as human beings so we can make reasonable choices about..." (par. 2)
- ☐ B. "... there often seems to be a mismatch between what people choose to learn and the available jobs." (pa. 3)
- ☐ C. "In our restructured world of work --... simply seeing the opportunities is hard." (par. 6)
- ☐ D. "Human beings are not born complete; we make ourselves over the course of our lives." (par. 7)

Box 35.5 Find the theme; summarize the text

Task: Students read a short story of 734 words, *Grandma Ruth*, in which a girl learns that her grandmother was named after a famous baseball star, Babe Ruth.

Writing prompt: What does Naomi learn about Grandma Ruth? Use the space below to provide your answer in not more than three sentences. Use sentences from the text to support your response.

Box 35.6 Elements of performance tasks (writing)

<i>Stimulus</i>	<i>Information Processing (during the time provided)</i>	<i>Product/performance</i>
<ul style="list-style-type: none"> • Readings • Video clips • Audio clips • Graphs, charts or other visuals • Research topics/issues/problems • etc. 	<ul style="list-style-type: none"> • Research questions • Comprehension questions • Simulated Internet search • Discussion 	<ul style="list-style-type: none"> • Essay, report, story, script, etc. • Speech with/without graphics or other media • Responses to embedded constructed response questions • etc.

Box 35.7 Performance standards across-the-curriculum

- RI.1.8: *Distinguish among facts, reasoned judgments, opinion or speculation*: “Identify the reasons Clyde Robert Bullis gives in his book *A Tree is to Plant* to support his point about the function of roots in germination.” [1st grade: Science]
- RI.1.5: *Analyze and describe the structure of texts*: “Locate key facts or information in Claire Llewellyn’s *Earthworms* by using various text features (headings, table of contents, glossaries) found in the text.” [1st grade: Science]
- RH.11-12.2 & RH.11-12.9: *Summary/synthesis*: “Determine the central ideas found in the *Declaration of Independence* and the *Seneca Falls Conference*. Provide a synthesis that makes clear the relationships among the key ideas and details between the two texts.” [11th–12th grade: History]
- RH.11-12.8: *Evaluation/Use of Evidence*: “Evaluate the premises of James M. McPherson’s argument regarding why the Northern soldiers fought in the Civil War by corroborating the evidence provided from the letters and diaries of these soldiers with other primary and secondary sources and challenging McPherson’s claims where appropriate.” [11th–12th grade: History]

or professional, and distant from personal feelings or experiences. CCSS reading and writing tasks are also “beyond the here and now,” considered to be more academic than required with earlier standards.

In her contribution to this volume, Humphrey discusses the literature which surrounds issues of disciplinarity and pedagogies, particularly in the Australian context. So far in the CCSS, there are expectations for use and production of content area texts; but as yet, teachers are not given much assistance. In the CCSS assessments, there has been an effort to integrate disciplinary/content areas into the performance tasks by requiring written products that focus on topics, visuals, and appropriate source types (e.g., primary sources in history), as well as domain-specific vocabulary relevant to the disciplines. But for K-12, scholarly discussions of the nature and values of the texts in the content areas and how they should be approached in the classroom are rare, except among a few experts influenced by SFL theories (e.g., Schleppegrell, 2010, 2012).

It is disappointing that the CCSS experts and practitioners appear to know little of the extensive EAP literature found in professional volumes and journals, such as *English for Specific Purposes* and *Journal of English for Academic Purposes*, in which differences among disciplinary discourses relating text structures, the nature of introductions and arguments, and uses of evidence and other features that distinguish disciplinary discourses are discussed at some length. As a result, performance tasks tend to be framed in standard English class genres (e.g., essays, stories) rather than more common texts in the disciplines (e.g., proposals, lab reports, reviews, and critiques; see Carter, 2007).

This absence of scholarly K-12 literature is evident in the recommendations for teaching in the disciplines/content areas which appear to rely on teacher knowledge rather than upon research (Box 35.8).

Related to disciplinary practices is the “privileging of reasoned argument” over other text types in reading and writing in both the Australian and CCSS approaches (see Humphrey, in this volume; e.g., <http://achievethecore.org/page/503/common-core-argument-opinion-writing-list-pg>). Practitioners, as well as theorists, see problems with this emphasis; for, as

Box 35.8 Recommendations for combining disciplinary literacy and CCSS

(adapted from Zygouris-Coe, 2012, p.44 and the Wisconsin Department of Public Instruction website)

- Build prior knowledge.
- Teach students to pose discipline-specific questions. Teach them how to inquire, write, talk, reflect and represent the critical questions, problems and concepts [of the discipline.]
- Promote classroom reading, writing, listening, speaking and critical thinking using authentic materials [not explained] that support the development of content-specific knowledge.
- Guide students through complex texts using discipline-specific literacy strategies [not explained].
- Use knowledge of text structures and genres [not explained] to predict main and subordinate ideas.
- Teach students text features (graphs, charts, illustrations, headings) and how to construct meaning from them. Map graphic representations against explanations in the text.
- Compare claims and propositions across texts.
- Use norms of reasoning within the discipline (i.e. what counts as evidence) to evaluate claims.
- Analyze the language of each discipline—grammar can help with understanding of vocabulary, complex sentence, and ideas. Help students with identifying and producing “signal” words that can help direct and build meaning.
- Use multiple forms of assessment.

Humphrey notes, argument’s overuse tends to efface the identity of the writer (Ivan, 1998) and can result in less persuasive argumentation. A central and much-critiqued shared element in the CCSS and the approaches described by Humphrey is the evaluation of school and teacher quality almost exclusively through high stakes assessments based on the standards. Comber (2012), speaking of the Australian context, points out that name and shame tactics employed by government-commissioned reports lead inevitably to ‘teach to the test’ pedagogies. As a result, student writing often becomes abstract, depersonalized, and context reduced. Ryan and Barton (February, 2014, p. 305) argue that the Australian National Assessment Program (NAPLAN) encourages formulaic writing while avoiding the important aspects of student identity and voice. Likewise, in CCSS testing “...reading focuses on what lies within the four corners of a text” (Coleman & Pimentel, 2012, p. 4), not on building students’ relationships with these texts. Teachers and schools are left on their own to entice students to read and write, and to differentiate literacy instruction for second/foreign language students and students with disabilities.

However, when examined more closely, there are some significant differences between recent approaches to literacy in Australia and those countries that look to systemic functional linguistics as their theoretical guide, and those advanced by the CCSS in the United States. Theory and research supporting pedagogies and assessment present a remarkable difference. One only needs to compare this chapter with the one by Humphrey to discover disparities. In contrast to the Australian approach, the Common Core is not solidly based upon theories

of language or genre but, instead, upon expert consensus about the skills necessary for academic and professional success.

Literacy emphases also vary. Whereas the current Australian approaches appear to focus more on providing a visible pedagogy, particularly for *writing* in disciplinary genres, in the US, the ACT and National Assessment of Educational Progress' findings about the importance of *reading* expository texts have become the central focus of CCSS standards and assessments. CCSS originators argue that

Students who meet the standards readily undertake the close, attentive reading that is at the heart of understanding complex [texts]. They actively seek the wide-deep and thoughtful engagement with high quality literary and informational texts that builds knowledge, enlarges experience, and broadens world views.

(CCSS/NGA, 2010, p. 3)

Because reading is viewed as central to CCSS, much of the initial development effort that followed standards creation was devoted to defining text complexity, determined to involve both qualitative measures (e.g., meaning, structure, language conventionality, clarity, and knowledge demands) and quantitative ones. The major quantitative measure, "The Lexile Framework," is very much like the older readability measures such as the Dale-Chall Readability Formula (see Calkins, Ehrenworth & Lehman, 2012, pp. 34–41), but the qualitative measures are quite new. These measures have been applied to a considerable number of recommended grade-appropriate texts which appear in Appendix B of the CCSS official website.

But what about writing? There are a number of genre-based influences upon writing instruction in the United States, including English for specific purposes (Swales & Feak, 2012), principally focusing on graduate and professional text production, and rhetorical genre studies (Bawarshi & Reiff, 2010), which has made some inroads on the traditional college freshman composition classroom. Though some popular authors of instructional guides for CCSS (e.g., Dean, 2008; Owocki, 2013) mention a variety of written genres (e.g., blogs, advertisements, diagrams with interpretive narratives), the CCSS standards follow the NAEP's lead in avoiding the term "genre," classifying texts in three broad categories: argument/opinion, informative/explanatory writing, and narrative, with the first two becoming more important as the students advance in school.

CCSS writing standards also include effective processes, incorporating technology, and completing research involving multiple sources. In guides, teachers are told that students should be "writing routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes and audience" (quoted in Owocki, 2013, p. xviii).

Conclusion

As can be seen from this chapter, there are a number of reasons why the CCSS have been a political hot potato since their inception. The first relates to the long-established states' rights in developing educational standards. This tradition has led to backlash as some states argue that the federal government, through its incentive funding, has taken from the states their right to educate and assess. Not surprisingly, a few states have already withdrawn from the CCSS project and some politicians seem to be backing away from their initial support (Walters, 2014). Second has been the rapid, and seemingly secretive, manner in which the CCSS were developed by a few individuals. According to Mercedes Schneider, a researcher who published

on Diane Ravitch's blog (2014), the group of twenty-four people who were central to the preparation of the CCSS are, for the most part, from the assessment community. Few have been classroom teachers and of those, "none have taught in the elementary grades, special education or ESL" (p. 1).

Third, rather than draw from the extensive research about college demands or disciplinary discourses, CCSS rely principally upon the ACT and NAEP test findings as well as upon

...a consensus of knowledgeable experts...using the intellectual resources available to them—research (where there was relevant evidence), best practices (exemplary standards documents from high schools), and experience (and the judgment that comes with it...thus CCSS progressions do not have an elaborate and rich research base to support them.

(Pearson, 2013, p. 4).

The designers admit to these weaknesses, speaking of the standards as a "living document" that can be revised. However, since the standards have already been imposed—and assessed, in some cases—they may be difficult to change.

A fourth factor complicating adoption and acceptance focuses on the assessments. As in the past under No Child Left Behind, teachers and students may again be evaluated principally upon the high stakes CCSS examinations at the end of each academic year. Concern was heightened when a few states began testing in 2013, and the scores were abysmal. In New York, for example, only 30 percent of the students passed; 3 percent of the ESL learners and 5 percent of the disabled received passing scores (Strauss, 2014a). Obviously, assessment tools need to be re-examined. All of this is complicated by the issue of professional development of teachers, particularly those in the content areas who traditionally viewed their job as teaching subject matter, not literacies. David Pearson, one of the nation's leading reading experts, argues that the mandate for teaching CCSS across the curriculum may be the most difficult to enforce. He cites Shanahan and Shanahan (2008), also nationally-acclaimed reading experts, who point out there is much for content teachers to learn. In addition to the varied nature of texts of all types (visual, oral, print, online) and domain-specific vocabulary and syntax, differences also exist in the ways in which disciplinary experts approach tasks and the "texts" that support them, "reflecting the values, norms, and methods of scholarship within the disciplines" (p. 58). In their research on reading, Shanahan and Shanahan found that university chemists were most interested in "the transformation of information." As they read, they wrote down formulas or went back and forth from text to chart. Mathematicians read and reread their short texts, explaining that even function words like "the" and "a" are important to a problem posed. Historians were most interested in the biases of the authors: "their purposes were to figure out what story the writer wanted to tell" (Shanahan & Shanahan, p. 50). It appears that from the CCSS instructional guidance found in textbooks and online, these distinctions stemming from disciplinary values and norms have not been made. Again, it becomes the job of the states and districts, and teacher training institutions, to provide the expertise and pedagogies in the content areas relevant to *all* students. However, there is considerable evidence that

...initial teacher preparation is currently highly uneven...teachers typically have different levels of knowledge and skill for teaching all students...districts and schools must be able to figure out how to design professional development that is useful to diverse teachers and meets their needs.

(Santos, Darling-Hammond & Cheuk, 2010)

Despite these issues and the backlash that the CCSS is causing, there are many schooling experts and state departments of education that continue to embrace the standards. Why is this the case? For the first time in the United States, there had been some agreement among experts, state governors, and departments of education on what skills students need to acquire to be college and career ready (see Murphy, 2014). Though fallible and not yet fully tested (see Kirp, 2014; Ravitch, 2014), the standards are few and clear, aligned vertically from kindergarten to twelfth grade. Finally, since the standards cross curricular boundaries horizontally, they may lead to whole school reforms in which all teachers and administrators are using common vocabulary to improve the literacy and critical thinking skills of all their students (see Caulkins, Ehrenworth & Lehman, 2012, pp. 180–198).

In 2014, Arne Duncan, the US Secretary of Education, said the following:

I believe the Common Core State Standards may prove to be the single greatest thing to happen to public education in America since *Brown versus Board of Education*.⁶

We'll see. But after all these years of chaotic and uneven state-level standards and testing, it certainly would be beneficial for the United States to have some stability and agreement on what is important to student success.

Further reading

Caulkins, Ehrenworth & Lehman (2012); Pearson (2013); Smith, Appleman & Wilhelm (2014)

Related chapters

- 3 Academic literacies
- 15 Systemic functional linguistics and EAP
- 34 EAP in school settings

Notes

- 1 In most of North America, “public” schools are government funded. The vast majority of students in North America of all social and economic classes attend public schools, which serve students from kindergarten (age 5) to grade 12 (age 18).
- 2 See the landmark Supreme Court case, *Brown vs. Board of Education* (1954) in which it was decided that “race-based segregation of children into ‘separate but equal’ public schools violates the Equal Protection Clause of the Fourteenth Amendment and is unconstitutional.”
- 3 Legislation in 1972 (Title IX) and 1973 (Section 504, Rehabilitation Act) prohibited discrimination on the basis of gender or disability.
- 4 The fourth item type is called *technology enhanced*, utilizing the students’ technological abilities in responding to tasks and questions. They require students to drag and drop, highlight, and complete other tasks online.
- 5 Standard coding: LA = English/language arts, the content domain; 8, the students’ grade; RI = Reading Informational Texts (students also read literature = RL); and 1 refers to the articulated Anchor Standard at this grade level.
- 6 The Supreme Court Case, *Brown vs. Board of Education* (1954), mandated desegregation of all schools in the United States.

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EAP PEDAGOGY IN UNDERGRADUATE CONTEXTS

Neomy Storch, Janne Morton and Celia Thompson

Introduction

The relationship between language and learning is at the core of English for academic purposes (EAP). Hyland and Hamp-Lyons (2002), in their editorial marking the inaugural issue of the *Journal of English for Academic Purposes*, see the aim of EAP as facilitating learners' study or research in English. Following an English for specific purposes (ESP) approach, Hyland and Hamp-Lyons highlight the need to tailor EAP research and pedagogy to the particular requirements of specific academic disciplines. The last decade or so since their editorial has seen accounts of a great diversity of disciplinary and professional genres – in law (Price 2014), business (Bhatia 2008), and medicine (Sarangi and Roberts 1999) to name just a few. There have also been a smaller number of reports which discuss the development of EAP materials and curricula based on this type of research (e.g. Swales and Feak 2000). It should be noted that these materials, and the research upon which they are based, are primarily directed at a postgraduate rather than an undergraduate level.

EAP at an undergraduate level, as Johns (2009) has observed, is 'more complex and elusive than most other ESP categories' (p.41). It is shaped by multiple factors including country-level differences in higher education systems, which influence the orientation of EAP courses and materials. In British universities, for example, students specialise from first year, leading to a prevalence of discipline-specific EAP offerings. In North American universities, later specialisation has meant that EAP typically takes the form of generalist freshman composition courses and writing across the curriculum programs. Generalist EAP offerings, which aim to prepare students for a wide variety of target situations, including diverse disciplines and professions, highlight the challenges of decision-making about materials and methods. When this decision-making is not framed (or indeed constrained) by a particular discipline and its practices, how do we determine the content – the knowledge and practices – that we teach? More generally, what are the theories and studies that have informed the development of materials and the teaching of undergraduate EAP, particularly over the last decade? Our review of the EAP literature suggests there is not a great deal of scholarship directly addressing such issues, and in particular there is a lack of published research that discusses actual examples of pedagogical materials and course curricula.

There are a number of ways approaches to EAP can be categorised. For example, Charles (2013) distinguishes between EAP informed by corpus-based research, by analysis of academic genres, and by investigation of the broader positioning of EAP as a set of social practices within higher education institutions. Hyland (2006) draws on the work of Lea and Street (1998) and presents an alternative tripartite model: study skills, disciplinary socialisation, and academic literacies. Our discussion of approaches to EAP in this chapter uses a modified typology: study skills, academic socialisation, and critical EAP. We use these categories as a way of reflecting upon different views about the role of EAP, the focus of instruction, and the status of EAP in the academy. They also reflect an evolution in our understanding of literacy practices in different universities and our experiences of teaching EAP across a range of disciplines. It is important to note that these approaches are not mutually exclusive, and EAP offerings in any one institution can include all three approaches or indeed any particular offering might combine several such approaches.

In this chapter, we discuss these three approaches and provide brief examples, where possible, of how they have been operationalised. The examples come predominantly from the Australian higher education system, the context with which we are most familiar. In our discussion, we note the contributions of each approach and the main criticisms levelled at each approach, and we identify contentious issues, some of which are discussed more fully in other chapters in this handbook. We acknowledge that of necessity the perspectives that we report represent a partial sampling of work done on undergraduate EAP pedagogy.

Approaches to EAP in undergraduate courses

A study skills approach is the most ‘traditional’ form of EAP. Jordan (2002), in a history of EAP in Britain, notes that early offerings in the late 1960s and 1970s focused on teaching academic vocabulary and different ‘registers’ of writing. These days, study skills provisions offer a variety of resources for students in the form of stand-alone workshops, short courses, individual tutorials, and increasingly via online formats that provide mostly generic advice, tips, and techniques around various academic ‘skills’ (see for example Wingate 2012a). EAP informed by this approach tends to be delivered by centralised student support centres. At our university, for example, an academic skills unit provides a range of EAP offerings, including: pamphlets such as ‘Getting started: 10 tips for a top first year’ and ‘Tutorials: how to get the most out of tutes’; workshops; and interactive online short courses in developing academic writing and preparing for exams. The workshops are typically available to all students, including native speakers, since it has been recognised that native speakers may also be unfamiliar with the requirements of university study. While participation in these workshops does not earn credit points, the advantage of this form of EAP is that students can access it when desired – especially in online formats. Examples of this kind of breadth of EAP offerings can be found in all Australian universities.

The study skills approach arguably perceives EAP as a form of remediation and aims to assist students to overcome deficiencies in language and/or study skills. The assumption underlying this ‘fix-it’ approach (Turner 2012) is that there is an identifiable common set of skills associated with academic communication. Thus, EAP provisions informed by this approach tend to be generic, viewed as helping learners deal with the challenges of studying at the university in general and assessment tasks in any discipline. A number of criticisms have been levelled at the study skills approach, particularly in terms of the views it reflects about academic literacy. By teaching a set of decontextualised skills, the approach

may present a narrow view of academic language and learning and deal only superficially with valued discourses in specific disciplines (Hyland and Hamp-Lyons 2002).

A further criticism is that while the study skills approach may 'scaffold and reassure in a general way', it is 'not intended to promote critical engagement' (Goodfellow 2005: 484): an issue we return to later in this chapter. Turner (2012) also notes that this model of EAP, with add-on courses carrying no credit points, may have deleterious effects on the already marginalised status of EAP within the academy. For example, in many Australian universities, EAP practitioners in student support centres are employed on short-term contracts and/or classified as non-academic staff. This marginalisation of EAP practitioners is likely to extend to the marginalisation of students whose academic language and learning needs these programs seek to address. In the Australian context, however, it is important to note that a service orientation to EAP does not necessarily entail a study skills approach. As Jones (2004) notes, language and learning centres in Australian universities are responsible for a substantial proportion of EAP teaching and are currently more likely to orient towards an academic literacies framework.

The second approach to EAP instruction is *academic socialisation*. This approach views EAP as a form of induction, based on the idea of knowledge about rhetorical and linguistic features of texts as a means to understand a disciplinary culture's 'norms, epistemology and social ontology' (Berkenkotter and Huckin 1995: 21). Two strands can be identified in this approach: induction into the academic culture via a generic EAP course or induction into a specific disciplinary discourse community in an ESP course. The pedagogy in both strands tends to be genre-based with explicit teaching of the defining features of selected genres or text types. The approach is informed by a large body of research on genre analysis, with different researchers drawing on different theories of genre (e.g. Hyland 2002 in EAP; Hewings 2004 in systemic functional linguistics (SFL); Paré 2014 in rhetorical genre studies), and now facilitated by corpus linguistics (e.g. Gardner 2012). However, as noted earlier, most of the research on academic genres has focused on postgraduate student writing (e.g. Basturkmen 2012) rather than that of undergraduates. Wingate (2012b), for example, notes the lack of research on the genre of the argumentative essay, the most common genre found in undergraduate writing.

Examples of ESP-type provisions include credit-bearing subjects and non-credit-bearing offerings such as adjunct modules that are offered alongside a disciplinary subject, and workshops and online activities designed to assist students with specific assessment tasks. ESP offerings tend to be designed in consultation with discipline specialists and are informed by a genre analysis of relevant assessment tasks (see for example Wingate 2012a). Teaching tends to be text focused (oral and written genres), and often includes the use of model texts not only to exemplify the identifying traits of a genre but also to show examples of well-written texts. According to Hyland (2007; 2011) the main advantages of a genre-based approach to EAP is that it is coherent and addresses the needs of the students expediently. Many researchers, including Hyland, also argue that genre-based pedagogy can provide students with a metalanguage with which to discuss and critique texts (e.g. Drury 2004).

One good example of a genre-based online program (informed by SFL and developed at the University of Sydney) is a series of discipline-specific interactive modules for writing undergraduate laboratory reports in a variety of science and engineering disciplines (Drury 2004, accessible at www.usyd.edu.au/learningcentre/wrise/). Another genre-based EAP offering is described by Johns and Swales (2002). The course is one in which Johns taught academic literacy to first year university students through content and assessment tasks from cultural anthropology. Close co-operation with discipline specialists was essential

in this teaching endeavour. A similar emphasis on ongoing collaboration between content and EAP staff was noted in a case study of a genre-based EAP credit subject taught in the discipline of architecture at the University of Melbourne (Melles et al. 2005). This EAP subject included three components that mirrored the three core subjects (architectural history, design, and construction technology) in the first year of the architecture degree. For example, the EAP design component covered the presentation genre in design studio contexts; its rhetorical structure; the integration of visual and verbal forms of communication, and an emphasis on critique – how to provide it to peers, and how to handle it from tutors. This case study also records how the EAP teacher needed to be flexible in adjusting pedagogical materials and methods in response to changes over time in the School of Architecture.

Some researchers, however, have had concerns about a focus on genres and texts. One concern is about the underlying view of genres (and disciplinary discourse communities) as homogenous and stable (e.g. Prior and Bilbro 2012). Another concern is that a genre-based approach which focuses on the product may ignore the processes that surround text creation. Leki (2007), for example, argues that the use of model texts to exemplify the defining features of a genre provides students with a false sense of academic literacy requirements because it obscures how context may shape these requirements. Macbeth (2010) found that the use of model texts stifles creativity and encourages textual borrowing. We note here that more recent genre-based EAP research and pedagogy tends to acknowledge that even within a single discipline, academic genres are heterogeneous and often hybrid (Bhatia 2008), and has moved away from a focus solely on texts to take into consideration the contexts in which the texts occur (Jones 2004).

There are also debates about the merits of a general versus a discipline-specific EAP, and the notion of transferability. Questions have been raised about whether students can transfer what they have been taught in an ESP class to the literacy requirements in other subjects (e.g. Benesch 2001) or different assessment tasks. This is particularly a concern given the reality of the growing inter-disciplinary nature of higher education. On the other hand, the concern with the general EAP strand is the relevance of the genres dealt with for students who may come from a range of disciplines. The now commonly accepted notion of situated learning – that is, that learning processes are specific to the context in which the learning occurs – clearly poses a major challenge for a generalist EAP pedagogy.

For some researchers, academic socialisation is viewed as an unproblematic transmission of knowledge from experts to novices, although this is not a position we hold. Such a perspective has been criticised because it explicitly encourages students to accept and accommodate to the norms and ideologies of particular disciplines – as embodied in valued genres – rather than question these ideologies. The work of those that critique this perspective informs the third approach to EAP, that of critical EAP.

Proponents of *critical EAP* include theorists such as Pennycook (1997), Benesch (2001; 2009), and Canagarajah (2002). These scholars reject the notion of EAP as the acquisition of a set of cognitive skills (the ‘study skills’ approach) or the reproduction of valued texts (the ‘academic socialisation’ approach), and instead argue that EAP should aim to develop learners’ critical literacy. They also draw on the work of researchers such as Lea and Street (1998) and others (e.g. Lea 2004; Lillis and Scott 2007) who have investigated academic literacy practices of native speaker students. Lea and Street (1998) use the term ‘academic practices’ to highlight the cultural and contextual nature of literacy in the academy, and to encourage a more student-centred approach with an emphasis on practices rather than on texts, and on the socio-political contexts of writing.

The aim of critical EAP is to encourage students to engage actively with the unequal power relations that shape writing contexts, question rather than reproduce the valued genres, and develop their own writer identities. This approach acknowledges that undergraduate students not only have to learn how to write for different subjects, but also have to calibrate their writing to suit the expectations and requirements of specific subject tutors (Lea and Street 2000). Writing then, becomes 'a process of creating and defining a new identity and balancing it with the old identity' (Shen 1989: 101). A way in which the critical EAP practitioner can assist students to negotiate various subject positions across different discourse communities, argues Canagarajah (2004), is by creating safe learning environments that enable students to develop new and alternative identities without being penalised for what might be perceived in the academy as deviant behaviour. It has been argued, however, that there are few published examples of EAP syllabi or materials which have adopted a critical EAP or academic literacy practices approach that include a focus on the role of student identity in academic writing. Our review of available undergraduate EAP materials has revealed a number of exceptions worthy of further consideration.

Grey (2009) in Australia offers valuable insights into how a critical approach to EAP pedagogy can be applied to undergraduate teaching. She describes an EAP elective subject entitled 'business communication' in a business undergraduate degree. Working from the assumption that business students need to be equipped to deal with diversity in a globalised marketplace, the subject aims to encourage students 1) to become critical 'nomadic ethnographers' who, with the aid of digital cameras and mobile phones, capture different visual representations of race, gender, and diversity in their local communities; and 2) to reflect on and question how their own identities are shaped by their individual histories, cultures, and genders. For assessment, the images students compiled, combined with material from additional resources such as blogs, music clips, and electronic databases were incorporated into a business proposal presented as an academic poster. Encouraging students to engage with and question different forms of knowledge is also a key aim of the critical EAP activity included in our case study section.

Moving beyond Australia, of the few published descriptions of EAP courses which represent academic literacies or critical EAP Morgan (2009a) in Canada and Wingate (2012a) in the UK provide interesting examples. Morgan describes the development of an EAP credit-bearing course entitled 'language and public life' which aimed to co-develop learners' writing (e.g. paragraph development) and critical inquiry. Morgan emphasises the importance of designing assessment tasks that require students to engage with their own diverse textual experiences beyond the university (e.g. examples from mass media publications), in order to ensure that the research they undertake is socially relevant. However, as he acknowledges, there may be a number of difficulties inherent in encouraging students to find source materials that represent a variety of perspectives on a given topic, because of a growing concentration of media ownership.

Wingate's (2012a) example is of a critical EAP course developed for information technology undergraduate students. The course was offered online and not for credit. Her findings, based on how often students visited the online site and student interviews, show that students rejected this approach, preferring a genre-based 'accommodationist' approach. Wingate suggests that students may be perhaps more willing to take a critical perspective when they have a better understanding and control of disciplinary discourses, echoing Leki (2007) and Hyland (2007; 2011). Hyland argues that it is difficult for students, particularly undergraduate students who are novices in their discipline, to question or challenge a genre unless they fully understand it. However, the notion that a critical approach to EAP

cannot co-exist alongside a more pragmatic and accommodationist approach is challenged by Harwood and Hadley (2004), who argue that it is possible to combine these different orientations in what they term a corpus-based form of ‘critical pragmatism’. Although the authors apply this model to a postgraduate context, it is nevertheless useful to consider its merits in the light of this discussion of undergraduate pedagogical settings.

Harwood and Hadley (2004) describe ‘pragmatic EAP’ as a skills-based instrumental approach to academic literacy development in which the main aim is to teach students to accommodate to, and eventually appropriate, the dominant conventions of Anglo-American writing styles in order to ensure academic success. In contrast, ‘critical EAP’, they contend, conceives of learners as active researchers engaged in processes of knowledge creation. Learners are encouraged to question rather than adopt dominant academic discourse practices in their search for new understandings and perspectives. Rather than focusing on access to power (the realm of ‘pragmatic EAP’), ‘critical EAP’ focuses on exploring diversity. ‘Critical pragmatic EAP’ attempts to reconcile these opposing positions by teaching the dominant features of disciplinary discourses sourced from examples identified in discipline-specific corpora relevant to students’ fields of study, whilst simultaneously recognising and respecting the need to explore cultural and rhetorical differences.

Although such a model may seem appealing, and certainly offers students insight into different disciplinary practices, it is less clear how learners might be encouraged, or indeed supported, in the production of writing that does not adhere to corpora conventions. Part of the answer might lie, as Harwood and Hadley suggest, in raising lecturers’ awareness of students’ diverse cultural and rhetorical backgrounds so that differences in student writing styles might be more widely tolerated. Part of the answer might also lie, as Benesch (2001: 53) and Morgan (2009b: 86) indicate, in paying greater attention to the right of students to question the academic literacy demands they face.

Applications of EAP pedagogies in undergraduate settings: two case studies

We have noted in this chapter that EAP offerings at any particular university are shaped by a whole range of socio-political, cultural, and historical factors, including their country and institutionally specific contexts. At our university, EAP encompasses all three approaches described above. A centralised academic skills unit provides generic and assignment specific workshops; and an English as a second language (ESL) unit, located in the School of Languages and Linguistics, offers a range of credit-bearing EAP subjects for students for whom English is an additional language (EAL) at undergraduate and postgraduate levels. The undergraduate subjects are 12 weeks long and are available each semester. They include two generalist EAP subjects (Academic English 1 and 2) and a discipline-specific subject (Academic English for Economics and Business). Since their inception approximately 20 years ago, these subjects have only been offered on a credit-bearing basis to ensure that they are included as part of students’ degree courses. This not only avoids the potential problem of overloading, it also guarantees that students obtain credit for their EAP studies. The subjects are taught by lecturers whose academic status puts them on a par with teaching staff in other disciplinary areas, and whose research in applied linguistics informs their EAP teaching. In the following section, we describe two case studies: one describing the curriculum and assessment tasks of one of our EAP subjects (Academic English 2); the other describes an activity used with students in Academic English 1, which endeavours to engage students critically with subject materials.

Case study 1: Generalist credit-bearing EAP subject

Academic English 2 (AE2) is designed for EAL students with levels of English language proficiency equivalent to IELTS (International English Language Testing System) 6.5–7. The subject consists of a one-hour lecture, a two-hour tutorial, and participation in online discussions each week. The subject is intended for first year students from across the university, but second and third year students also sometimes enrol in the subject as an elective.

As noted, a particular challenge of generalist EAP courses is determining the content – the knowledge and practices – that we teach. AE2 could best be described as a genre-oriented, theme-based EAP subject. What we mean by this is explained below. The subject is organised into three parts, with the overarching theme being the effects of globalisation and internationalisation on Australian institutions. The three current themes are: internationalisation of education; the changing family; and Australia's international relations. The choice of themes reflects a primarily sociological orientation towards content, consistent with our location in an arts faculty, as well as our aim to select topics with which our students have some personal experience or familiarity. Their connection to the first theme is self-evident; the second theme requires students to compare recent trends in Australian families with those in their countries of origin; and the third theme focuses on how Australia is perceived and represented (in the media) by other countries, particularly those from where our students come.

AE2 is genre-oriented in a number of ways. The subject is structured around a series of more formal assessed tasks, beginning with a short and then a longer summary, a critical evaluation, a comparison of two articles, and leading to an oral presentation and an essay. These text types – all of which incorporate source material – have been identified as amongst the most common in undergraduate academic writing on the basis of surveys of academic tasks. Such surveys attempt to categorise written academic tasks and report their frequency and some detail of their linguistic and rhetorical features (Carter 2007; Moore and Morton 2005 for a survey of tasks in our own university; and most recently, Nesi and Gardner 2012; Nesi, this volume). Such surveys can provide useful input into pedagogical decision-making for generalist EAP subjects. In addition, in AE2, 'genre' is introduced in the first lecture as a key concept, and discussed explicitly throughout the semester. In the first lecture, for example, students are given three extracts on the theme of internationalisation of education and asked to identify text types – a blog, a newspaper article, and a research article – on the basis of rhetorical issues including purpose, audience, structure, and style.

The third way that AE2 is overtly concerned with genre is in an active attempt to 'promote rhetorical flexibility' (Johns 2009: 43). Building on the notion of genre introduced in the first lecture, students are presented during the subject with a wide variety of text types and required to write a range of texts – more and less formal – in different conditions (e.g. timed writing in exam conditions, reflective pieces on the process of assignment writing, narrative and opinion in blogging and online discussion board; only some of which are assessed). The overarching aim is more about genre awareness and an understanding of process rather than genre acquisition per se. Flexibility and adaptability are encouraged through comparing rhetorical and linguistic features of different text types as well as discussion of variability and choice within any one genre. The balance between a focus on teaching language and a focus on generating and discussing ideas remains a tension; one that is negotiated differently each time the subject is taught. In its most recent iteration, the subject saw several other changes including a shift in the first assessed summary from individual to collaborative (see Storch 2013), and a move to make the oral presentation task more open-ended by giving

students a choice in what they research and present within the themes of the subject, and how they present this – in groups, individually, using video, posters, drama, instead of the more traditional PowerPoint. These initiatives were met with some enthusiasm but notably very few students took up the alternative oral presentation formats. While this may have been a consequence of our undergraduate students' unfamiliarity with these new assessment formats, it also has curriculum design implications suggesting that we may need to calibrate our teaching more carefully in order to prepare students adequately for these new formats.

Case study 2: Critical thinking activity

In Academic English 1 (AE1) a thematic approach to the teaching of language is adopted. The overarching theme for the subject entails a study of the development of Australia as a multicultural society, thus attempting to develop students' appreciation of cultural diversity. Readings and lectures on Australia's indigenous peoples comprise one of the key areas of focus. It is within this thematic context that the 'critical thinking' activity is conducted. Students begin the activity by discussing their own understandings of 'critical thinking'. They are then asked to consider the proposition by Gieve (1998: 126): that for students to think critically at university level, they need to not only question how their own beliefs and claims to knowledge may influence their own actions, but also question how beliefs and knowledge claims influence the actions of their peers, their teachers, and other sources of authority they may encounter.

A key point to discuss with students here is the connection between 'thought' and 'action': the ability to think critically and to consider issues from a variety of perspectives will have a direct influence on the decisions students make, and the subsequent course of actions that they then adopt. Furthermore, some undergraduate students may be encountering the notion of 'critical thinking' for the first time, especially those from educational backgrounds where learning is conceived primarily as the work of memory and repetition of the words and ideas of one's teachers and authority figures. It will be important for teachers to acknowledge that for such students, the prospect of challenging recognised experts may seem quite daunting.

Next, students discuss how this approach to critical thinking could relate to their own choice of source materials in their writing. Students are encouraged to reflect on how factors such as authors' cultural backgrounds, disciplinary affiliations, and text genres are important to consider. Students are also prompted to discuss possible economic, social, cultural, and political implications of the perspectives they may promote as a result of their selection of specific source texts in their written work.

Students then write a paragraph in response to the question: *Discuss the origins of Australia's indigenous peoples*. To do this they are required to read and critically evaluate information found in four short text extracts representing different written genres (an historical text, a scholarly essay, an entry to an historical reference book, and a poem) and cultural orientations (indigenous compared with Anglo-Australian perspectives). Each text extract provides information relating to the origins of Australia's indigenous peoples. Next, students discuss the language and cultural values represented in the text extracts; they then write paragraphs that draw on the texts provided to address the above question. Finally, students reflect on which texts and cultural orientations they included in their paragraphs, and their reasons for choosing these sources.

A key objective underpinning the activity is to encourage students to consider how their own cultural beliefs and assumptions influence the kinds of source texts and epistemological orientations they select in their writing. Without exception, students who have completed

this activity have favoured using the texts written by the non-indigenous authors ahead of the indigenous writers. They explain that this is because they cannot understand the indigenous authors' narrative writing styles, and prefer a more 'scientific' style of writing, that includes the use of dates and figures, found in the Anglo-Australian text extracts. Although difficulties with language and text genres can prove problematic, it is felt that the insights students gain by engaging with different viewpoints and culturally different orientations to knowledge outweigh these disadvantages.

A more detailed description and theoretical rationale for this approach to the teaching of critical thinking as a form of social and political practice in EAP contexts, as well as suggestions about how to adapt this activity to suit discipline-specific contexts, can be found in Thompson (2002). The activity can also be adapted to non-credit-bearing undergraduate EAP contexts (refer to Thompson 2009, for details) and can be used for professional development of critical EAP practitioners (e.g. Morgan 2009b). The amount of time required to focus on related language-oriented activities will depend on students' previous educational backgrounds and levels of English language proficiency.

Final reflections and future research directions

To conclude, we now review the key areas of contention in EAP undergraduate pedagogy that our research for this chapter has identified. We do so with the aim of providing fertile ground for further reflection, curriculum development, and future research. The points we raise are primarily related to the role of EAP, the focus of instruction, and the status of EAP in the academy. We also wish to emphasise the role played by specific institutional factors in shaping the nature of EAP provision offered in different settings. As suggested above, the three main approaches to EAP discussed in this chapter have many points of convergence, and a single institution might include all three approaches, just as one particular offering might combine a variety of approaches.

A *study skills* approach to EAP is generally offered across the university sector, usually by centralised student support centres, considered by the academy as providing a form of remediation. The main concern with this approach is its generic nature, which may preclude fostering critical engagement with texts, institutional practices, and ideologies. Despite the fact that the study skills approach may offer students many potentially valuable resources, EAP provisions that adopt this approach run the risk of being viewed as low status, resulting in the language learning needs of students being accorded low priority.

Academic socialisation is the second approach to EAP instruction considered in this chapter. The approach includes credit- and non-credit-bearing generic EAP and ESP provisions. EAP and ESP pedagogy tends to be genre-based with explicit teaching of the defining rhetorical and linguistic traits of selected genres or text types. Concerns with this approach relate to both the view of genre as homogenous and stable, and the issue of transferability: whether what is learned in one EAP/ESP context can be transferred by students into other study areas. The EAP/ESP approach, as in the study skills approach, arguably continues to downplay the position of EAP in the academy. A number of researchers maintain that EAP should work towards becoming a fully-fledged discipline in its own right rather than continue to see its role as subservient; that is, servicing the requirements of other disciplines (Benesch 2001; Melles et al. 2005).

The final approach we have reviewed is that of *critical EAP*. Broadly speaking, this approach encourages students to evaluate the socio-political factors that shape their learning contexts, to question rather than reproduce valued genres, and to develop their own scholarly

identities. Most of the critical EAP offerings we have referred to in this chapter have been credit-bearing stand-alone subjects. The concern with this approach is whether learners can question the ideological foundations of disciplinary discourses before they fully master these discourses. The possibility of developing a ‘critical pragmatic EAP’ has also been raised. Such an approach might entail teaching disciplinary discourses based on examples sourced from discipline-specific corpora relevant to students’ fields of study, whilst simultaneously working to raise staff awareness about students’ different cultural and rhetorical orientations, as well as recognising that students have the right to question the dominant ideologies of the academy.

From our research, we conclude that discussion of approaches to EAP tends to be predominantly theoretical. As previously mentioned, there are still relatively few empirical investigations of how these approaches are implemented, nor studies reporting on systematic evaluations of these approaches. Tardy (2006), for example, notes the dearth of studies investigating how genre-based pedagogy has been implemented, and calls for research gauging the success of EAP courses using a genre approach. Wingate’s (2012a) account of designing, implementing, and evaluating different approaches to EAP is a good example of such a study. It illustrates quite forcefully that an effective EAP course needs to draw on a range of theoretical models, to take account of local factors, and, as importantly, to take student preferences into consideration. Yet another issue that became increasingly clear to us in writing this chapter is the bias in EAP towards writing (or the reading–writing nexus). In particular, we could find little research or pedagogy addressing the speaking demands of undergraduate study.

Finally, while it is clear that current understandings of the nature and issues surrounding EAP pedagogy in undergraduate settings have expanded over the last 10 to 15 years, there is still more that needs to be done to ensure that its position within the broader institutional frameworks within which it is offered is secure. A key to this stability lies not only in investing in regular professional development for EAP practitioners, but also in demonstrating to the wider academic community the important contribution this work makes towards enhancing the quality of student scholarship from across all university disciplines.

Further reading

Brandt (2009); Castelló & Donahue (2012); Mauranen, Hynninen & Ranta (2010)

Related chapters

- 2 General and specific EAP
- 3 Academic literacies
- 19 Genre analysis
- 22 Critical perspectives
- 23 Undergraduate assignments and essay exams
- 42 Needs analysis for curriculum design
- 43 EAP materials and tasks

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EAP SUPPORT FOR POST-GRADUATE STUDENTS

Christine B. Feak

Introduction

As this volume illustrates, today there is a wealth of research on English for academic purposes (EAP), much of which has focused on identifying the communication demands and challenges faced by those engaged in research writing and presentation. Importantly, this research can now serve as the foundation of our teaching and materials development for courses targeting post-graduates or research students. We are also in a very good position to incorporate into our teaching the notion of data-driven learning (DDL), exposing students to large amounts of authentic corpus data so that they can discern interesting and useful aspects of language on their own (Johns 1991, Johns 2002). Indeed, despite controversies and unresolved questions in our field (Hyland 2012), we have come quite far in our ability to offer EAP coursework that is data informed, relevant and well positioned to help students navigate their way through their degree programs and become full participants in their chosen own fields.

To appreciate how EAP support has evolved over the years, let us begin by considering a class session in an EAP writing course designed for post-graduate students at a prestigious university in the eastern United States in 1985. As was typical of the time, all of the students were international students from such diverse fields as electrical engineering, physics, law, hospitality management and labor relations, among other disciplines. The students were learning about comparison–contrast organization and were reading an essay entitled “Grant and Lee: A Study Contrast” written by Bruce Catton (1956). A widely read essay in U.S. undergraduate composition classes, it analyzes two U.S. civil war generals, the North’s Grant and the South’s Lee, who were meeting to effectively bring an end to the war. The essay was chosen so that students could analyze and understand the rhetorical pattern for a future writing assignment and not to help students with academic reading. After some discussion of the content, verb tense and organization, some attention was given over to vocabulary such as *hazy*, *poignant*, *sanctified*, *sinewy*, *obedience*, *diametrically* and *reconciliation*. Finally, the students were given a list of expressions for indicating similarity and difference, which was based on the intuitions of a small team of instructors. The students spent time reformulating some sentences using different expressions from the list so that they could vary their sentence structure for comparing and contrasting.

At the end of class the students were asked to write a 500-word comparison–contrast essay that would be graded in terms of how well the highlighted organizational pattern was

followed, and how effectively comparison and contrast language was used to support the pattern. Students were allowed to choose any topic they wanted provided that the resulting essay was organized in terms of comparison and contrast. To complete the assignment, one physics student in the second year of his PhD program wrote about sticky rice and long grain rice, while a second year PhD student in electrical engineering described her two friends, each essay receiving the highest possible score.

It remains an open question whether the two post-graduate students or any of the students in the course gained any insight into the complexities of academic writing. But regardless of whether the class was providing the right type of support, it may come as a surprise that in the mid-1980s it was truly innovative in important ways. For one, it was credit bearing and provided exclusive support for matriculated post-graduate students. For another, the course was offered at a time when there was little support for these students and when many believed that any attention to writing at this level was “a form of remediation” that did not belong in post-graduate education (Golding and Mascaro 1985: 176). While many U.S. universities offered intensive English language programs for students interested in pursuing a university degree, far fewer offered courses targeting post-graduate students’ communicative needs. Also relevant here is that students were writing essays consisting of several paragraphs, revealing how English for specific purposes (ESP) writing instruction was moving beyond register analysis and sentence grammar as the main focus of interest to attend to rhetoric (Dudley-Evans and St John 1998).

By today’s standards, of course, there is much to critique about the class. One could criticize the choice of the prose model approach, in which students read, analyzed and then imitated texts, writing with few or no sources. One could also question the choice of a model essay written by an established historian on a topic requiring knowledge of the U.S. civil war, which most international students lacked; the emphasis on product rather than process; the list of comparison–contrast expressions based on guesswork; and the focus on form rather than content which perhaps misled students into thinking of “form as a mold into which content is somehow poured” (Eschholz 1980: 35) and that “the way to good writing was to mold oneself into the contours of prior greatness” (Bazerman 1980: 656). I offer the scenario not to harshly criticize, but rather to demonstrate that we were unsure of how to meet the students’ needs.

It is reasonable to wonder why the course developers did not seem to realize that the students, just as post-graduates today, were expected to write papers to demonstrate content understanding and to write up research for theses, dissertations and later articles for publication. The simple answer is that at the time, unlike instructors in pre-matriculation EAP programs, instructors of EAP courses for enrolled post-graduates had few resources to draw from. Research was scarce and what little was available was not so easy to find as it is today. Since research was not readily available to guide course development, materials often consisted of texts, exercises and ideas designed for other purposes, such as those for undergraduate composition courses for domestic students (which, in 1976, Zamel noted were grounded in research that had relevance for EAP writing instruction), and some ESP textbooks focused on science and technology, which were a poor reflection of actual language use (Holmes 1988). In some cases, instructors developed their own in-house materials, mostly as isolated individuals and with little input from available research. Unlike the present EAP teaching context, as Mackay pointed out, there was “no ready-researched body of information upon which to draw” (1981: 108). EAP support was often a matter of what *could* be offered as opposed to what *should* be. Indeed EAP, along with its parent field ESP, was a fledgling discipline (Hyland and Hamp-Lyons 2002). Practitioners of the time certainly

would have welcomed the needs analyses, linguistic analyses and materials that are so widely available today.

The mismatch between the post-graduate students' EAP needs and the course content may be hard to grasp if we recall that in the 1980s, publications were emerging that were relevant for post-graduate EAP writing instruction. For instance, Kroll (1979) identified data commentary and lab reports as important writing activities, while Ostler (1980) isolated the latter along with book reviews, research papers and research proposals. Other common writing tasks identified were article summaries (Behrens 1978, Ostler 1980, Bridgeman and Carlson 1984). West and Byrd (1982) investigated the writing needs of engineering graduate students and found that research and technical reports were commonly required. One paper that focused on vocabulary teaching even mentioned that for a post-graduate student, it was important to "read about research in his [sic] own area and related areas; to listen to professors speak about their work or the work of colleagues; and often to write papers incorporating the research of others" (Martin 1976: 91).

Whether focused on undergraduates or post-graduates, the findings of this important, early work clearly had relevance for students engaged in research writing. Yet, at the same time, there was still ample support for maintaining an emphasis on general essay writing because "in most post-graduate courses in Britain and North America, the most frequent learning assignment and the most usual method of assessment is the written essay" (McDonough 1985: 244). This lack of alignment between coursework and post-graduate student language needs persisted well into the 1990s, as documented by Leki and Carson (1997), who in fact described the EAP writing and writing in the actual academic context as "completely different worlds" (39).

Although the discussion thus far has been on writing, much of what I have said so far can be extended to EAP speaking support for post-graduates, as well. For example, at the same prestigious university introduced earlier, the speaking class for international post-graduates in 1985 consisted of students from a range of disciplines. It was discussion-based, with either a student or the instructor leading, and designed to provide opportunities for students to practice speaking and improve their proficiency. Lessons on non-discussion days generally focused on one of the following: pronunciation practice, non-verbal communication and backchanneling, idioms and slang, politeness (drawing from Brown and Levinson [1978]) as well as discussion gambits (conversational tools for participating in discussion such as "I think that ..." or "In my opinion ...") (Keller 1979) and "conventional language forms" or language patterns (Yorio 1980). The course incorporated some discourse analysis and pragmatics research into some of the lessons, with the work of Grice (1975, 1981) and Brown and Yule (1983) being particularly valuable. Some time was even devoted to talking on the telephone, grammar reviews and listening comprehension. Although research was being done on speaking, none of this specifically shed light on the needs of post-graduates in such important areas as talking about research, giving presentations and interacting with experts and non-experts alike, which we know are important today.

There was no textbook that could cover all of these topics and so materials had to be created or assembled from various sources, as was the case for the writing course. For instance, material from English as a second language (ESL) speaking books led to discussions focused on a dilemma such as which candidate should receive a donated heart or who should be allowed to enter a nuclear fallout shelter. Materials often focused on gambits that could be used in these discussions. The discussions, of course, did provide opportunities for students to speak and learn something about spoken English and may have even helped them gain confidence, but it is unclear whether these opportunities benefited them in their interactions

with professors, giving research presentations or handling the demands of a dissertation or thesis defense.

The course did not take into account the limited, but useful, EAP research mentioning that post-graduate students needed to present research findings orally (Martin 1976) and engage in seminar discussion (Johns 1981, Beatty and Chan 1984). There was also, unfortunately, no speaking needs analysis comparable to those done for writing (Kroll 1979, Oster 1980, Bridgeman and Carlson 1984; one of the early ones was Ferris and Tagg's work which did not appear until 1996). In the few investigations that touched on post-graduate speaking, it was found that professors often ranked speaking as less important than reading and listening (Johns 1981). The one exception was concern for the speaking proficiency of teaching assistants (TAs) where there was growing interest in international TAs (Bailey 1983), an area for which support and resources were more likely to be available than for other EAP needs.

Interestingly, some English for science and technology (EST) research on speaking was available that could have informed EAP teaching and that still has relevance for today, specifically publications on conference posters (van Naerssen 1984, Dubois 1985) and talks supported by slides (Dubois 1981). This work was not brought into the classroom perhaps because it was not clear how research focused on science and technology professionals was connected to post-graduate speaking needs. Indeed, in the mid-1980s, students had somewhat less pressure to present at conferences than do their counterparts today, who are stepping into the research world at earlier stages in their PhD programs (Swales and Feak 2012). Thus, there was no strong motivation to extend the EST research to the EAP context.

The disconnect among student needs, research and teaching was not simply a matter of the newness of EAP teaching for matriculated post-graduate students, the limited research or the lack of materials. On the contrary, a fundamental issue was how the purpose of these classes was envisioned. Based on an in-house language re-assessment, the students had been identified as having a low level of proficiency, not "ready" to handle the linguistic demands of their programs and so required to take the classes. The primary task at hand, therefore, was exclusively focused on creating opportunities for students to develop general proficiency, as opposed to acquire "the communicative skills to participate in particular academic and cultural contexts" (Hyland and Hamp-Lyons 2002: 2). The irony is that whether or not the students were proficient enough to handle their coursework, they were nonetheless engaged with the discourses of their disciplines and seeking to understand their "textual worlds, processes of induction into their chosen disciplines, as well as the hybrid discourses and multi-modal genres they were expected to master" (Feak 2009: 42).

The exclusive focus on EAP coursework as a means to address proficiency failed to help students become "genre ready" (Swales and Feak 2011); to provide opportunities for students to develop their research English; to raise their consciousness about how written and spoken genres are constructed and why; to handle the myriad of communicative tasks connected with an advanced degree ranging from writing email to corresponding with reviewers and editors to giving poster presentations to writing an article for publication.

Making EAP support attractive for research students today

Our approach to EAP support for research should consider proficiency, but equally important is the need to take the student's current communication demands into account. Whether or not post-graduate students are proficient enough to write literature reviews or give a presentation on their research, they are engaged in these activities. We should broaden our concern beyond proficiency for several reasons. First, evidence to support the notion

that proficiency is a good predictor of academic risk is not particularly compelling. Indeed, whether a connection exists between academic success and proficiency has been the focus of ongoing debate (see, for instance, Dooley 2010, Cho and Bridgeman 2012, Phakiti et al. 2013). Overall, it appears that the link between language proficiency and academic success is tenuous (but see Cho and Bridgeman 2012). This should not be completely unexpected if we consider that not all native speakers of English successfully complete their post-graduate degrees and when they do, at least in the U.S., they often require more time than their international peers (King 2008, Ampaw and Jaeger 2012).

A second reason to not privilege proficiency over actual need is that those deemed to have a high or a high enough level of English proficiency may have limited, or perhaps no, access to EAP support, if such courses target lower-level students. Proficient students are often considered “too advanced” to need EAP support and believed to have the linguistic capital needed for success in their chosen degree programs. Thus, when we read course descriptions of many EAP programs, it is disappointing that many offer such courses as Academic Speaking 1 or Academic Writing for Graduate Students I described in this manner:

Academic Speaking 1

This 3-credit speaking course is designed for international students who scored 45 or 50 on the SPEAK test, or 23–27 on the TOEFL-IBT

Academic Writing for Graduate Students I

This course, designed for non-native speakers of English at a low-advanced level of proficiency in written English, focuses on writing for the academic context.

While we may reasonably be concerned about proficiency, such descriptions do little to promise students that their immediate EAP needs will be met. They do little to invite more proficient students to seek support or to help students, advisors and faculty across the university see that in a writing class, for example, regardless of their proficiency students will have opportunities to learn about genres and moves as well as to handle complex writing and speaking tasks such as creating a research space; imposing order on previous studies that supports their research; guiding their reader through their texts or talks; having a stance toward what they say or write; and negotiating knowledge claims.

The reality today is that all post-graduates, regardless of proficiency or L1, can benefit from EAP support offered in a variety of modes including workshops, semester-long courses and one-on-one consultations (either face-to-face or computer-mediated such as Skype). Drawing from existing EAP research, we can provide support for post-graduates that recognizes that communicative demands become increasingly more challenging as students progress through the stages of their doctoral programs (Casanave 2014) and offer support at these different stages and at the right time.

How to exactly go about offering ongoing support is a difficult question to answer since each post-graduate program places some unique communicative demands on students. And even when demands seem similar, they may in fact be quite different. In my own institution, for example, a thesis (dissertation) proposal in one department may consist of a roughly 25-page literature review that concludes with research questions and an approach to investigating them. In another department the proposal may be the first three chapters of a traditional thesis (dissertation), often written after two years of coursework. To understand the unique contexts of our home institutions, we may conduct a needs analysis. Needs analyses to inform teaching are important to our work (see, for instance, Elisha-Primo et al. 2010,

Prior 2009). We may learn, for instance, that in a speaking class, we should work on presentations supported by slides and integrating talk and text. We may learn that students in a writing class might benefit from coursework focusing on various aspects of a job search from CV to the job talk. Yet, needs analysis can also uncover needs that cannot be addressed due to a lack of instructional time or resources. Thus, consideration might need to be given over to what instructors are able to do (Swales 1978). An example here would be course assignments in seminars that require students to write a weekly blog or contribute to the writing of a wiki, areas of computer-mediated communication that are just beginning to be explored in the EAP literature (Kuteeva 2011, Luzón 2011). At the same time, needs analyses may not provide a broad enough picture (Molle and Prior 2008), particularly with regard to the relationships among reading, speaking, listening and writing along with the visual/non-verbal aspects of knowledge creation.

Apart from needs analysis, we need to consult EAP and ESP research, which today can inform our decision making when designing EAP courses. We have a growing understanding of post-graduate writing (see, for instance, descriptions in Cooper and Bikowski 2007, Huang 2010, Ädel and Römer 2012, Swales and Feak 2012, Cheng 2014); as well as a growing understanding of speaking in research contexts (e.g., Rowley-Jolivet and Carter-Thomas 2005a, Rowley-Jolivet and Carter-Thomas 2005b, Mauranen 2009, Morton 2009, Feak 2013); listening (Lynch 2011) and reading (Hirvela 2013). Importantly, to support post-graduate students, EAP and ESP research needs to be translated into a form that makes it accessible to our students. The knowledge is there for the taking, but to fully benefit from EAP and ESP research the findings must be put into action: that is, we need to move our research knowledge off the proverbial shelves and into the classroom. With this perspective in mind, the work of researchers, instructors, course designers and materials developers should become more fluid.

Some current EAP perspectives and needs of post-graduate students

Beyond needs analyses and translating research findings into useful materials for our EAP classrooms, in order to remain responsive, current and flexible (i.e. to teach well), it is important for instructors to continuously learn from students to understand their pressing writing and speaking concerns along with the strategies they rely on to address those concerns. As a result of ongoing surveys of and interviews with my post-graduate students in a dissertation writing course, I can say with confidence that some needs have remained constant, while new challenges are emerging.

Students highlight the continuing need for genre and sub-genre-focused support that targets, for instance, literature reviews, book reviews, empirical papers for publication and proposals of various kinds (Cooper and Bikowski 2007) as well as dissertations or theses (Thompson 2013). They report a desire to develop speaking skills, particularly for research presentations for conferences, the job search, and for defense of a thesis, dissertation or a proposal. To support their learning, post-graduates continue to see value in investigating authentic language in online corpora such as the Michigan Corpus of Academic Spoken English (MICASE), the Michigan Corpus of Upper-level Student Papers (MICUSP), the British National Corpus (BNC), the Corpus of Contemporary American (COCA), The British Academic Spoken English (BASE), The British Academic Written English corpus (BAWE), Vienna Oxford International Corpus of English (VOICE) and English as a Lingua Franca in Academic Settings (ELFA) to name a few. They also appreciate learning to use computer tools (e.g. Lextutor, Wordsmith Tools and Antconc) to investigate their questions

about writing and speaking. Indeed, corpus analysis has value as a central approach to our teaching and to post-graduate student learning (Lee and Swales 2006, Flowerdew 2009, Charles 2014, Simpson-Vlach 2013).

Students report new communicative challenges that are emerging as the post-graduate student population changes. One source of major change is the establishment of new university initiatives and the internationalization of universities. Post-graduate students no longer neatly fall into the two traditional categories: international students enrolled in degree programs in Anglophone countries, and students in non-Anglophone countries who use course materials available only in English (textbooks, in particular) (Björkman 2011). More recently, EAP teaching at the post-graduate level has expanded to include post-graduates in the context of content and language integrated learning (CLIL) (Arnó-Macià and Mancho-Barés 2015) in which English is the medium of university instruction in non-Anglophone countries (Björkman 2011) and a lingua franca. To these three groups we need to also add students enrolled in English-medium universities that are satellites or branches of universities (Anglophone or otherwise) whose home bases are in other countries such as the University of Michigan in China, the London Business School in the United Arab Emirates, Monash University in Malaysia and the Technical University of Berlin in Egypt. Finally, if we can agree that language proficiency should not be the gatekeeper to support, we cannot ignore L1 speakers of English pursuing post-graduate qualifications in Anglophone countries, who are increasingly seeking the type of EAP support offered to L2 speakers of English.

Many post-graduate students report that they do not have backgrounds in the disciplines they are entering or that they are non-traditional, such as returning to school after a hiatus or making career changes. These students can be expected to face a number of challenges that may differ from those of traditional students who begin a post-graduate degree program shortly after completing an undergraduate degree (Green et al. 2013). For traditional students, apart from establishing their new identities as students, they must also create an identity that extends beyond a course participant or knowledge consumer to researcher/knowledge producer. This process involves a constellation of linguistic and non-linguistic factors, such as motivation and self efficacy (Sawir et al. 2012, Phakiti et al. 2013).

Post-graduates increasingly report challenges understanding not one, but multiple disciplinary audiences. As divisions among traditional disciplines are being eroded, post-graduates are increasingly engaged in interdisciplinary work. Students in mathematics may be working with biologists to mathematically model complex protein processes, while others in information science may be conducting studies with medical doctors to optimize health information sharing. As these examples suggest, interdisciplinary work requires research students to enter into a multitude of discourse communities (O'Regan and Johnston 2000) and navigate several "academic tribes and territories", each with its own distinct set of practices (Becher and Trowler 2001), "values, processes, and world views" (Reich and Reich 2006: 52). A significant challenge here is that even students' own advisors may lack the discursial expertise they expect their students to acquire so that they understand the thinking, reading and writing practices embodied in each discipline (Swales 1990, Swales and Feak 2000). In light of this, EAP courses for post-graduate students need to provide opportunities for students to become sensitive to "the complex ways in which discourse is situated" (Hyland 2002: 393) and to disciplinary variation.

Post-graduates report new areas of speaking and writing that could potentially be addressed in our EAP courses. Examples here include project summaries, blogs, tweets (tweet your dissertation), genres of the job search ("elevator pitches", teaching statements,

research statements and cover letters), biostatements, web pages, email, presentations for school groups, research presentations in departments outside their disciplines, and talking to reporters. As can be seen, many of these involve communicating research in new ways and to new audiences, an emergent need worthy of attention in our post-graduate EAP courses.

Communicating with non-experts

Already in 1984, Huckin and Olsen highlighted the need for university students to develop the ability to communicate with non-specialists, especially since they may need to write for and speak to various stakeholders such as company managers, supervisors and government officials. While Huckin and Olsen focused on instruction that can help students in technical fields acquire communication skills for career purposes, in particular speaking and writing, the observation that students need to communicate with non-specialists has never been more true than it is today. Apart from interdisciplinary work that requires post-graduates to communicate with colleagues outside their disciplines, colleagues within the same broad disciplinary area may be so specialized that they have difficulty communicating with each other about their research. Take, for example, the School of Natural Resources in my university. Work in this school ranges from landscape architecture, green and smart building design, to the use of satellite remote sensing to understand land use and cover change. Students report spending one month of every academic year in workshops and other activities aimed at helping faculty and students learn and relearn how to communicate with each other.

Earlier I suggested that for the full benefit of research to be reaped, we need to move it into the real world. Similarly, post-graduate students today are reporting growing pressure to share their work with non-experts. For instance, with the push to create a more educated public, governmental funding agencies are expecting funded research to be made accessible to the public. To this end, post-graduates may need to write with a non-expert audience in mind when they prepare project summaries for federal grants. Other contexts where non-experts are the target audience include reports for policymakers, overviews of sponsored research from non-government sources, or even travel grants from a student's home university. Further, there are growing expectations that lay abstracts will accompany institutional research review board packets, applications for post-doc positions and published research papers. In the case of published research, a commitment to making research accessible means that post-graduates may need to compose lay abstracts. Consider, for instance, the following excerpts from the expert abstract (text A) and the lay abstract (text B) in a pharmaceutical journal.

Determining the delamination propensity of pharmaceutical glass vials using a direct stress method

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A. An accelerated lamellae formation (ALF) methodology has been developed to determine the delamination propensity and susceptibility of pharmaceutical glass vials. The ALF process consists of a vial wash and depyrogenation mimic procedure followed by stressing glass vials with 20 mM glycine pH 10.0 solution at 50°C for 24h and analyzing the resulting solutions by visual inspection for glass lamellae. ALF results demonstrate that while vial delamination propensity generally correlates

with glass hydrolytic resistance, ALF is a more direct test of glass delamination propensity and is not affected by post-production vial washing that can affect results obtained using hydrolytic resistance tests. ALF can potentially be used by pharmaceutical companies to evaluate and screen incoming vial lots to minimize the risk of delamination during the shelf life of parenteral therapeutics, and by glass vial manufacturers to monitor and improve their vial manufacturing processes.

B: Glass flakes can sometimes appear in liquid pharmaceutical drugs contained in glass vials. These glass flakes are a result of several factors related to the glass vial production process, glass vial sterilization procedures, and the formulation of the liquid pharmaceutical drug. Vial testing is routinely done in order to select glass vials that are less likely to form glass flakes. The factors leading to the formation of glass flakes were studied and applied to a method designed to directly screen vials for their propensity to form glass flakes. The washing of vials followed immediately by sterilization at high temperatures was determined to be a critical factor in the formation of glass flakes. As a result, a laboratory mimic of this procedure was incorporated into the newly developed method for screening vials. This mimic procedure as well as robust accelerated incubation conditions and a sensitive visual inspection procedure are key aspects of this vial screening method.

It is not possible to discuss the two excerpts in detail here, but clearly a key challenge in writing such abstracts is for authors to realize that disciplinary and genre knowledge can hinder attempts to communicate content (Schrivver 2012), and it may be unclear to post-graduate students that the more disciplinary knowledge they have, the more they need to consider audience needs (Schrivver 2012), particularly what knowledge they share with others (common ground) and what they *do not share*. Thus, post-graduates who might have spent years acquiring sophisticated subject-matter and genre knowledge to write expert-to-expert communications now need to learn to reach other audiences beyond their network of peers.

To help students learn to communicate with non-experts, we can offer EAP instruction in forms other than traditional courses. For instance, EAP programs can sponsor opportunities in which they can “translate” their research so that a non-expert can understand and appreciate. Recent innovations here include the Three Minute Thesis (3MT®) (University of Queensland 2014) in which students have exactly three minutes to explain their research in language and a single slide that are accessible to an intelligent but non-expert audience. Other opportunities include offering slams or nerd nights, where researchers take the stage to share their research, and the highly creative “Dance Your PhD” competitions (Bohannon 2008). For writing, it may be possible to sponsor a writing competition such as the Lay Summary Writing Competition held at the University of Manchester, UK (University of Manchester 2014).

Final thoughts

Questions and criticisms have been raised regarding the value of EAP. For instance, EAP support has been criticized both for not sufficiently addressing the specific disciplinary needs of students (Hansen 2000) and for failing to motivate students to challenge the educational practices of their disciplines (Benesch 2009). These criticisms certainly can and must be addressed. What also needs to be addressed is the notion of EAP as a quick fix for students who are beginning academic programs and who seem to lack the English language proficiency

needed for success. Given today's post-graduates and the communication challenges they face, ongoing EAP support for all post-graduate students is more important today than ever before. The transition from the role of a post-graduate student in the structured environment of disciplinary coursework into that of an independent scholar and researcher requires that students acquire new communication skills and competencies throughout their degree programs, for which supervisors cannot always provide support. Although there is still a place for EAP classes targeting less proficient students in the early stages of their programs, it is important for EAP programs to offer a range of courses that attract and reach out to students of all levels of English proficiency at various stages of their degree programs. We can start by offering courses that can give students insights into the writing and speaking demands of coursework. These may, for instance, focus on email, summarizing, evaluative writing (e.g. reviews of books and/or published papers) and syntheses of studies, creating slides or other visuals, culminating in the writing of a short literature and oral presentation. As post-graduate students move further into their programs, they would benefit from courses on research-paper writing, proposal writing and writing for qualifying exams. Students would also find value from courses focused on speaking in research contexts such as conferences or workshops to prepare for the Three Minute Thesis. Other courses could guide students through the dissertation or with writing for publication (including the writing of a manuscript, cover letters and corresponding with reviewers and editors). Students may also benefit from courses that cover the genres of the job search, which would focus on cover letters, personal statements, teaching philosophies and research statements. We have the research to support the development of high quality courses to support students from their first semester to their last. Given the growing communicative demands on post-graduate students, putting our research into practice in creative ways is central to providing support to all post-graduates.

Further reading

Björkman (2011); Harwood (2005); Hyland (2012); Luzón (2013)

Related chapters

- 39 Writing centres and the turn toward multilingual and multiliteracy writing tutoring
- 42 Needs analysis for curriculum design
- 43 EAP materials and tasks

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ENGLISH FOR PROFESSIONAL ACADEMIC PURPOSES

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Introduction

While landing a job in academia may be a dream come true for many, keeping and thriving in the job bring a set of challenges that can be doubly daunting if they must be met in a language one is not entirely comfortable with. Functioning as a professional academic in English, as many even in non-English-dominant nation-states are now asked to do, entails engagement in a complex activity system of communicative academic practices, both oral and literate, pedagogical (in English-medium institutions) and research-oriented, many of which are discussed in other chapters in this volume (see, for example, Crawford Camiciottoli & Querol-Julián; Forey and Feng; Kuteeva, all this volume). This chapter on English for professional academic purposes, or EPAP, however, focuses on arguably the most high-stakes and stress-inducing of the practices that professional academics around the world are increasingly expected to master; namely, research publication in English. Thus, our specific focus is English for research publication purposes, or ERPP (see Flowerdew, 2013b).

“Publish or perish” may have become a truism, but it is perhaps truer now than ever before, or as Hyland (2012, p. 37) has put it, “never more cruelly applicable than today”. Professional academics’ visibility institutionally and in their disciplines, especially internationally, depends not just on the ability to address pressing research questions and real-world problems but also to persuade publication gatekeepers that the fruits of their research labor merit an audience of peers. Why the pressure to publish appears to be more keenly felt now than previously may have much to do with what critical applied linguists (e.g., Kramsch & Thorne, 2002) see as the growing prevalence of neoliberal ideology in academia, or an ever-more corporate-minded focus on global market forces and values. The marketization of academia (Fairclough, 2010), or commodity-like selling of institutions, is evident in universities’ intense interest in, and publicizing of, their global ranking, which to a great extent is determined by faculty publications in high-profile indexed journals (Curry & Lillis, 2013a; Flowerdew, 2013b), an overwhelming number of which are English-only (Belcher, 2007; Lillis & Curry, 2010). For individual academics, this institutional competitiveness translates into a “carrot and stick” (Kwan, 2010, p. 55) scenario, where research must appear in high-visibility venues

to count for promotion, continued employment, or avoidance of much heavier teaching workloads. Even well before completing their graduate degrees, students may feel pressure to publish (Flowerdew, 2013b; Kwan, 2010; Lee & Lee, 2013) not only to smooth the path to an academic job but even as a degree requirement. What once was viewed primarily as a means of joining scholarly conversations and contributing to disciplinary knowledge may now be seen as a necessary exercise in personal professional branding.

While the publication pressure on individual academics may be difficult to see in positive terms, unless we count, as neoliberals do, incentivizing of a strongly competitive work ethic (Lee & Lee, 2013), from a knowledge production perspective there are clear advantages to greater sharing of research in a language accessible to ever greater numbers of readers (Lillis & Curry, 2010). Whether this increase in global distribution of knowledge is resulting in more equitable representation of knowledge from all over the world is much less clear. As many have pointed out (Flowerdew, 2013b; Swales, 2004), speakers of English as an additional language (EAL), especially those EAL users in the periphery—that is, in less economically developed or “off-networked” (Swales, 1990, p. 106) regions—face both discursive and non-discursive challenges (Canagarajah, 2002) that “native” English speakers in the “inner circle” (Kachru, 1982) with the material and intellectual support they need are not forced to grapple with.

On the face of it, the now 3:1 outnumbering of first-language English speakers by plurilingual EALs (Pérez-Llantada, 2012) would seem to aid in leveling the playing field; that is, in ushering in a new era of acceptance of “translingual practice,” use of a diverse range and combination of multilingual/multicultural rhetorical strategies (Canagarajah, 2013), and of “alternative ELF [English as a lingua franca] versions of standard written English” (Mauranen, Pérez-Llantada, & Swales, 2010, p. 647). Translingual/transrhetorical tolerance, however, may be far from reality for those faced with First World gatekeepers, who may still insist that authors “go native” (Ferguson, 2005, p. 81) and meet not just center linguistic expectations, with the help of putative native-speaker proofreaders, but also center criteria for what counts as novel, significant, and relevant (Flowerdew, 2013b; on the “molding” of thought in accord with Anglo-linguacultural preferences, see Coulmas, 2007, p. 6). To meet these publication demands, EAL academics may find themselves reliant on whatever local and virtual networks of academic and literacy brokers (or supporters) they can assemble (Lillis & Curry, 2010; Curry & Lillis, 2013b). EAP professionals, interested and experienced in providing academic English support, would seem well poised to step into the breach and address EAL researchers’ needs, yet as Hyland (2009b) has pointed out, EPAP pedagogical practice appears well behind the curve of relevant research on disciplinary discourses. Or as Flowerdew (2013b, p. 316) remarks, “there is an urgent need ... for ESP practitioners to up their game.” Kwan (2010) has noted that even in as well-resourced a setting as Hong Kong, there is quite limited instructional support for research publication efforts, and what exists mainly focuses on textual issues, not the crucial, often “occluded” social practices, or genres (Swales, 2004) of navigating the publication process. Other types of institutionally available support in EFL settings, such as English language consultants or writing centers (Willey & Tanimoto, 2012) or translation and editing services (Pérez-Llantada, 2012), are also most likely to focus specifically, albeit still helpfully, on the textual, mainly linguistic, aspects of research writing.

The goal of the rest of this chapter is to point toward ways in which EAP professionals might advance their own research-informed pedagogical practice in EPAP to meet the challenges of promoting more globally equitable research publication—not by helping EAL academics become more accommodationist, uncritically meeting First World gatekeeping

expectations (Feng, Beckett, & Huang, 2013), but by helping them become more effectively critically pragmatic (Harwood & Hadley, 2004), with a repertoire of strategies to negotiate publication hurdles and meet their own research visibility goals.

Research past and present

Flowerdew (2013b) has observed that ERPP theory and research can be placed in two broad categories—discourse analysis, or product-oriented, research, and social constructivist and situated learning theory-informed, or process-oriented, research—both of which are potentially informative for research writers themselves and the EPAP professionals who support them. We should note, however, that Swales (1990) and Hyland (2009b) have pointed out that product and process are not so neatly separated (and Flowerdew, 2013b, essentially agrees in his discussion of research on the rhetorical dimension of research articles). Published research products show abundant evidence of the social process of production, with authors positioning themselves in the context of their specific research areas and disciplines (Pérez-Llantada, 2012). Nevertheless, if we take a broad chronological view of ERPP research, we do, as Flowerdew (2013b) observes, see an early focus on text, or genre primarily as text types, with particular emphasis on the research article (RA), the most prestigious member of the research genre set (which includes grant proposals, conference presentations, proceedings papers, journal submission communications, etc.; see Flowerdew, 2013b). Swales' (1990) early research on the rhetorical move macrostructure of RA introductions known as CARS, or create a research space, launched a wealth of similar studies of RA introductions in numerous disciplines (e.g., Graves, Moghadassi, & Hashim, 2014) and of other RA-focused part-genre analyses—for example, of abstracts, methods, discussion, and results sections—still evident in the major ESP/EAP journals (e.g., Bruce, 2009; Kwan & Chan, 2014).

Recent incarnations of textual ERPP studies routinely merge genre analysis with corpus linguistics and have branched out, following Hyland's lead (2009a), beyond move structures to other still more conspicuously interpersonal aspects of research writing, such as stance and engagement. Genre and corpus approaches are also combined to inform an intercultural rhetoric perspective on ERPP, as seen in recent parallel corpora RA studies (e.g., Spanish and English: Pérez-Llantada, 2012), which serve to help uncover similarities and differences between RAs in different languages and cultural contexts, hence potentially empowering scholars who hope to straddle several linguacultural worlds or transition from regional to international publication. Even more explicitly pedagogically motivated text-focused RA studies are also increasingly in evidence, aimed at enabling novice research writers to employ corpus tools in their own analyses of discipline-specific RAs (Charles, 2012; Lee & Swales, 2006), and to utilize computer-assisted scaffolding in their own independent construction of RAs (Lo, Liu, & Wang, 2014).

Process-oriented ERPP studies, often employing ethnographic methods, are by no means new to the field (e.g., St. John, 1987), but have become more common of late, as seen in Flowerdew's (2000) own work, his work with Li (Flowerdew & Li, 2009), and Li's (2006; 2014) solo work, as well as Lillis and Curry's (2010) massive decade-long ethnographic research in southern and central Europe, and Hanauer and Englander's (2013) mixed methods study of 148 Mexican scientists. Much of this research takes what can be loosely termed an activity system (Bazerman, 2004) perspective (not looking at one writer's work with one genre in isolation), though without explicit mention of it in many studies, and is in line with the social practice orientation of academic literacies

(Lillis, forthcoming; Lillis & Tuck, this volume). More recent research underscores the intensely social nature of ERPP at many different levels.

Borrowing Robinson's (1991) and Huhta, Vogt, and Tulkki's (2013) micro (individual), meso (institutional), and macro (societal) perspectives (which they use for ESP needs analysis), we can see a broadening, increasingly complex focus on the social in ERPP, with growing interest in power/equity issues at all these levels. The micro perspective is evident in many of the earlier, as well as recent, process-oriented studies, which focus primarily on the individual writer's vantage point, with Li's (2006) case study of one Chinese student's many pre-publication revisions a prime example, clearly exhibiting the writer's progress toward academic socialization through the publication-navigation process. At a more meso level, we find a focus on journals and their gatekeeping processes: highlighting editors (Flowerdew, 2001) and reviewers (Belcher, 2007; Gosden, 2003). Lee and Lee (2013) also take a meso perspective in their focus on a Korean university, but their meso purview merges with a macro geopolitical perspective when they link institutional with national policy. Increasing concern about academic language attrition, or "domain loss" (Coulmas, 2007, p. 6), as more journals become Anglophone and more researchers choose Anglophone venues over those in other languages (Flowerdew, 2013b; Pérez-Llantada, 2012), is compelling interest in dual-language publication agendas and how to support them. Casanave (1998) was among the first to call attention to this topic (but see also Ammon, 1998; Banks, 1999; Crosnier, 1994), and more recently it is the focal area of interest of contributors to Curry and Lillis's (2013b) special issue of *Language Policy* on publication and "the consequences of linguistic policies." In that special issue, Gentil and Séror (2014) manage to address all three levels—micro, meso, macro—by autoethnographically focusing on the impact of institutional and national policies on their own commitment to publishing in French and English.

So far, few studies have focused as exclusively and intensively on the macro level as have Feng, Beckett, and Huang (2013; see also Min, 2014) in their examination of China's "going out" policy, which aims to internationalize Chinese journals by boosting their visibility abroad. Such national efforts may be exactly what's needed to bring about large-scale leveling of the playing field, raising the profiles of "national" journals (Salager-Meyer, 2014). At present, however, as Pérez-Llantada (2012, p. 39) has observed, EAL academics face an "increasingly stark choice" between devoting inordinate amounts of time and effort to international publication in English or publishing in home-language venues often devalued by their own national assessment systems. Some see a light at the end of the tunnel, however, in recent citation studies that indicate China's research output in Anglophone venues, given its current growth rate, is on track to surpass that of other nations (Feng, Beckett, & Huang, 2013; see also Englander, 2014, on the large Latin American Spanish-language citation counts now captured by Google Scholar). The publication landscape in the not-so-distant future may, thus, be radically different from the Western Anglo-dominated scene we see today.

Critical issues

In this section we provide a digest of critical issues related to EAL scholars' experiences writing for publication that underscores the need to frame the challenges identified in the literature not as those affecting a particular group of scholars, but as those confronting the academic world at large, understood as a linguistically and culturally diverse community of scholars.

Originality and identity

Originality is constantly invoked as a desirable feature of scholarly research. Expectations of originality relate to almost all aspects of research and how it is reported. However, what exactly constitutes original research, or an original contribution, is not always clear, leading at times to cynical interpretations from scholars who have faced the charge of lack of originality in their submissions (Canagarajah, 2003; Flowerdew & Li, 2009). Along social constructivist lines, Hyland (2009b, p. 89) has referred to originality as “not the expression of an autonomous self but of writing that is embedded in and built on the existing theories, discourses, and topics already legitimated in the community.” Originality in terms of the research space is, thus, informed by research interests and agendas, and the larger ongoing disciplinary conversations. Additionally, writers need to be able to “sell” their research to gatekeepers and fellow scientific community members by framing it to (appear to) engage current lines of inquiry in the field, lest it be dismissed as “parochial” (Belcher, 2007; Flowerdew, 2001, 2007). Originality is, thus, not a purely disciplinary concern; it is also a selling point. On the other hand, parochialism, the perceived lack of relevance beyond the local context of production, is indeed one charge that EAL scholars need to develop discursive strategies for, and not always easy to overcome when the citation practices of EAL scholars may index them as parochial with some gatekeepers (Lillis and Curry, 2010).

One originality issue affecting EAL writers in particular concerns textual borrowing. Flowerdew and Li (2007) have documented an extreme case of textual re-use that led up to an investigation. The journal at the center of this case eventually published a statement condemning the practice of textual re-use without proper citation. Yet, as Flowerdew and Li (2007) observe, textual borrowing is common among both EAL and native-speaking writers. Indeed, recourse to textual models has been identified not only as a coping strategy by struggling authors, but as a matter-of-course strategy for all writers. Tardy (2009) has noted it is also used as a pedagogical strategy in disciplinary content courses and professional settings, where interaction with texts is part and parcel of developing genre expertise. In the case of off-network EAL scholars, the absence of a live disciplinary discourse community of reference leads to reliance on published material in the target disciplines that EAL writers can gain access to (sometimes painstakingly, as illustrated in Canagarajah, 2003), as a source not only for disciplinary content, but also as models for their own writing.

While excessive resemblance of a contribution or exemplar to another text is problematic, unusual departure from conventional disciplinary discourse usage may index writers not only generically as outsiders but also specifically as members of a particular national language community (Lillis & Curry, 2010). Contrastive studies of published texts have improved our understanding of what it means to write with an accent in academia. For example, Pérez-Llantada (2014) illustrates that while formulaicity is a common feature to English and Spanish scientific discourse, different rhetorical functions are associated with seemingly cognate lexical bundles. This difference, the author concludes, partly accounts for the hybrid flavor in Spanish scholars’ EAL texts.

Learning the ropes of disciplinary activity can be a tortuous process not least because it so grippingly engages identity. For novice researchers, “[D]elving into a research culture and being accepted as a full member involves learning new modes of doing and behaving, in a process of academic enculturation and identity transformation” (Carlino, 2012). In the case of more seasoned, established researchers, such as those featured in the work of Curry and Lillis (2010), Lillis and Curry (2010), Englander (2009), Hanauer

and Englander (2013), and Pérez-Llantada (2012), identity may be contested primarily on linguistic grounds, where lack of linguistic resources and real or perceived generic constraints severely limit what EAL writers feel able to say (Lillis & Curry, 2010; Pérez-Llantada 2012).

Socialization, networking, and brokering

Socialization, the way “newcomers to an academic culture learn how to participate successfully in the oral and written discourse and related practices of that discourse community” (Duff, 2010, p. 169), is at the crux of disciplinary activity and the means by which a disciplinary community is able to develop a tradition. For EAL scholars, socialization takes on an additional critical role in overcoming linguistic and disciplinary hurdles pertaining to publication (Lillis & Curry, 2010). The critical nature of professional and academic networks to EAL scholars’ productivity cannot be easily overstated, as literally illustrated by Lillis and Curry’s (2010) participants’ graphic sketches of the academic networks on which they rely for access to “resources,” ranging from useful contacts to first-hand information, to publications, to collaboration opportunities. In a globally connected knowledge-based economy that increasingly emphasizes internationalization as a value, productive alliances between “core” and “periphery” research centers may be “brokered” by key mediators who are influential members of their disciplines. With respect to publication, Lillis and Curry (2010) use the term literacy brokering to refer to the range of mediational interactions between authors and the people—“literacy brokers”—who, in various capacities, contribute to shaping a manuscript into its final publishable form (see also Li & Flowerdew, 2007, on “shapers”). Knowledge about the range and nature of brokering practices, and their outcomes, could be used in the design of pedagogic interventions, as noted by Lillis and Curry (2010).

Geopolitics and decentering academic publishing

Critical theory has problematized the notion of scientific communication as neutral (value-free) and transparent. In order to demystify the order of discourse (Fairclough, 2001) within which EAL scholars faced with international publication pressures have to operate, Piscioneri (2011) argues for the need for EAL writers to cultivate critical awareness of a particularly Western reasoning tradition: a “grand narrative” or “history of ideas” with roots in the European Enlightenment. He outlines how such an awareness-raising project could be implemented that also addresses the development of macro skills (such as the rhetorical organization of texts, or citation conventions) and micro skills (such as word choice and cohesive devices), and critically engages notions of Western superiority by emphasizing the grand narrative’s critical under- and counter-currents, such as Marxism, feminism, or civil rights.

Canagarajah’s (2003) account of atypical strategies used by EAL scholars operating in extreme conditions of peripherality to overcome the discursive and material hurdles pushes the boundaries of legitimate peripheral participation (LPP), a notion he finds ultimately accommodationist in its original formulation. He suggests that while LPP evokes a community concentrically arranged and centripetally oriented, “more radical discourses [may lead] to the fissures and tensions that generate new interest groups and discourses” (2003, p. 247). Lillis and Curry (2010) similarly call for a decentralization of control over academic publication through a range of actions, including making brokering and mentoring services available,

taking up questions about powerful implicit ideologies governing knowledge production and merit assessment, and revaluing and promoting local research, local languages, and local journals. Salager-Meyer (2012) explores the advantages of different open access frameworks, which can offer affordable (or free) access to recent knowledge, and increased visibility for those who publish. Salager-Meyer (2014) also suggests that small national journals could join forces and go regional, and become legitimate alternative venues for publication.

Calling into question the use of the label *international* “as a proxy for English-medium” venues and practices, Lillis and Curry (2010, p. 6) propose adoption of internationality as a new criterion emphasizing plurality (of editorial boards, collaboration, authorship, etc.). The notion of plurality also needs to permeate the directionality of disciplinary conversations. Tupas (2011, p. 219) quotes Susan Strange, an international studies scholar, who has admonished American academics for being “deaf and blind to anything that is not published in the USA.”

To conclude this section, we would like to add a final thought about consumption (or readership). The scientific community is admittedly a community of writers, but more fundamentally a community of scientific readers who also write. As Belcher (2014) notes, there is a need to cultivate a cosmopolitan readership who are able to appreciate the value of alternative forms of argumentation (cf. Canagarajah, 2013) and who bring that to bear in the range of literature that they consume and cite.

Recommendations for practice

Current understanding of publication as a socially-oriented networked activity suggests a pressing need for EAP specialists to go beyond a focus on textual conventions of RAs to provide support along the trajectory of writing-for-publication. Here, we suggest interventions and support for various activities throughout the pre-publication process, taking what can be termed a critically pragmatic approach (Harwood & Hadley, 2004).

We do not mean to imply, however, that pedagogical intervention at the textual level is not of value. Indeed, text-based pedagogical approaches that raise rhetorical consciousness among novice EAL academics may be crucial to their eventual success as published scholars. The goal of such approaches, if authorial agency is to be enhanced, would not be the teaching of rhetorical conventions per se, but scaffolding the ability to critically analyze and pragmatically use such conventions. Learning to view RA sections through the lens of Swalesian rhetorical move structure analysis can lead not just to awareness of the prototypical but also of variation within and across disciplinary communities, and hence of the possibility of engagement with hybrid discourses that “merge[s] the strength of local scholarly discourse with the dominant conventions of mainstream academic discourse” (Canagarajah, 2011, p. 125).

More and more evidence is accruing of the value of corpus tools as enablers of critical consumption and use of research genres. Charles (2012) and Lee and Swales (2006) have documented how individualized, discipline-specific corpora can “build the field” (Rose & Martin, 2012, p. 66) for research writers, immersing them in relevant contexts of writing, disciplinary cultures, and topic-specific lexicogrammar. These user-constructed corpora, which can enable comparison of the writer’s own text with a self-selected collection of online articles, may be especially valuable in under-resourced areas, where they may serve as virtual literacy brokers for EAL scholars, helping them determine how stylistically far or close they are, or want to be, from already-published texts.

Another promising recent pedagogical intervention at the textual level is the use of self-guided tutorial systems to support research writing. A trial-version tutorial called EJP-Write

(Lo, Liu & Wang, 2014) enables EAL writers to readily check move structures and collocations, view paragraph/sentence/phrase templates, as well as manage their citations and references. Like self-built corpora, such tutorials have the potential to scaffold rhetorical strategy and language use decision-making, and may be especially helpful for under-resourced scholars. While development of such online tutorial programs, especially if discipline-specific, requires substantial commitment and collaboration among EAP practitioners, subject-matter experts, and system developers, the learner autonomy benefits for those who can access such programs online also appear to be potentially substantial (Lo, Liu, & Wang, 2014).

A daunting task for all EAP professionals, but especially those who wish to support research writing for publication, is that of becoming knowledgeable about a range of discipline-specific social practices. A social constructivist-informed pedagogy, however, would assume that learning to write for publication occurs in the contexts of publication through interaction, negotiation, and contestation. With such a view of learning, the role of EAP professionals then becomes that of mediator between writers and their academic and literacy brokers, and facilitator of negotiation of issues that arise in research/publication contexts. Social-practice EAP support would ideally occur, as mentioned above, throughout the pre-publication processes. We suggest a few types of such support in what follows.

Support for positioning of EAL academics' research efforts within a discipline, a research area, and, more specifically, a journal should begin early in the publication trajectory (see Curry & Lillis, 2013b, for support strategies). While EAP specialists are not themselves in a position to choose a research topic or target journal for those they support, they can raise awareness of the need to establish a research niche in view not only of ongoing scholarly conversations but also of the writer's disciplinary, professional, and personal goals. They can also facilitate awareness-raising of publication venue possibilities (local vs. non-local; Anglophone vs. home language medium) and how these choices can affect, and be affected by, authorial positioning and identity.

Support for navigation of the research genre system (Tardy, 2003), not just the RA, should also be seen as an ongoing, multi-sequenced process. Since the RA is always part of a genre system, usually preceded by such antecedent genres as focused literature reviews, grant proposals, conference abstracts, and presentations, research writing for publication actually begins long before writing of the RA itself. Support can take the form of help with locating and scaffolding the critical reading of relevant literature, providing a safe space for rehearsal of conference presentations, and formative feedback on any antecedent and other research-related genres attempted.

Interaction with journal gatekeepers, a later stage in the publication trajectory, is only beginning to be addressed in the pedagogical literature (again see Curry & Lillis, 2013b). Novice scholars may find it challenging to interpret reviewer comments, which may be linguistically instantiated as questions, hedges, and indirect suggestions (Flowerdew & Dudley-Evans, 2002; Swales & Feak, 2011). Raising awareness of this "occluded" genre can start with exposure to real examples of reviews and responses locally collected or found in the EAP literature (Belcher, 2007). Instructional support can consist of menus of interactional strategies for responding to reviewer comments, contesting editorial suggestions, and explaining revision decisions (Swales & Feak, 2011).

Perhaps most critical of all to providing sustainable research publication support for EAL academics may be facilitating connection with other literacy brokers (translators, proofreaders) and academic brokers (senior researchers, potential mentors and collaborators, journal editors, and reviewers). Organizing a retreat or workshop in collaboration with

such brokers (Cargill, O'Connor, & Li, 2012; Moore, Murphy, & Murray, 2010; Murray & Newton, 2008), can, in addition to providing a supportive environment for discussion of ideas and issues, facilitate the formation of networks that offer many types of support beyond the expertise (or energies) of the EAP specialist. When such local support is not possible, EAL academics can be directed to virtual support such as that offered by AuthorAID, an online non-profit organization offering seminars, webinars, and mentoring to off-networked researchers (Englander, 2014).

As Cargill, O'Connor, and Li (2012) observe, the need for publication support for EAL academics is a worldwide dilemma. Institutions of higher education, rather than addressing it, are more likely to exacerbate it in their race to higher rankings. EAP specialists are among the few making a concerted effort to understand, meet, and even diminish (e.g., through open access advocacy [Salager-Meyer, 2012] and support for national assessment policy changes [Min, 2014]) this need.

Future directions

There are, of course, many different directions that EPAP research and practice could take to better address and alleviate English for research publication needs. Here we list a few that could be especially productive.

From homogeneity to hybridity

Further research is needed on hybridization and how hybrid discourses can constitute a bridge between dominant and peripheral discourses/modes, and, more specifically, on how scholars draw on their L1 discourse as a resource in their publication efforts. Fairclough (2010, p. 541) sees “a hegemonic shift [towards a more] favourable environment for ... practices of academic writing which achieve a hybridisation of traditional academic styles and colloquial, informal, spoken styles.” We need to explore how this shift is or could be realized in disciplinary and institutional communities.

From individuals to social networks

Although there is increasing awareness of academic publication as networked activity rather than individual accomplishment, publication practices within research groups are still under-examined. Further exploration of how novice EAL academics learn to participate as researchers and writers in research groups could reveal much about the nature of socially embedded practices. As the situatedness of research becomes more dispersed, and more researchers engage in global knowledge production through cross-border collaboration (Lillis & Curry, 2010), so too grows our need to better understand what it means to successfully collaborate across local, regional, and international communities.

From English text to multimodal, translingual practice

While much of the focus of EPAP research has been on textual features of RAs, we know that academics engage in a range of research-related literacy events that involve multiple semiotic modes and media, such as blogging, conference or virtual presentations, scholarly email exchange, informal talks, and other modes of research-related communication (Kuteeva, this volume). Further investigation of these multimodal practices, which are crucial to

social-network building, could illuminate much that is currently invisible in most RA-oriented research literature (Curry & Lillis, 2013b).

So far, EPAP has mainly focused on English medium publication in center journals. More attention to how EAL academics participate in local, dual-language, and translingual practices could help shed light on critical issues such as development of writer agency and identity, and provide insight into how to support plurilingual research practices. More research on such practices could also provide a space to discuss more equitable knowledge dissemination, nurturing of local research communities, and development of more ecologically sustainable language policies (Feng, Beckett, & Huang, 2013).

From data-based theory to data-and-theory-based pedagogy

While textual, corpus-based, and socially-oriented research and theory have expanded our understanding of academic publication, efforts to apply research insights to pedagogy are still surprisingly limited (Flowerdew, 2013a). The challenge for EAP specialists now is to further develop research-informed instructional support relevant to various disciplines and local settings, and capable of promoting the seemingly disparate goals of greater learner (author) autonomy and productive collaboration. To meet this challenge, we may need to move out of our comfort zones to collaborate with and be informed by, as well as inform, a range of brokers and stakeholders, including not only disciplinary experts and literacy brokers in other fields but also policymakers at institutional and national levels.

Further reading

Bennett (ed.) (2014). Explores such topics as the impact of English on various scholarly discourse traditions and the challenge of negotiating dual local and global academic identities.

Flowerdew (2013a). Outlines some of the most salient themes within the purview of ERPP.

Kamler (2010). Locates the review process in the larger context of brokering as social practice and illustrates pedagogic strategies by drawing on actual submission review cases.

Moreno (2010). Argues the case for cross-cultural academic discourse analysis studies – combining corpus, discourse, and genre analyses, and ethnography – informing pedagogical ERPP applications.

Lillis & Curry (forthcoming). Offers an overview of the traditions that inform the emerging field of scholarly writing in a multilingual context – noting that much of this research continues to be circumscribed to EAP.

Related chapters

- 3 Academic literacies
- 22 Critical perspectives
- 24 Lectures
- 32 Interpersonal meaning and audience engagement in academic presentations
- 33 Research blogs, wikis, and tweets

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PART VIII

Managing learning

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WRITING CENTRES AND THE TURN TOWARD MULTILINGUAL AND MULTILITERACY WRITING TUTORING

Magnus Gustafsson and Lisa Ganobcsik-Williams

Introduction

Writing centres are student-centred and learning-oriented spaces, which, compared to many other aspects of higher education, offer very good conditions for facilitating learning, peer learning, and life-long learning. Historically, writing centres have been structured around the tutorial, and staff have offered advice mainly to undergraduate students on the writing they do at university – advice ranging from argumentation and paragraphing to the mechanics of writing (e.g. spelling, punctuation, and grammar). Pedagogically, tutorial work in writing centres has embraced rhetorical approaches to written communication (North 1984) and emphasised the triad of genre, audience, and purpose. Consequently, the ethos of the traditional writing centre model is that students mature in their knowledge and independence as academic writers through collaborative discussion with a writing tutor, and through opportunities to work in guided ways on writing processes and strategies (Lunsford 1991). The collaborative discussion is crucial to the beneficial learning environment, and the possibility of conducting one-to-one sessions focused on an individual student's writing development is central to the writing centre approach.

But what goes into the concept of a “writing centre”? As this chapter addresses audiences far and wide, nomenclature surfaces as a critical component. The writing centre (or “center”) model described above has typically been a US higher education institution, and has largely been concerned with English as a first language or a higher education context where English is the first language.¹ For the purposes of this chapter, however, it is equally important to remember that the writing center in US Higher Education (HE) is not the only institution involved in English for academic purposes (EAP) learning activities. The responsibility for writing development, including EAP writing development, in US HE is shared in a complex and unclear manner between institutions such as “the writing center”,

“first year composition” (FYC), “writing across the curriculum” (WAC), and “writing in the disciplines” (WID).

These four ways of organising writing development for students are quite different. FYC is a very large institution across US HE, and often consists of one or two composition courses in the first general education year for undergraduates. It is delivered mainly by English departments and involves a large number of staff and contingent faculty on short-term contracts delivering variations on a set curriculum. These variations emerge as the many course sections are taught by different staff even if there is a coordinator in charge. Unlike FYC, WAC and WID approaches tend to be organised as faculty development through workshops and consultancies, and focus on developing pedagogies for faculty to teach writing in their courses across the curriculum. The difference between WAC and WID can be said to lie in the degree of disciplinary depth and specificity. Where WAC emphasises continued development and training in general writing strategies, WID deals with the development and teaching of discipline-specific genres, and tends to focus on upper level, discipline-specific writing-intensive courses. The writing center, finally, will typically welcome students from across these different types of writing activities.

While there are obvious advantages of having several branches involved in a university’s writing development and EAP delivery, there is, at the same time, a risk that EAP becomes nobody’s responsibility. In an ideal organisation, there is a well-resourced programme that contains and coordinates these branches; but it seems, equally often, that there are organisational obstacles to such coordination. Consequently, US writing centers have responded to different institutional aims and educational agendas throughout the decades (Boquet 1999).

Even if the organisational sense of responsibility for writing or EAP might be vague in US HE, the writing center is part of this multi-component structure, and will have a mission statement that is recognisable as that of a writing center (International Writing Centers Association 2015). Today, however, writing centres are making their way into other higher education systems where this multi-branch context for writing development might not exist. In Europe, for instance, there are writing centres in the UK, Ireland, the Nordic countries, and Eastern Europe, but it is perhaps in the German-speaking sector of European HE that the largest number of writing centres is to be found.² In this European setting, there is no FYC and little if any WAC or WID, and the writing centre might take on parts of any of these aspects of writing development. We must emphasise, though, with Donahue (2009), that the absence of these particular forms of writing instruction does not in any way mean that there is no writing instruction in European HE (Donahue 2009). Another obvious and crucial aspect of writing centres in Europe, barring the UK possibly, is that they cater for other languages of course. It is no longer EAP only, but also Norwegian, German, Swedish, etc. for academic purposes.

To the extent, then, that there is a fairly homogeneous HE scene in the US, colleagues might be able to distinguish between “writing centers”, “FYC programs”, “WAC/WID programs”, and so on. However, Europe has a more diverse HE environment and a shorter history in terms of “writing centres”, “writing programmes”, and rarely anything like first year composition. Hence, our terminology across Europe as well as compared to the US gets more confused (Bekar *et al.* 2015). We discuss “writing centres” and read each other’s scholarship and believe we know the meaning of familiar words, but that might not be the case. So, in this chapter, we will talk about writing centres, writing centre approaches, and writing centre methodology, and because some of those statements will refer to European activities, they might refer to groups of people in units called divisions or language centres;

they might also refer to activities that some readers would associate with integrating content and language in higher education (ICLHE; cf. Airey, this volume), or with WAC or WID programmes or the activities in such programmes. In fact, maybe for the purposes describing activities outside the US, distinguishing between writing centres and writing programmes might cost more than it yields (Thaiss et al. 2012).

The writing center in US higher education

In the United States, writing centers have been established in many colleges and universities since the 1970s and 1980s, when open admissions, increasing numbers of students, and widespread concern about a “literacy crisis” in students’ abilities to read and write (Sheils 1975) prompted institutions to set up writing tutoring centers (Harris 1982). However, widening participation is not a phenomenon exclusive to the twentieth and twenty-first centuries. Historians of the writing center movement argue that individualised support for students’ writing development in American HE can be traced back much further: to the discussion and debate about students’ reasoning and writing that is described as having taken place within eighteenth-century college and university literary societies (Waller 2002; Lerner 2009); to a 1904 classroom-based “laboratory method” of peer and teacher attention to students’ writing (Carino 1995: 105; Lerner 2009); to the creation of writing labs separate from the classroom by the 1930s (Carino 1995: 106; Lerner 2009); and to writing or composition clinics in the 1940s and 1950s (Boquet 1999: 469; Moore 1950; Carino 1992: 38–39).

A hallmark of US writing center pedagogy is the positioning of the writing tutor as different from a classroom teacher. The role of the writing tutor is to elicit student-writers’ ideas and help them to scaffold their writing as a mentor, rather than as someone who will ultimately be grading their assignment. As a “radical” alternative to classroom pedagogy that would help address the needs of individual student-writers (Bruffee 1984: 87), as well as for reasons of scalability, US writing centers began using students as peer writing tutors during the late 1960s and 1970s (Boquet 1999: 474; Devet *et al.* 2006: 197–198; Waller 2002), and today the “use of students as peer tutors in US writing centers is almost universal” (Devet *et al.* 2006: 205). Training and professional development for writing center tutors take place through a variety of means in different institutions, and can include credit-bearing classes focusing on theories and pedagogies of writing tutoring, training sessions, and staff meetings.³

Given a long history focusing on individual students and their writing development through working with peer tutors, writing centers have often positioned themselves as alternative spaces or safe havens for students (Gardner and Ramsey 2005; Geller *et al.* 2007). Increasingly, however, this self-image has become insufficient and writing centers have also articulated their functions in university policies and their function in university research agendas. Gillespie *et al.* (2002) promoted the writing center as a research site, and Gardner and Ramsey (2005), in their discussion of the changing mission and the rhetorics of writing center missions, also called for a change of emphasis in the self-definition at work.

Perhaps as a result of appeals like these, the character of research on writing center work has been changing and more often meets Haswell’s (2005) call for replicable, aggregable and data-supported research (RAD). In 2012, Driscoll and Perdue (2012) reviewed 30 years of articles in *The Writing Center Journal*, the main peer-reviewed journal for writing center work. They found that RAD work has been increasing in writing center communities, particularly in the past ten years of the study, but that a lot of work fails to meet the “RAD

rubric". They claim that "we must not only revisit our discussion of research diversity; we must embrace RAD research as a language for future of [sic] writing center publications" (2012: 36).

So, while "research diversity" is called for, Driscoll and Perdue (2012) note that RAD work has the potential to problematise the received wisdom or anecdotes of writing center work, known to academic writing scholars as "lore". Such questioning of writing center lore is another comparatively recent change of direction envisioned for studies by Thompson *et al.* (2009), who find that writing center lore is rarely supported by actual research findings. An important contribution to the collective testing of writing center lore is *Peripheral Visions for Writing Centers* (Grutsch McKinney 2013). Grutsch McKinney is hard on lore and likens it, like Gardner and Ramsey (2005), to a grand narrative. She suggests that lore "persists because narratives and the rhetorical and visual habits they spawn are all difficult to change" (2013: 85). Instead of, or in addition to, the grand narrative of the writing center as a welcoming and freethinking space where individualised writing tutorials are conducted, she promotes a more peripheral and localised view of the many writing development activities in which writing centers can be involved.

Questioning a potentially outdated grand narrative is a daunting task of course, but one that writing centre communities elsewhere in the world benefit from and can actually contribute to. In other words, the site- and region-specific adaptations in writing centres outside the US offer important indirect commentary on the givens of US writing center lore. For instance, European writing centres may share a core belief in tutoring student writing but in some cases the similarities end there.

The writing centre makes its way to Europe

Given its success in US HE, it comes as no surprise that the writing centre idea made its way to Europe, too, and has been adopted and contextualised in a number of institutions since the early 2000s (e.g. Bräuer and Girsensohn 2012; Deane and Ganobcsik-Williams 2012; Doleschal 2012; O'Sullivan and Cleary 2012; Stassen and Jansen 2012; Tokay 2012; Worley 2012). Many of the reasons for looking towards writing centres are similar since HE institutions in Europe have also faced the massification of HE, widening participation, and changing educational policies.

What might be more specific to the European setting, at least from a short-term historical perspective, is the Bologna Declaration and the attempt to establish a European HE area (EHEA) for greater student and workforce mobility. The outcomes-oriented educational policy promoted through the Bologna Declaration is one that has a significantly stronger emphasis on writing than various educational curricula in the numerous member states of EHEA. While these many national curricula have various ways of addressing writing development, there is no shared point of reference for writing development and the educational cultures vary significantly (Kruse 2013). Yet, the writing centre approach has offered a way to promote writing development that has been feasible across many of the different educational traditions and cultures in Europe.

On mentioning the Bologna Agreement, another distinctive dimension of writing centre development in Europe comes into focus – the more extensive language variation along with the diverse educational cultures. So, while the Bologna Agreement has generated a greater emphasis on writing and even English for academic purposes, a significant number, if not all, writing centres in Europe also tutor L1 writing in addition to EAP. Since such L1 tutoring often happens prior to EAP tutoring, which typically happens largely at

the level of master's degrees, the L1 tutoring also serves to provide ways for students to encounter writing instruction to begin with and prepares them to make better use of the EAP activities.

Where the multiple educational traditions and the greater language variation might offer challenges to European writing centres, there is also the advantage of having US writing center development to learn from. Mullin (2006), for example, argues in relation to writing centre development in a UK context that because such development is less hampered by US traditions and beliefs regarding writing support, there is greater potential to set up more purposeful and context-sensitive writing initiatives.

This opportunity of observing writing center development in the US and the fact that the educational arena is so different has enriched the conversation among European scholars about adaptation and strategy for European centres. Hence, discussions or accounts of US writing center pedagogy have had the explicit function of avoiding transfer and templates and instead have widened the debate (cf. Davidson and Tomic 1999). Such widening concerns issues of curricular design, choice of textbooks, and tutoring philosophies (cf. Santa 2009), but it also goes further and points at how simple import of concepts across languages and educational cultures is ill-advised, and that what is called for is a mutual exchange (Donahue 2009).

It may also be the case that the relative novelty of the writing centre idea offers an appealing site for development for many colleagues in view of the paucity of other shared and recognisable forms of interventions for writing development, and the inherent focus on learning. European writing centres can more quickly and with less resistance take on the functions also of US writing programs. In contrast to the "traditional model of a writing center", many European centres, therefore, cater also for faculty training, and adopt a more adjustable set of contextualised strategies to increase the writing performance of university students in Europe.⁴

The centre approach – what's in it for EAP?

So, from the US horizon as well from a European perspective, the writing centre offers great potential for writing development work. What, then, are the advantages of the writing centre approach for EAP? English for academic purposes, after all, goes well beyond first-year composition and pre-sessional introductions to writing at university. In US HE, writing centers and interventions like WAC/WID originally may have been seen as complementary, whereas there has been increasingly more collaboration and coordination between these activities and agents in the past 15 years or so (Mullin 2001; Anson 2006; Elon University 2015; Flash 2015; Minnesota University WEC-program 2015). This conflation reflects the development horizon in Europe as well, where writing centres tend to take on multiple functions/roles in their respective universities.

This is the point where we believe the many diverse educational contexts in Europe are the most radically accentuated, since the local conditions vary so vastly, and yet the writing centres appear to accommodate this variation and still cater for EAP development. The diversity we see is not only in L1 backgrounds but also in what English as a second language (ESL)/English as a foreign language (EFL) training there is in the various educational traditions. In terms of conflating writing centres and WAC/WID activities, the past 15 years or more have offered a rich body of scholarship on WAC and WID that underlines the strong connection between WAC/WID pedagogy, and that of writing centres with their original one-to-one tutorial mode of operating.

As we access this literature on the connections between writing centre work and WAC/WID, we need to remember that while WAC and WID are distinct and have different objectives and approaches, there is also a tendency among scholars who explore the overlap between WAC/WID and writing centres to “employ the umbrella term WAC” (Corbett and LaFrance 2009: 3). However, to be brief and risking over-simplification, WAC and writing centre approaches align well in so far as having a place in “liberal arts” or “general studies” curricula of US higher education. That these approaches cater for EAP seems an uncontroversial assumption. With increasing conflation of activities, writing centres see more WAC and WID writing.

More importantly, the writing centre–WID connection has additional dimensions beyond the mere fact of students bringing disciplinary writing into the centre. Barnett and Rosen (1999) go as far as to suggest that the writing centre–WAC/WID link has the potential to create a university-wide writing culture. A link between writing centres and WAC/WID offers an environment for writing development that can potentially make “writing visible, understood, and accepted as a valuable tool for teaching and learning across the disciplines. A campus-wide writing environment implies ongoing dialogue about writing and its relationship to thinking and learning among faculty as well as students” (Barnett and Rosen 1999: 1).

Predictably, the crucial connection between writing centres and WAC/WID hinges on precisely this shared responsibility. US scholars like Waldo, McLeod, Maimon, and Childers support Barnett and Rosen in the idea that the writing centre approach should be a part of the hub of writing development at university level. Waldo (1993: 16) sees in the writing centre that caters for WID an environment that “provides students with a comprehensive tutoring program”. Similarly, McLeod and Maimon focus their view of the writing centre–WID connection on the immediate and hands-on WID work that takes place inside writing centres:

Although it is possible to run a WAC [/WID] program without such an entity, *our experience is that to sustain a WAC [/WID] program, a writing center is crucial*. ... The most successful writing centers work with faculty in the disciplines, asking for copies of assignments and *helping faculty refine them*.

(McLeod and Maimon 2000: 581, *italics added*)

On the one hand, this claim tells us something about the versatility expected of writing centre tutors as they are addressing writing assignments from all over the university. On the other hand, the claim also points to the work writing centres do with disciplinary faculty in terms of collecting student reactions to assignments, and having a wealth of writing development advice to draw on as they offer to help colleagues revise assignments and assignment briefs. Perhaps it is also this particular aspect of writing centre work that Childers has in mind when she suggests that writing centre colleagues, “rather than mostly working with students, [can] become more of a resource, guide, and facilitator for faculty research, discovery, and risk taking with writing, thinking, and learning across the disciplines” (Barnett and Blumner 1999: xii; Childers 1999).

The somewhat broader definition of writing centre work that includes more direct work with teachers and researchers in other disciplines has been an integral part of many European writing centres from the very beginning. Perhaps it is even the case that writing centre work in Europe to a larger extent than in the US has to cater to a broader set of disciplines and in ways that go beyond tutoring students from these disciplines

(Brinkschulte, Stoian, and Borges 2015). For the UK scene, similarly, WID has become the more prominent concept in writing development. The early subject specialisation of UK universities, and what appears to be a degree of preparedness among academics teaching in this system to take responsibility for teaching and responding to disciplinary writing, offer good openings for a WID approach in writing centre work (Ganobcsik-Williams 2006: 52; O'Neill 2010).

So, as writing centres have grown in numbers and the European writing centre community has grown larger, it seems the approach chosen has been one of working across many levels, ranging from the one-to-one with students, to the workshop with teachers, to working with all the teachers in a programme or department in order to develop and sustain a dynamic writing culture. To offer two examples of this kind of work in Europe, we will account for the activities and set up of the writing centre at Coventry University in England, and refer to the corresponding activities at Chalmers University of Technology, Sweden. With very different backgrounds and organisational conditions, the two “centres” nevertheless find themselves with activities that are similar and missions or responsibilities that are almost interchangeable. One of the units is a writing centre and the other is a division in a department.

In 2004, the first centrally funded UK university writing centre, the Centre for Academic Writing (CAW) at Coventry University, opened for students seeking guidance on writing essays and other types of academic prose. CAW has developed steadily in the years since its founding, offering students face-to-face, individualised and small-group writing tutorials, synchronous and asynchronous online writing tutorials, academic writing workshops, credit-bearing undergraduate writing modules, and a credit-bearing master's module on writing for publication. CAW also cascades support for student writers through WID consultations with teaching staff, and supports postgraduates, academics, and other researchers in writing for publication.

The Division for Language and Communication (DLC) at Chalmers University of Technology, Sweden, is a unit whose current activities can be traced back to the 1980s. Its organisational trajectory has involved four institutions, organisational status ranging from work unit to department, and remits as varied as “providing language service” to providing researched-based engineering communication education to all university students. It offers courses in engineering programmes, electives across programmes and educational levels, thesis tutorials for writing groups, and writing tutorials for individual students as well as groups of students.

Unlike “traditional writing centres”, therefore, CAW's and DLC's missions go beyond tutoring “to enable students to become independent writers”, and include phrases like “to equip academic staff in all disciplines to achieve their full potential as authors and teachers of scholarly writing” (CAW 2014). This type of staff development remit authorises academic writing lecturers at CAW and lecturers and staff at DLC to work with academics and support staff on their own scholarly writing; for example, through individualised consultations, scholarly writing retreats, and dedicated writing events or staff development courses for the development of their writing or their use of writing in courses.

The CAW and Chalmers models demonstrate how useful, reciprocal connections can be forged between writing centres, WID, and WAC. This integrated provision for writing development means that the writing centre can be involved in writing development for academic and professional staff as well as for students at all levels, and that writing specialists can work with students and colleagues to create a culture of writing that permeates the institution at all levels (Ganobcsik-Williams 2011: 259). Not surprisingly, both models

also exemplify the fundamental issue of nomenclature, organisational contexts, and higher education traditions in Europe.

CAW's remit has included WID since its founding. In the same manner, DLC provides multiple WID programmes. Both CAW's academic writing lecturers and DLC's lecturers work with academics in the faculties on creating strategies for teaching writing more explicitly in students' degree courses. Consultations between a CAW or a DLC lecturer and one or more department-based academics involve discussing the aims of a particular module or degree course, and how to design assignments to meet those aims. Lecturers and writing developers then work together to plan teaching and to draft/revise assignment briefs. In this way, CAW's and DLC's writing lecturers provide staff development and support for colleagues in the teaching of writing. Because WID can entail a considerable commitment from both staff developers and lecturers based in other disciplinary fields, CAW and DLC both offer WAC-inspired staff development workshops that promote more general "writing to learn" concepts and techniques (Bazerman and Russell 1994: xiv) to support students' writing development.

The future is already here: EMI and multiliteracy

Writing centre development is dynamic and responsive, and with increasing globalisation, writing centres have had to respond to greater language variation among the students and faculty who turn to them. In relation to EAP in US higher education, there has historically been a division of labour between WAC initiatives on the one hand, and ESL programs or initiatives on the other. Matsuda observed this unproductive separation already in the 1990s and argued that it is problematic (Matsuda 1999). Writing centres, however, find themselves in the middle, and since writing centre methodology allows higher resolution in terms of the individual writer's development, US writing centers have had to design material and collect experience, and also gradually develop a degree of ESL delivery (Zawacki and Cox 2011). In fact, as recent WAC and writing centre publications suggest, writing instruction informed by WAC and writing centre approaches is becoming increasingly multilingual both in English-speaking countries and elsewhere (Thaiss *et al.* 2012; Zawacki and Cox 2014). In terms of specific tutoring practices, the Institute for Writing and Rhetoric at Dartmouth College, for instance, provides guidelines for tutoring multilingual writers in English (Dartmouth College Institute for Writing and Rhetoric 2014), while the Multilingual Writing Center at Dickinson College, "staffed by Overseas Assistants and by Dickinson students who have experienced study abroad and are recommended by foreign language faculty for their writing ability" (Dickinson College Multilingual Writing Center 2014), offers tutoring for multilingual student-writers in languages other than English (Arabic, Chinese, French, German, Hebrew, Italian, Japanese, Russian, Spanish).⁵

In Europe, writing centres were always already multilingual even if they have been informed by an L1 language profile. The Bologna Agreement charges universities and students alike to rise to an increasingly English-mediated higher education. The second cycle (master's level) is often delivered in English, and writing centres in Europe therefore support EAP development for a large number of different ESL/EFL backgrounds.

The influence of globalisation or policies like the Bologna Agreement, however, is only one of the "new" dimensions of writing centre work. The multilingual is not enough. There has been a marked tendency in writing centre literature and development in the past five years, at least, towards the multiliteracy centre rather than the writing centre. Directors and tutors alike have pointed out how writing centre activity has had to incorporate, as

rule rather than an exception, more than one-channel, one-dimensional writing pieces. So, modern technology and the increasing importance of interactive and social media call for more than just multilingual writing centres (cf. Sheridan and Inman 2010; Cope and Kalantzis 2000).

For many professional or graduate careers, academic writing literacy is insufficient and universities, like Elon University for instance (Elon University, 2015), include in their teaching and learning aims the need to prepare students for the communication they will need to do after graduation. With such objectives for writing, writing centres increasingly need to handle more multiliteracy-oriented and collaborative writing tasks. This new day-to-day experience has *“expanded our understandings of the situated and pluralized nature of literacy”* (Grimm 2012 in Balester *et al.* 2012; our emphasis). From a writing centre perspective, then, “academic purposes” now not only entails but begins to emphasise the multiliteracy character that informs writing.

Concluding remarks

This chapter has offered a sketch of the potential of writing centres for EAP. The largely US-oriented background of the writing centre approach has been influential also in other educational systems, and we have offered some examples of its adaptation in European HE and how it helps promote English for academic purposes and beyond. Given the organic development of writing centers in US universities, colleagues in other educational systems who look to the US for writing center development face the challenge of engaging with that perspective in an informed manner in order to develop writing centre activities in their own local contexts.

Such strategic development in some European contexts has meant that writing centres have started out already with a combined mission of working also with WID and WAC approaches, and with local strategies informed by the language contexts of their universities. For us, writing centres may well be ideal hubs from which to design and deliver systematic EAP/WID interventions. It might even be the case that writing centres as such hubs might generate change on a larger scale. A UK writing centre successfully trialled a writing fellows programme, where tutors moved out of the centre and worked with faculty in assigned courses, for instance, and saw its potential for further change:

Indeed, they [writing fellows or mentors] offer so many benefits to students that it becomes tempting to see the “problem” of student writing as an opportunity to make improvements in an educational system that has resisted real pedagogical change for too long.

(O’Neill 2008)

We have tried to outline how writing centres have responded to changes in the HE contexts where they are situated; but as O’Neill suggests, writing centre activities also have the potential of indicating changes that are called for in our respective educational systems (cf. also Bräuer and Girgenson 2012).

The writing centre idea has great appeal and potential. A step that lies in the future but is congruent, we believe, with the multiliteracy centre idea is to see how “writing centres” adapt to and influence massive open online course (MOOC) design and delivery while also promoting EAP. The useful discussion of the future missions of “writing centres” that Gardner and Ramsey initiated in 2005 seems to have found solid support and has

spread the conversation outside the US in a movement that holds great potential for the development of writing and multiliteracy centres.

Still, while we are predictably hesitant to talk of the “core” of something like a “writing centre approach”, the tutorial still holds great appeal. Maybe the bulk of writing centre work might still be one-on-one tutorials, and while we need to make sure that writing centres evolve in response to students’ learning environments, we may have to find ways to safeguard aspects that we deem effective in our everyday activities in learning environments sometimes called writing centres. We hope that our chapter offers an inclusive contribution to an ongoing conversation with an aim to make the most of “writing centres”. It might also serve as an invitation for continued scholarship examining the many ways “writing centres” and higher education systems can interact and mutually evolve.

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- European Writing Centers Association (EWCA) www.writingcenters.eu/
- The European Association for the Teaching of Academic Writing (EATAW) www.eataw.eu/

Related chapters

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Notes

- 1 Needless to say, this is hardly the case any longer, and the ESL and ELF dimensions are becoming increasingly important also in US HE, as witnessed, for instance, by recent publications by Zawacki and Cox (2011; 2014).
- 2 In 2013, “Writing centres and writing consultants in Germany [...] founded the ‘Gesellschaft für Schreibdidaktik und Schreibforschung’, an association for professionals dedicated to writing centre work and writing consulting. Ten scholars who work in writing centres – either as writing researchers or as freelancing writing consultants – established the association in Göttingen aiming at assisting researchers and practitioners who support, teach, and counsel writing at schools, universities, or job-related writing. After the first writing centre in Germany, the Writing Lab in Bielefeld, inaugurated in 1993, approx. 30 other writing centres have spread all over Germany” (Brinkschulte 2013).
- 3 The US-based International Writing Centers Association (IWCA 2015) website provides sample syllabi for peer tutoring courses, as well as a link to the “PeerCentered blog” for “peer writing tutors/consultants or anyone interested in writing centers to blog with their colleagues from around the world” (PeerCentered 2014).
- 4 Cf. Santa 2009: 3, where he claims that in Europe “the writing centre is the writing program”.
- 5 Also see Manuel Herrero-Puertas’ reflection on the “fertile multilingual scene” and the place of the (multilingual) writing center at the University of Wisconsin-Madison (Herrero-Puertas, 2011).

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40

EAP MANAGEMENT

Andy Gillett

What does EAP management include?

People involved in managing English for academic purposes (EAP) may have a wide range of titles or job descriptions and may be situated in one – or more – of several different areas of an institution. Whoever is involved in the EAP management and wherever it is located, it broadly comprises managing people, managing courses and managing resources. The management is normally carried out by a head of department or director of a centre. There are, however, many other people who can be involved, with titles or roles such as assistant director, curriculum coordinator, student counsellor, marketing officer, staff-development manager, teacher trainer, testing coordinator, technology coordinator and so on.

Although EAP is taught in private language schools and secondary schools, most teaching is in institutions of higher education around the world. In this case, it is often included as part of an intensive English programme (IEP), and many of the roles required of an EAP manager will be those of an IEP manager. Kaplan (1997) gives a useful overview of the history of IEPs in the United States and the role of the director of such programmes.

He starts by presenting some of the challenges for a manager of an intensive English programme. The first challenge he mentions is the location of IEPs. He points out that IEPs can belong to departments of English, to language or linguistics departments or to continuing education departments. EAP can also be taught in particular departments such as business or medical schools, or even in student services and advice centres. A second challenge is student proficiency on entrance. As IEPs and EAP programmes are primarily preparing students to succeed in a range of degree courses (Hamrick 2012), it is necessary to make decisions about what levels of student proficiency can be included in the programmes and how this should be tested. Another challenge with IEPs is the reporting structures within the programmes. The wide range of locations of these makes it difficult to have a standard hierarchical structure to work with.

Finally, Kaplan tries to define the wide range of responsibilities of the director. He distinguishes six primary areas of responsibility: academic, administrative, institutional, political, fiscal and managerial, as in Table 40.1.

He makes it clear in the discussion that, although EAP managers may be academic staff in the same way as other academic managers, their wide responsibilities mean that their range of roles may be quite different. An example of this diversity is the possible contacts that an IEP/EAP manager may have in his or her role as manager, shown in Figure 40.1.

Bearing in mind Kaplan's distinction of the roles of language administrators, Panferov's (2012) research looks at the knowledge and skills required to transfer from being a language

Table 40.1 Six of the primary duties of a language programme director

<i>Academic responsibilities</i>	<i>Administrative responsibilities</i>	<i>Institutional responsibilities</i>
Curriculum design	Operations	Liaison with higher level administrators
Testing	Policy development	Committees (e.g., admissions, governance, language education, faculty)
Syllabus development	Policy implementation	Student/faculty advocacy
Student placement	Infrastructure planning	
Teacher evaluation	Long- and short-term budget	
Articulation among levels	Organisational planning	
Test development and curriculum trialing	Staff development (in-service/ pre-service)	
Teacher training	Record keeping	
<i>Political responsibilities</i>	<i>Fiscal responsibilities</i>	<i>Managerial responsibilities</i>
Liaison with clients	Budget development	Staffing
Institutional policy development	Day-to-day control of expenses	Running meetings
External professional organisation involvement	Purchasing	Structuring committees
Liaison with accrediting agency, funding agencies, sponsors, international agencies	Equipment maintenance	Hiring
	Planned acquisition of office and instructional equipment	Firing
	Grants and contracts	Dealing with grievances
		Counselling
		Legal action
		Personnel records
		Personnel harmony
		Personnel searches

Kaplan (1997: 10)

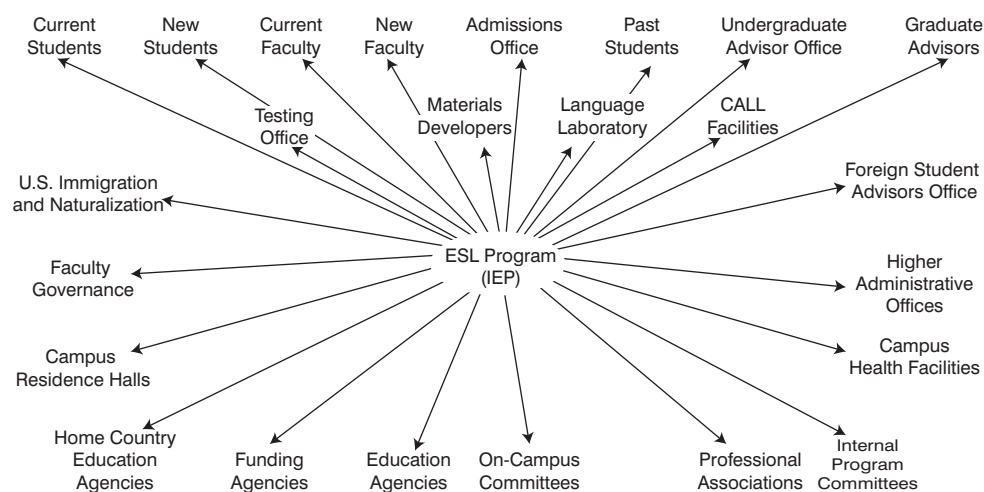


Figure 40.1 Some possible contacts for an IEP director (Kaplan 1997: 16)

Table 40.2 Variety of daily responsibilities of a language programme administrator ($n=106$)

<i>Areas of responsibility</i>	<i>% of administrators listing the responsibility</i>
Personnel issues	80.9
Curriculum	67.4
Marketing	64.0
Budgeting	59.6
Staff evaluation	52.8
Time management	50.6
Cooperation with university programs	48.3
Teacher training	46.1
Immigration and legal issues	44.9
Customised programme development	43.8
Policy	34.8
Accreditation	32.6
Technology—purchasing, implementation, and ongoing support	30.3
Fundraising	2.2
Programmes abroad	2.2

Panferov (2012)

teacher to being a language centre manager. She points out that such a transition is often not planned in many fields in higher education and happens by chance when someone receives promotion to a position that involves management. Consequently, many people are unprepared for the new role.

Panferov (2012) carried out a survey of English as a second language (ESL) with programme administrators in the USA, most of whom had advanced degrees, mainly in business or educational administration. She investigated the typical responsibilities that a programme manager might have. The results are given in Table 40.2. It is clear from the survey that the most frequently mentioned areas of responsibility were personnel and curriculum issues.

Similarly, Kling and Panferov (2012: 136) surveyed 190 American and European university language centre administrators about the time they spent on various kinds of management work. Figure 40.2 shows the percentage of the administrators who thought that a particular issue was one of their daily challenges. The results of the survey show that the top two were again personnel and curriculum. Furthermore, if staff evaluation, for example, is included in personnel issues, then this category is by far the most important.

The above research shows that the main areas of work that managers feel are important are personnel and curriculum. This is followed by marketing and budgeting. Bailey and Llamas (2012: 20) took this further by giving more specific details about these broad areas. They started with the teaching of English to speakers of other languages (TESOL) Programme Administration Interest Section's (PAIS) definitions of knowledge and skills needed by a manager (PAIS 2004). These are:

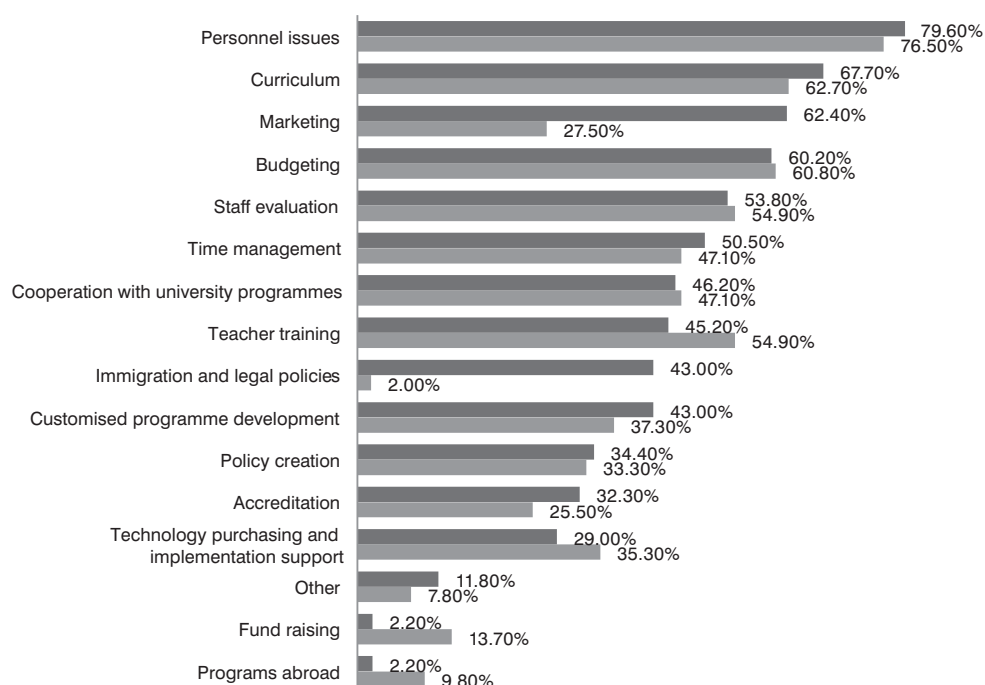


Figure 40.2 Typical daily challenges (Kling & Panferov 2012: 136)

- 1 Develop budgets and monitor expenditure.
- 2 Recruit, hire and supervise teachers and support staff.
- 3 Train teachers, aides and other related staff.
- 4 Recruit/identify, test and place students.
- 5 Determine programme goals, objectives and work plans.
- 6 Schedule classes.
- 7 Provide suitable facilities and sufficient materials.
- 8 Establish and maintain links between the English programme and other departments within the institution, outside agencies, and the community as a whole.
- 9 Evaluate programme effectiveness.

In order to address the question regarding what skills and knowledge language programme managers need, a questionnaire was created and a survey carried out. Using a five-point Likert scale, 7 of the 29 items on the survey gained mean scores of 4 points or more and can therefore be considered core responsibilities. They are: evaluate programme effectiveness; determine and re-evaluate language programme goals and objectives; develop curricula to meet language programme goals and objectives; revise curricula as needed; conduct staff meetings; supervise and evaluate teachers and/or support staff; and hire teachers and/or support staff (Bailey and Llamas 2012). These seven points are therefore the essential responsibilities of programme managers; they could be summed up as curriculum management and staff management.

As is clear from the above discussion, the skills and knowledge required range widely over fields of applied linguistics and educational administration.

Managing courses

According to the research outlined above, one of the main EAP management roles is working with appropriate curricula and courses. Course management includes managing the overall curriculum, and particular course design – pre-, in- or post-study. This involves courses at appropriate levels for specific students, placement, testing, progression and coming to conclusions about appropriate materials and ensuring quality. It can also encompass specific projects – internal or external – for a group of visiting scholars, for example. Innovation in course design also comes here. This will almost always involve working with various university departments and other stakeholders, including lecturers and students.

Kaplan (1997) provides an overview of the choices involved, covering the areas of format of the programme, pedagogical principles, daily schedule, patterns of classroom management (for example, team-teaching, self-instruction) and classroom formats (use of listening and computer labs, teacher-managed classrooms, etc.).

Within the context, Hyland recommends that EAP curriculum managers start from student needs and rights (Hyland 2006: 282). This information can then be used to state broad goals and then work on the more specific outcomes on which to base the course. This then forms the basis of a structured plan of what needs to be learned and taught in the programme. The content and the tasks can then be selected and sequenced in order to lead to the desired learning outcomes.

The important stages that need to be managed, therefore, are: conducting needs analysis, setting goals and objectives, and devising and evaluating syllabuses. So, first the needs and rights of the students need to be investigated. Once the needs and rights of the students have been established, the next stage of managing the design of an EAP programme is to determine the content, tasks and assignments which will meet the objectives agreed on for the course. Ideally, this will include a relevant mixture of skills and knowledge and an appropriate range of topics, task types and genres. According to Hyland (2006: 286; cf. also Bruce 2011: 60–64), depending on the aim and length of the course, five main kinds of knowledge and skills should be provided for:

- 1 Genre: ensuring relevant genres are included.
- 2 Context: familiarising learners with target contexts and the roles and relationships involved.
- 3 System: ensuring that students acquire the necessary elements of the language system.
- 4 Content: selecting and sequencing the content domains students will require.
- 5 Process: making provision for students to develop their language skills with different types of practice.

The starting point in this case is what the students will need to do in their English-medium academic contexts. This will largely be defined by the genres they will need to work with, as discussed in other chapters in this volume.

An important decision to be made at this stage is whether the course should be linguistically wide – focusing on more general academic language and practices – or narrow – concentrating on the language needed for a particular subject or task (Basturkmen 2003, this volume; Hyland 2002, this volume). The choices may be pedagogically, linguistically or financially motivated, and the choice of wide-angle programmes may reflect the unwillingness of institutions to fund the development of narrow-angle courses (Basturkmen 2010: 55)

Basturkmen (2010) provides case studies related to research into how course developers work with the particular needs of students. The cases show actual decisions that teachers made in developing the courses. The chapters describe the contexts of the course, how the courses were developed, emphasising investigations of specialist discourse, descriptions of course and materials, and the evaluation process. Descriptions of particular difficulties are included. The chapter stresses, in particular, the importance of working with subject specialists. Examples are given in Murdock (1997) of outreach to academic departments, and how this can be enhanced, with projects such as course to course linkages, sheltered and adjunct courses, foreign language credit or English courses, joint projects and joint research.

More examples of course design are given in Allison, Cooley, Lewkowicz and Nunan (1998); Boyd (2002); Bruce (2005); Dlaske (1999); Feak and Reinhart (2002); Hoekje (2007); Jones (1991); Jones and Roe (1975); Mazdayasna and Tahririan (2008); Preece and Godfrey (2004); and Wigglesworth (2007).

Throughout the process of curriculum development, attention must be paid to quality. McNaught (2009) and Mercado (2012) give good overviews of what quality is, how it is defined, various approaches to quality assurance, and establishing quality systems. Stoller (2012) provides an in-depth discussion of innovation, drawing attention to impetus, characteristics of innovation, and various ways in which good practice can be spread.

Finally, any management of programme development needs to include course evaluation. Lynch (1996) provides managers with an introduction to both qualitative and quantitative approaches to evaluating the effectiveness of EAP programmes. He gives examples of several different models of evaluation and many useful techniques for collecting and analysing data. See also Pennington (1991).

Managing people

A second important role of an EAP manager is managing people, including hiring, firing, evaluating and developing. Managing people can cover managing academic and non-academic staff. This may involve recruitment of staff, induction of new staff, mentoring of staff, leading staff, staff evaluation/assessment/accreditation, professional development and possibly firing. In all this, good communication is essential. People management can also cover managing students, including marketing, promotion and recruitment.

As EAP deals mainly with international students, EAP management has intercultural aspects and therefore needs cultural sensitivity. Hiller (2012) emphasises the importance of managers' own intercultural competence and that of their colleagues. She discusses structure such as Osland and Bird's (2000) Sensemaking model, Salovey and Mayer's (1990) Emotional Intelligence model, and Christison and Murray's (2009) Management and Leadership IQ Assessment for ELT (English language training) as tools that EAP managers can make use of to develop their own intercultural competence.

Geddes and Marks (2012) discuss human resource matters, particularly the importance of staffing, as the success of much educational work depends on the competence of the administrative, managerial and academic staff. The first stage is to carry out a job analysis and produce a realistic and detailed job description (Geddes and Marks 2012: 220), drawing on the institutional knowledge already present, as well as *a priori* needs and principles. The analysis should start from the overall mission and specific goals of the programme, and determine how each position fulfils them. A job description can then be written on the basis of any existing document, interviews with anyone currently doing the targeted job, and

with colleagues working alongside them, and any descriptions available from other language programmes. The information collected can be used to list the duties to be performed and the responsibilities required for the post, from which the knowledge, skills, abilities, educational background and experience required can be inferred. In consultation with colleagues, the requirements for the position can then be categorised and prioritised, and a job description can be written or the old one revised.

In most cases, before someone is appointed, an interview will take place, the purpose of the interview being mainly to confirm conclusions drawn from documentation and to further assess the candidates' analytic, interpersonal and communication skills. Interviewing requires conscious organisation and planning, and the style is important. Geddes and Marks (2012) mention traditional unstructured interviews, situational interviews, experience description interviews and pattern behaviour interview questions.

After recruitment, people management involves appropriate supervision, which may include aspects of performance management such as developing, motivating and evaluating teachers. In order to manage teacher performance and development, EAP managers need to be aware of their teachers' beliefs (Alexander 2012).

McNaught (2009) discusses a case study of a system of performance management developed at a college in Australia and presented at a conference by Renwick and Thomas (2000). Although sensitive areas are involved, it was generally agreed that the appraisal was beneficial for all concerned. After discussing the issue among the management group, it was decided that the key areas to be measured were teaching preparation, classroom teaching, record-keeping, consultation with students, contribution to course development, professional development and self-assessment (Renwick and Thomas 2000: 177).

Various tools were used to measure the areas mentioned including surveys, observations, self-assessment and reflection. An initial discussion was held between the supervising coordinator and staff member to make arrangements for observation. To ensure transparency, at this point documentation was handed over, including information on the observation criteria, a feedback form and a teacher self-assessment form. There was then a classroom observation of approximately one hour, followed by a post-observation discussion, and a separated discussion of goals and objectives with the staff member. Finally, teachers were asked to carry out a self-assessment of their own teaching performance. Most agreed that it was a valuable process overall and leads on to professional development. Another good reason for pursuing professional development programme in EAP is to prevent demotivation or burnout (Curtis 2008).

Related to this aspect of professional development, Falout, Murphey and Stillwell (2012) present the results of a survey of 75 experienced English teachers from around the world. Questions included: "What demotivates you?" "How are you remotivated?" "How do you maintain motivation?" The most common reason for demotivation was depersonalisation, particularly with regard to contact with students. Meaningful relations with others and supportive communities helped to remotivate and keep motivated. Other factors included setting multiple goals, being flexible and learning from mistakes. Other causes of demotivation included overwork, time pressure and feelings of low personal accomplishment, or lack of job satisfaction. Professional development was suggested as a way to fight this (Falout, Murphey and Stillwell (2012: 14). The survey showed that many teachers had attempted to remotivate themselves by changing their ways of working and undertaking further training and development, especially when it involved other colleagues. Examples of individual self-directed professional development were keeping reflective journals, compiling teaching portfolios and conducting action research.

Table 40.3 The action research cycle

Cycle 1	
Step 1:	Problem/puzzle identification: “Student motivation is declining over the course of the semester.”
Step 2:	Preliminary investigation: “Interviews with students confirm my suspicion.”
Step 3:	Hypothesis formation: “Students do not feel they are making progress from their efforts. Learning logs will provide evidence to learners of progress.”
Step 4:	Plan intervention: “Get students to complete learning logs each week.”
Step 5:	Initiate action and observe outcomes: “Motivation is improving, but not as rapidly as desired.”

Cycle 2	
Step 6:	Identification of follow-up puzzle: “How can I ensure more involvement and commitment by learners to their own learning process?”
Step 7:	Second hypothesis: “Developing a reflective learning attitude on the part of learners will enhance involvement and motivation to learn.”
Step 8:	Second round action and observation: “At the end of each unit of work, learners complete a self-evaluation of leaning progress and attainment of goals.”

Nunan (2012: 35)

Farrell (2012) looks at the growing recognition that teachers can and should constantly develop themselves throughout their careers, and knowledge informs much of this. There is also a need to reflect on this knowledge in order to stay fresh and develop. Farrell discusses types of reflective practice that can be employed and presents a reflective practice framework (cf. Ding, this volume). A variety of opportunities for reflection should be provided, with built-in ground rules and formally assigned time. External input should be given and the time and space should enable trust to be developed among participants.

Another method of pursuing professional development is presented by Nunan (2012). He discusses and gives an example of good practice in using action research for professional development using his action research cycle (Table 40.3).

Troudi and Rich (2012) and Bailey, Curtis and Nunan (2001: ch. 12) give good examples of compiling teaching portfolios as a means of professional development, the two main elements being evidence and reflection (Troudi and Rich 2012: 58). Evidence includes: letters of professional reference; classroom action materials; professional development activities – presentations, committee work, research projects, publications, courses, membership of professional bodies – teacher evaluation reports; student evaluation; and student work. Reflection needs to include the teacher’s voice and the teacher can reflect on teaching philosophy, views about education and curriculum, views on language learning and teaching approaches, classroom management, the global position of English, assessment and evaluation, materials and challenging students, etc.

Research by BALEAP between 2005 and 2014 describes the knowledge and skills required for EAP teachers, and points forward to the ongoing professional development of teachers needed to be managed by the EAP manager (see also Ding, this volume). It may be useful to use the *BALEAP Competency Framework* (BALEAP 2008) and the BALEAP continuing professional development scheme: the *TEAP Scheme* (BALEAP 2014).

The *BALEAP Competency Framework* describes overall EAP teacher competence, as well as 11 specific teacher competencies divided into four main areas: academic practice, EAP students, curriculum development and programme implementation. For each of these four

main areas, an overall competency statement is given, followed by a more detailed description of the area.

According to these statements, overall, an EAP teacher will be able to facilitate students' acquisition of the language, skills and strategies required for studying in a further or higher education context, and to support students' understanding of approaches to interpreting and responding to the requirements of academic tasks and their related processes. The specific competencies are given in Table 40.4.

These EAP teacher competencies can be developed with the BALEAP TEAP scheme (BALEAP 2014), the development of which has been informed by surveys, discussion, consultation, study of similar schemes and a pilot scheme.

The aim of the scheme is to provide the profession with a description of the range of professional knowledge, values, competencies and professional activities undertaken by EAP practitioners during their career. It provides a document which can be used for professional dialogue and development across the sector, and thus syllabuses for novice EAP tutor induction and EAP teacher education. The document can be used in contexts like teacher evaluation (mentioned above) for mentoring continuing professional development, and to focus teaching observation, so that areas of learning and teaching practice needing enhancement can be identified. Furthermore, it can be used as input in teacher recruitment and job description. Most generally, it can be a means of raising awareness of professional standards both within institutions and across the wider education sector (BALEAP 2014).

The framework is provided in Table 40.5. At each of the three levels (associate teacher, fellow, senior fellow), candidates are certified on the basis of a teaching portfolio of evidence, statements, teaching observation and reflective account of practice.

Resource management

Much educational management includes management of the resources that enable the teaching to take place. This can involve budgeting and planning expenditure, purchase of, implementation and support of materials, including technology and other office hardware. One important resource is time, so time management and timetabling need to be taken care of. Christison and Stoller (2012) discuss time's importance and provide examples of good practice.

Basic to the management of resources in an organisation is strategic planning; Klinghamer (2012) discusses the importance of strategy in the process of management. She describes the stages in a strategy process: formation of a planning team; establishment of a foundation for the process, including vision, values, mission and strategic goals; analysis of the programme, particularly bearing in mind the analysis of financial, physical, organisational and human resources; planning, including an outline of the programme's commitment to specific strategies; and implementation of the plan, evaluation and revision, perhaps setting new goals. This is followed by a report of a case study in strategic planning in an English programme at a university in the United States. To supplement this, Christison and Murray (2009) describe the technical skills that are required to plan strategically, concluding that the skills of leadership, innovation, vision and emotional intelligence, as well as flexibility and adaptability, are required.

Murray (2012) discusses the financial aspects of programme management: budgeting, costing, fiscal policy, reporting and writing business plans. She emphasises that financial criteria should not be the only driver of educational decisions, but all decisions should be based on "whether total expenditures produce a sufficient human outcome" (Carver 1996: 1).

Table 40.4 Summary of 11 specific competencies.

Academic practice	an EAP teacher will –
Academic contexts	have a reasonable knowledge of the organisational, educational and communicative policies, practices, values and conventions of universities.
Disciplinary differences	be able to recognise and explore disciplinary differences and how they influence the way knowledge is expanded and communicated.
Academic discourse	have a high level of systemic language knowledge including knowledge of discourse analysis.
Personal learning, development and autonomy	recognise the importance of applying to his or her own practice the standards expected of students and other academic staff.
EAP students	an EAP teacher will understand –
Student needs	the requirements of the target context that students wish to enter as well as the needs of students in relation to their prior learning experiences and how these might influence their current educational expectations.
Student critical thinking	the role of critical thinking in academic contexts and will employ tasks, processes and interactions that require students to demonstrate critical thinking skills.
Student autonomy	the importance of student autonomy in academic contexts and will employ tasks, processes and interactions that require students to work effectively in groups or independently as appropriate.
Curriculum development	an EAP teacher will understand –
Syllabus and programme development	the main types of language syllabus and will be able to transform a syllabus into a programme that addresses students' needs in the academic context within which the EAP course is located.
Text processing and text production	approaches to text classification and discourse analysis and will be able to organise courses, units and tasks around whole texts or text segments in ways that develop students' processing and production of spoken and written texts.
Programme implementation	an EAP teacher will be –
Teaching practices	familiar with the methods, practices and techniques of communicative language teaching and be able to locate these within an academic context and relate them to teaching the language and skills required by academic tasks and processes.
Assessment practices	able to assess academic language and skills tasks using formative and summative assessment.

BALEAP (2008: 3)

Table 40.5 The BALEAP Competency Framework units and areas of professional practice descriptors

A Units	Academic practices	an EAP practitioner will:
A1	Academic contexts	have sufficient knowledge of the organisational, educational and communicative policies, practices, values and conventions of tertiary education to operate successfully in such academic environments.
A2	Academic discourse	have a high level of systemic language knowledge including knowledge of genre and discourse analysis.
A3	Academic disciplines	be able to recognise, explore and apply to their professional practice, knowledge of disciplinary differences and how they influence the way knowledge is expanded and communicated.
B Units	The student	an EAP practitioner will:
B1	Student needs	understand and apply knowledge of students' prior learning experiences, their expectations, their personal, linguistic and academic needs and the academic literacy requirements of their target academic situation.
B2	Student learning	understand the relevance of individual differences to practice and the role and importance of critical thinking and autonomy in academic contexts and will employ tasks, processes and interactions that enable students to develop these.
C Core Units	Course delivery	an EAP practitioner will:
C1	Teaching practice	be familiar with the approach, methods and techniques of communicative language teaching, be able to locate these within an academic context and apply these to the design and planning of learning activities and to teaching the language and skills required by academic tasks and processes.
C2	Assessment and feedback practice	be able assess academic language and skills competence using appropriate formative and summative assessment and provide appropriate feedback.
D Units	Programme development	an EAP practitioner will:
D1	Course design	understand the main types of language syllabus and will be able to deliver and transform a syllabus into a course or programme that addresses students' needs in the academic context within which the EAP provision is located.
D2	Quality assurance & enhancement	be able to use, design and implement a range of quality assurance and enhancement instruments and utilise results to inform development of own teaching practice, course quality and the student academic experience.
E Unit	Professional development, research and scholarship	an EAP practitioner will:
E		recognise the importance of applying to their practice the standards expected of students and other academic staff whilst engaging individually and collaboratively in continuing professional development, research and scholarship in the TEAP discipline.

Most EAP programmes in state institutions will have to follow the guidelines provided by the institution, so managers may have little or no control over some financial aspects. Some centres will have to cover costs, including paying for rooms, electricity etc., while others may have to make a profit. Costing courses professionally and accurately is vital.

The EAP manager may need knowledge of both financial accounting and management accounting. Financial accounting is for external stakeholders and produces financial statements such as balance sheets and income statements. Management accounting is a tool for managers to make informed financial decisions and includes budgeting. A budget is a short term plan to ensure that the longer-term strategic plan is achieved. Budgets include: income, expenditure and fixed costs and variable costs, direct and indirect.

Murray gives an example of a budgeting template (2012: 247–249) and offers the process in Table 40.6 for developing a budget. It is important to decide who is responsible for each stage of the process.

Most EAP managers will have to provide some sort of financial report. An example is given in Table 40.7.

Technology is also a resource that needs managing (Witbeck and Healey 2012: 283–284). To facilitate effective instructional use of classroom technology, administrators must have a basic understanding of the tools and the ways in which they can support (or subvert!) different pedagogical models. As in other contexts, it is important for managers to attend to teachers' perceptions of the tools needed in their classroom. Technology often fails for lack of help and maintenance, and it is important to provide funding for ongoing technical support, and for regularly upgrading facilities.

For effective use of administrative computing, attention has to be paid to the best use of new technologies in all areas, including programme marketing and student recruitment. Administrators have to know enough about hardware and infrastructure to be able to explain proposed purchases to school owners, governing boards or higher level administrators, and again have to provide funding for technical support, maintenance and upgrading (see also Arnó-Macià 2012).

Conclusion

As White (2001) points out, there is very little empirical research available relating to management of English language programmes. It will be clear from reading this chapter that there is even less relevant research for many aspects of managing EAP. This chapter has tried, therefore, to look at what research there is available that is relevant to EAP management. After reviewing surveys of language managers' priorities, it has concentrated on the major areas of people management, curriculum management and resource management. White's conclusion (2001: 199) that "the growth of a management culture in TESOL has yet to be accompanied by a body of published research and the development of a TESOL management literature" is even truer with regard to EAP management, and needs to be addressed.

Further reading

Basturkmen (2010); Bruce (2011); Christison and Stoller (2012); White et al. (2008)

Related chapters

- 39 Writing centres and the turn toward multilingual and multiliteracy writing tutoring
- 41 EAP teacher development

Table 40.6 Process for developing a budget

<i>Process</i>	<i>Purpose</i>	<i>Who is responsible</i>	<i>Special considerations</i>
Create budget template	To ensure consistency across all the programme budgets because they eventually need to be combined into an overall budget	Centre director with accountant/business manager	Ensure each category in the budget template has a principled basis to guide decisions (see section below on policy). Ensure equity across sub-programmes
Each programme estimates income	To have as accurate a projection of income as possible	Programme coordinators with accountant/ business manager	Follow principles of accrual accounting. Include tuition fees, royalties, interest on investments, sale of materials, consulting fees
Each programme estimates expenditures	To have as accurate a projection of expenditures as possible	Programme coordinators with accountant/ business manager	Follow principles of accrual accounting. Include salaries, consumables, fringe benefits
Consolidate a draft budget	To ensure the whole draft budget is balanced	Accountant/business manager	Check that the budget is using accrual accounting. Check that costs and income are amortised. Assign performance measures
Review draft budget	To ensure draft budget is compatible with goals and principles of institution	Centre director with accountant/business manager	Apply principles (e.g., do line items support programme goals? Is there flexibility to adjust for the unexpected? Does any excess expenditure over income comply with principles? Are key performance indicators [KPIs] appropriate?)
Revise programme budgets as needed	To ensure all individual and overall budgets meet institution goals	Programme coordinators with accountant/business manager	Apply principles, KPIs
Create final budget	To ensure agreement on overall budget	Centre manager or director and programme coordinators with accountant/business manager	

Murray (2012: 250–251)

Table 40.7 Mid-year Financial Report for Socrates Language Centre

	2010 <i>Actual</i>	2011 <i>Approved budget</i>	2011 <i>June budget</i>	2011 <i>June actual</i>	2011 <i>June variance</i>	
Income					\$	%
Course Fees	3,500,000	4,000,000 ^a	2,000,000	1,912,500 ^b	(87,500) ^c	(4.4)
Consulting	50,000	100,000	60,000 ^d	60,000	0	0.0
Interest	20,000	25,000	12,500	10,000 ^e	(2,500)	(20.0)
Total Income	3,570,000	4,125,000	2,072,500	1,982,500	(90,000)	(4.3)
Expenditure						
Teaching salaries (permanent)	1,750,000	1,900,000	950,000	930,000 ^f	20,000	(2.1)
Teaching salaries (casuals)	800,000	1,000,000	500,000	510,000 ^g	(10,000)	2.0
Support salaries	110,000	130,000	65,000	63,000 ^h	2,000	(3.1)
Consumables	250,000	300,000	150,000	200,000 ⁱ	(50,000)	33.3
Equipment	20,000	30,000	15,000	2,300 ^j	12,700	(84.7)
Travel	25,000	25,000	12,500	20,000 ^k	(7,500)	60.0
Rent	250,000	280,000	140,000	140,000 ^l	0	0.0
Contribution to parent organisation	357,000	412,500	206,250	0	206,250	(100.0)
Honoraria	5,000	5,000	2,500	4,000 ^m	(1,500)	60.0
Total Expenditure	3,567,000	4,082,500	2,041,250	1,869,300	171,950	(8.4)
Operating Surplus (deficit)	3,000	42,500	31,250	113,200		
Reserves	250,000					
Accumulated Surplus (deficit)	253,000	295,500				
KPIs						
Student weeks	6,250	6,375	3,187	3,000		
Ratio of salaries to student weeks	425.60	475.29	475.37	501.00		
% of income spent on rent	7.00	6.79	6.76	7.06		

a Course fee to increase to cover expected salary increases; and additional courses offered.

b Contract already signed for work in first half of year.

c Figures in parentheses are a deficit.

d Lower student enrolments than expected.

e Interest rates lower than expected.

f One permanent staff member left for a position in another centre.

g Casual hired to take load of permanent teacher who left.

h Support staff left.

i Paper and other consumables bought in advance. Service contracts for equipment paid in advance.

j New computers not yet paid for.

k Most conference travel occurs in first half of year.

l Contribution not made until December each year.

m Honoraria paid for professional development held at beginning of year.

(Murray 2012: 255–257)

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41

EAP TEACHER DEVELOPMENT

Alex Ding and Gemma Campion

Introduction

EAP (English for academic purposes) as a field of academic enquiry and research has changed enormously over the past few decades. EAP practitioners are now able to draw on a large body of work that has both expanded and deepened the intellectual, theoretical and empirical foundations available to inform and direct praxis. EAP practitioners are now able to draw on, *inter alia*, research in academic discourse communities and disciplines, genre analysis, contrastive rhetoric, corpus-based research, ethnographic studies, critical EAP and academic literacies for guidance. A cursory glance at the contents page of this handbook is testament to the increasingly wide range of interests and specialisms within EAP, and the launch of the *Journal of English for Academic Purposes* in 2002 ‘was a clear indication that EAP had come of age as an independent academic field’ (Hamp-Lyons, 2011a:93). With equal enthusiasm, Hyland states that EAP ‘has done a good job of consolidating a position at the forefront of language education’ (Hyland, 2012:30).

EAP is an educational endeavour but it is also a ‘business’ (Turner, 2004:96), a ‘major industry’ (Hyland, 2012:30) and a ‘multi-million dollar enterprise, not merely around the world, but often within just a single country’ (Hamp-Lyons, 2011a:93). Whilst Hamp-Lyons (2011a:101) might claim ‘for us, teachers and scholars, EAP is not about profit’, it would be unwise to conclude that EAP practitioners are divorced from the profit imperative that at least partly shapes their world.

The expansion of provision of EAP has been accompanied by an increase in demand for EAP practitioners. This, combined with an increasingly sophisticated understanding of EAP, would suggest an equivalent increase in interest in practitioners – particularly in terms of their education and development. Yet this is not the case. There is little published research exploring practitioners’ education and development, very few practitioner accounts of their development and equally limited opportunities to study for award-bearing postgraduate qualifications specialising in EAP. Put simply, it appears as if the development and education of practitioners is of only very marginal interest (Basturkmen, 2014; Belcher, 2012).

Drawing on the existing, impoverished base of literature and research, this chapter aims to critically explore the topic of EAP teacher education. We begin by considering who EAP teachers are, before going on to consider EAP education and development initiatives which are available to them. From foregrounding a diverse, fragmented picture of the profession,

we find limitations in the UK-centric discourse which currently dominates EAP teacher education. We also identify a range of challenges which hamper progress in this area.

The final section draws together the various critiques articulated in the chapter, and argues for, first and foremost, a greater concern for the EAP practitioner. Ultimately, we suggest that, given the diversity of 'EAPs' around the world, EAP teacher education would benefit most from a more critical, reflexive orientation, which would lend itself more readily to the diverse needs of EAP practitioners who work in a variety of different social, cultural and ideological contexts.

Before proceeding, it is necessary to make some general points about distinctions which are made in the literature between 'training', 'development' and 'education'. Whilst 'teacher training' typically refers to initial, preparatory teacher education (cf. Richards, 2008; Mann, 2005) which is usually seen as being associated with a particular context, and the development of certain skills (Richards, 2008), 'teacher development' by contrast tends to be used to refer to the longer-term process of development which teachers are engaged in throughout the course of their careers (cf. Borg, 2011; Mann, 2005). A further distinction can also be made between 'professional development' activities which have a more career-oriented, instrumental and utilitarian remit (typically referred to as 'continuing professional development'), and those 'teacher development' activities which are more often a voluntary activity and are more inclusive of personal and moral dimensions (Mann, 2005: 104), and perhaps more indicative of teacher autonomy. Whilst 'teacher education' was originally used to refer to the initial preparation of teachers (Richards and Nunan, 1990), it has since tended to be used, as it will be here, as a superordinate categorisation of all types of second language teacher learning processes and activities (Borg, 2011; Crandall, 2000; Richards and Nunan, 1990). Whilst teacher education and development are presented separately, they are, in reality (especially in EAP contexts), overlapping and due to significant changes which are occurring in the broad field of teacher education, it may be that in future traditional distinctions between the terms come to be replaced, as Richards (2008) suggests, by a reconsideration of the whole nature of teacher learning as a form of socialisation into the profession.

EAP practitioners

Who EAP practitioners are, what they do and where they work reveals a plurality of identities, roles, contexts and praxis, suggesting that EAP is best understood heterogeneously rather than monolithically. To illustrate this point, EAP practitioners may be called upon to teach, for example, foundation, pre-sessional, in-sessional and credit-bearing EAP and content-based courses, as well as supporting research students and staff who wish to publish, present and teach in English. This takes place in diverse language contexts, with students and staff who have a wide range of proficiency in academic English and academic experience. Courses may range from generic skills for English for general academic purposes (EGAP) to highly specialised English for specific academic purposes (ESAP) courses in, for example, postgraduate dissertation writing for maths students. Courses might be taught in public or private school, further and, most commonly, higher education contexts, which are resource-rich with good tutor–student ratios, opportunities for individual language consultations, and relatively light teaching loads with time and support given to practitioners for research, professional development, conferences, studying and scholarly activity. However, the opposite might equally be the case, with practitioners teaching in difficult conditions, with very large classes, high teaching loads, little support, few resources and very few opportunities to develop.

Practitioners' educational backgrounds may vary greatly, from no formal qualifications to teach English, to doctoral level practitioners with specialisms in EAP. Many positions are held by highly qualified and proficient non-native speakers (NNS) and others by BANA (Britain, Australasia, North America) practitioners (with a wide range of qualifications). Institutions in which practitioners work have a variety of missions, ambitions and identities from Ivy league, global research intensive universities to community-focused rural universities in developing countries. EAP units might be attached to academic departments, run as a for-profit service unit or exist as an independent centre. Practitioners may be working in regions and countries that have strong historical and well-established roots in EAP, whilst others may be in more isolated contexts where EAP is only beginning to emerge in educational institutions.

Opportunities for practitioners to develop, discuss and disseminate on topics of professional interest exist through a wide range of regional, national and international journals, organisations and associations. Usually these opportunities exist within a broader English for specific purposes (ESP) or language for specific purposes (LSP) community, as EAP is still considered to be a branch of ESP. Organisations with international aspirations, such as IATEFL (International Association of Teachers of English as a Foreign Language) and TESOL (Teachers of English to Speakers of Other Languages), have active ESP special interest groups with newsletters and seminars. The European Association AELFE (Asociación Europea de Lenguas para Fines Específicos) publishes the journal *Ibérica* and organises an annual international conference on LSP. National organisations such as GERAS (Groupe d'Étude et de Recherche en Anglais de Spécialité) in France also organise annual conferences and publish a journal, *ASp*. NFEAP (The Norwegian Forum for English for Academic Purposes) organises an annual conference, as well as hosting a discussion forum for practitioners in Norway and beyond. The Brazilian publication, *The ESPecialist*, is a well-established journal, published mainly in Portuguese.

BALEAP, over 40 years old, is worthy of special mention. Formerly the British Association of Lecturers in English for Academic Purposes, it is now simply BALEAP, and carries the strapline 'the global forum for EAP professionals'. BALEAP has aspirations to federate EAP practitioners globally and, as yet, there is little evidence that its ambitions are being fulfilled. However, BALEAP regularly organises professional interests meetings (PIMs), organises large international conferences, publishes proceedings, offers accreditation to EAP centres and promotes EAP teacher education and development. Furthermore, the endeavours of BALEAP to encourage education and development constitute the only systematic attempt to articulate and frame the competencies required of practitioners and provide formal recognition of EAP practitioners' development. These endeavours will be discussed in detail in the Education and Development sections below.

Organisations around the world, such as those already mentioned as well as, for example, the Asia-Pacific Rim LSP and Professional Communication Association and the Chinese Association of ESP, all offer the possibility for practitioners to meet and collaborate, although the extent to which associations and publications are embedded in practitioners' professional lives and identities is open to question given the heterogeneous positions, roles, resources and opportunities of EAP practitioners discussed above. A global and connected community of EAP practitioners has yet to emerge and this needs to be addressed if teaching English for academic purposes (TEAP) education and development is to encompass and be enriched by the experience, expertise, needs, challenges and interests of practitioners working in a much more varied range of contexts and cultures.

Education

Whilst the literature in relation to second language teacher education is now substantial (Borg, 2011), information relating specifically to teacher education for EAP is notably absent from this body of work. Historically, discussions of teacher education have also typically been absent from both key EAP texts (inter alia Flowerdew and Peacock, 2001; Hyland, 2006; Jordan, 1997), as well as articles published in *JEAP* and the *English for Specific Purposes Journal* (Morgan, 2009, being a notable exception). Although attention has been given to this area in isolated circumstances over the years – see, for example, the BALEAP PIM on Teacher Training in 2001, Sharpling's discussion of EAP teacher training and development needs in 2002 and Alexander's 2007 study of teachers making the transition from 'General English' to EAP (discussed in more detail on page 554) – there has otherwise continued to be a dearth of published research and literature on the topic.

In 2008, BALEAP acknowledged the 'gap [...] in EAP-specific teacher qualifications' (p.2) with the launch of their Competency Framework for Teachers of English for Academic Purposes (CFTEAP) (discussed on pages 554–555). Since then it seems that the topic of teacher education has begun to appear in some of the mainstream EAP literature; Bruce's (2011) *Theories and Concepts of English for Academic Purposes* has a whole section devoted to the teaching of EAP, and a whole chapter on the topic of EAP and Teacher Competencies. However, the discussion has little to add to our understanding of EAP beyond providing a description of the BALEAP CFTEAP. Hamp-Lyons' (2011a) chapter on 'English for Academic Purposes' also concerns EAP professional development, but mainly laments the lack of provision in this area. BALEAP has also recently held a PIM specifically on the topic of Teacher Education.¹

As there is currently no particular qualification requisite for entry to the EAP profession, teachers tend to have a variety of different qualifications. In the UK, teachers typically come from an English as a foreign language (EFL) background, and as such hold mainstream, general, English language training (ELT) qualifications such as a Certificate in Teaching English to Speakers of Other Languages (CELTA) or Trinity Certificate in TESOL, with some also holding diplomas (typically the Cambridge DELTA and Trinity Diploma in TESOL). Most also hold a Masters degree in TESOL, ELT or Applied Linguistics. In recent years, steps have begun to be taken to establish guidelines regarding EAP teacher qualifications, with the BALEAP CFTEAP recommending examples of appropriate qualifications for the UK context. The CFTEAP's list of qualifications is quite wide and includes generic ELT qualifications such as those mentioned above, despite the questions that have been raised within the profession about their appropriacy for the EAP context, and their ability to prepare teachers for the 'specific' demands of teaching EAP (Bell, 2012; Errey and Ansell, 2001; Krzanowski, 2001; Roberts, 2001; Sharpling, 2002). The most specific entry on the list is an 'ELT/TESOL/Applied Linguistics focus in undergraduate or postgraduate degree' (BALEAP, 2008:11), and whilst these types of Masters degrees are available at a large number of universities in the UK, only a small minority of them advertise optional modules in EAP or ESP (see, for example, advertised programmes at King's College, the Universities of Birmingham, Central Lancashire, Nottingham, Leeds, York and Westminster).

By contrast, at present in the UK, only a handful of specialist EAP training courses and Masters programmes are available. Masters in TEAP are currently offered at The University of Leeds and The University of Nottingham; Postgraduate Certificates in TEAP are run by Leicester University and Sheffield Hallam University; and short courses are offered by a range of course providers including Aston University, LSE,² NILE,³ Oxford TEFL and

SOAS.⁴ A glance at the course descriptions which are available online reveals differences between the aims and approaches of these courses. Many courses tend to take a pragmatic approach to teaching discrete knowledge and skills (for example, Leeds, NILE, SOAS) such as those described by the BALEAP CFTEAP (Leicester), and have a primary concern for showing teachers how EAP differs from teaching English in a general context (Aston, Oxford TEFL, Sheffield Hallam). The course run at Nottingham is notably different insofar as it presents a description of a course which intends to ‘incorporate much more than basic mastery of classroom management skills and knowledge of language systems’ in order to develop ‘innovation’ in EAP practitioners.

The part-time and online MA TEAP at Nottingham University attracts practitioners from all corners of the world (i.e. South and North America, Europe, Australasia, The Middle East, Asia and Africa) and from diverse work settings (i.e. bilingual schools, and public and private universities and colleges). The programme consists of three core modules exploring the *what* of EAP (academic discourses and literacies), the *how* of EAP (EAP pedagogies) and the *why* of EAP (academic contexts). Practitioners also choose four electives from a wide selection (e.g. EAP assessment, issues in EAP, EAP and new technologies, and learner autonomy) and then write a dissertation on an aspect of EAP. The programme is carefully designed to enable practitioners to engage with a wide range of writing and research genres/tasks (e.g. case study, reflexive narratives, discourse analysis, ethnography, empirical research) with diverse epistemological and ontological premises.

The MA in TEAP encompasses what one would expect of such a programme with a focus on developing the competencies and knowledge required to teach EAP effectively in diverse sociocultural, linguistic and educational settings. This includes inter alia: needs and rights analysis, critical thinking/pedagogy, curriculum and syllabus design, genre analysis, academic literacies, EAP methodologies, disciplinary differences and academic voice. However, the programme moves beyond the usual parameters of such programmes by engaging with a host of critical sociopolitical, cultural and economic themes and forces that largely shape the practice of EAP. Practitioners are exposed to tasks, texts and dialogues that explore, for example: neoliberalism in higher education, competing and conflicting academic values and ideologies, and the identities, roles and representations of practitioners and students. The programme is grounded in a sociologically informed and critical framing of EAP, a foundation which is essential if practitioners are to participate fully in shaping rather than simply being shaped by current educational and ideological discourses.

Currently, the number of available specialist EAP qualifications is low, and significantly, some courses which started in the past have not stood the test of time. This is perhaps not surprising given that they are not well-supported by the wider profession. First, despite calls within the profession for specialist qualifications, their status remains unclear; these types of qualifications, to date, have not been included in BALEAP’s CFTEAP ‘examples of appropriate qualifications [...] for the UK context’, and job adverts continue to cite Masters degrees in ELT/TESOL/Applied Linguistics, and even DELTAs, whilst making no mention of TEAP qualifications. In addition, it is not yet clear what role these qualifications should play; whilst Bruce (2011:105), noting the problems faced by teachers who have ‘pre-service teacher training for general English’, suggests that ‘specialized training courses and qualifications are being developed and offered to prepare and equip teachers of EAP’, the outlines which are currently available online reveal that not only are these courses being marketed towards those who wish to begin teaching EAP (see, for example, Oxford TEFL, Sheffield Hallam) but also those who are already established in the EAP (LSE, SOAS) or ESP professions (Leeds). Given the price of higher education courses at the present time,

and the lack of job security in many EAP positions, it may be that outsiders, in particular, wishing to break into the EAP profession might prefer to invest in a more generic Masters. Those within EAP, already established and armed with a teaching qualification, may question investing considerable time, effort and resources into studying. It is unclear how well-known these courses are throughout the world, but given the lack of visibility of description and analysis of these courses, it is likely that more needs to be done to make these courses more visible to the EAP community.

Development

Whilst there is again little in terms of published research and literature concerning how teachers learn to teach EAP and develop in their role, there are a handful of studies from the UK (often undertaken as part of MAs in TESOL and related subjects) which attempt to investigate this area. Whilst these studies have different foci, what they collectively reveal, from speaking to teachers themselves, is that amongst many factors, one of the greatest challenges involved in transitioning to EAP is developing the specialised or context-specific knowledge that teachers feel is required (Alexander, 2007; Campion, 2012; Post, 2010). Although one of the studies (Post, 2010) suggests that the challenges could be overcome with the development of effective pre-service training, others find that teachers tend to view their development as EAP practitioners as a long-term process (Alexander, 2007; Campion, 2012; Elsted, 2012), and that, therefore, opportunities for longer-term, on-going development initiatives are what teachers find to be most valuable. Amongst these types of development initiatives, a recurring point from the research is teacher participants' comments about the value of informal learning opportunities. Teachers single out activities such as 'looking things up, reading, asking questions [to colleagues], talking to other teachers, talking to subject specialists' (Campion, 2012:35), 'sharing ideas with colleagues, using EAP coursebooks, reading books or journals and attending meetings' (Alexander, 2007:4) and collaboration with subject specialists (Martin, 2014). Such comments are sometimes framed, however, as a type of coping strategy in the face of a lack of more formal development routes (Alexander, 2007; Campion, 2012).

Two of the most significant recent responses by the profession to the lack of formal provision for EAP teacher education and development have been the inception of the CFTEAP in 2008, and the more recent development of the TEAP Accreditation Scheme in 2014.

The CFTEAP consists of descriptions of competencies in four main areas: academic practice (academic contexts, disciplinary differences, academic discourse, personal learning, development and autonomy), EAP students (student needs, student critical thinking, student autonomy), curriculum development (syllabus and programme development, text processing and text production) and programme implementation (teaching practices, assessment practices). Originally conceived in order to 'provide guidance for the professional development of less experienced teachers' (BALEAP, 2008:2), the framework has evolved to take a range of roles including underpinning the BALEAP criteria for course accreditation, induction programmes for pre- and insessional tutors, providing a basis for teaching observations, a tool for individual teacher development, and informing, either implicitly or explicitly, some of the isolated pieces of research that have sought to explore the experiences of EAP teachers (see for example, Alexander, 2012; Post, 2010).

Considered as an 'invaluable resource' (Hamp-Lyons, 2011a:100), CFTEAP represents a 'comprehensive statement of the knowledge and skills required by teachers of EAP' (Bruce, 2011:104) and it appears to have been adopted by the profession in the UK. However, it

does raise some important concerns. At a time when BALEAP is bidding to become the 'global forum for EAP professionals', the CFTEAP appears to be UK-centric – lacking contextual sensitivity and range – and it is unclear whether this framework is indicative of all of the competencies required of EAP practitioners elsewhere. There is no documented account of the methodology used to select specific competencies for inclusion. Where the framework is mentioned in the literature, we simply get more description (see for example, Blaj-Ward, 2014; Bruce, 2011) rather than analysis or critique. The framework relates to practitioners' 'bid for membership of, and participation in the EAP discourse community' (Bruce, 2011:110) and represents appropriating and reproducing this set of competencies. The emphasis here is on knowledge and understanding of discrete attributes and skills. Movement beyond assimilating and reproducing to developing and transforming EAP praxis is absent from this framework, as is accommodation for, or recognition of, a more critically informed praxis and practitioner role. Morgan (2009) also observes, more generally, the lack of teacher education programmes (in EAP) inspired by critical pedagogy; Morgan's (2009) own MS programme appears to be the rare exception. The lack of scrutiny of this framework is particularly concerning given that the framework represents an idealised holotype of the EAP practitioner employed, as discussed above, to inform a range of activities and decisions. Although the framework draws extensively from the current theoretical and research foundations of EAP (the inclusion of learning styles perhaps being the obvious exception), there is a risk of 'fossilisation', unless BALEAP updates the framework to include emerging developments in the field and beyond. Finally, given the paucity of research examining the professional activities and lives of practitioners in a variety of contexts, it is difficult to know the extent to which the framework is comprehensive, selective, lacking or containing bias. However, the fact that the framework was compiled by senior practitioners and debated within BALEAP before publication engenders a degree of confidence that the framework is a reflection of professional consensus at least within the UK.

More recently, the BALEAP TEAP Accreditation Scheme has continued to extend its description of the role of the EAP practitioner, this time by providing more detailed information relating to the capabilities and aspirations of teachers at different stages in their EAP teaching career. In 2014, BALEAP launched the Scheme, which is based on its CFTEAP, in order to 'enhance the quality of the student academic experience through facilitating the education, training, scholarship and professional development of those in the sector' (p.4). The aims of the scheme are divided up into what it provides for the profession and what it provides for individuals.

The scheme details three different pathways which are offered as means of continuing professional development: Associate Fellow (a practitioner in the early stages of their TEAP experience), Accredited Fellow (an experienced TEAP practitioner with substantive teaching and student support responsibilities) and Accredited Senior Fellow (a TEAP practitioner with sustained experience across all areas who has impact at departmental level and institutional level and beyond). Achievement of Associate Fellow is through submission of a portfolio for internal verification (by a recognised TEAP CPD member institution), whilst achievement of Fellow and Senior Fellow is through submission of a portfolio for assessment by the BASC (BALEAP Accreditation Scheme Committee).

The TEAP scheme comprises a set of five main units: A. Academic Practices (Academic Contexts, Academic Discourse, Academic Disciplines), B. The Student (Student Needs, Student learning), C. Course Delivery (Teaching Practice, Assessment and Feedback), D. Programme Development (Course Design, Quality Assurance and Enhancement), E. Professional development, research and scholarship, and one optional unit: TEAP Mentor

and Assessor. Associate Fellows are only required to demonstrate competency in area C. Course Delivery, whereas Fellows and Senior Fellows are expected to cover all of the units. Each unit has detailed descriptions of expected 'professional knowledge and values' together with areas of activity where competency can be demonstrated, and examples of suitable evidence. So, for example, in unit C. Course Delivery, the list of areas of 'professional knowledge and values' includes points such as 'how to select and adapt appropriate materials', and the corresponding example of 'CPD tasks and indicative evidence' is 'published EAP course material evaluation and use' (BALEAP, 2014:19). The unit on teaching practice also requires teachers to undergo a number of formal classroom observations, the record of which is required as part of the submitted portfolio.

Completed TEAP Portfolios in total are expected to contain: the portfolio of evidence, a reflective account of professional practice (1,500 words, 3,500 words or 7500 words, depending on the award being sought) and referee statements.

In a similar vein, the British Council (in connection with BALEAP) also provides information regarding 'Pathways in EAP', a section of their website which provides information relating to a 'CPD framework for teachers of EAP'. This framework, like the Accreditation Scheme, provides CPD information for EAP teachers at 'entry level', 'experienced' and 'expert'. For each stage, information is provided about possible characteristics, needs, skills to be developed as well as advice and suggestions for how to progress at that particular stage. To progress from 'entry level', for example, the suggestions include: understanding and actively engaging with the competencies in the BALEAP CFTEAP, reading EAP teacher development literature, especially EAP teacher handbooks, engaging with the teacher's books for EAP courses, identifying experienced EAP teachers who can advise and lend materials, attending EAP staff development workshops and conferences, and joining relevant online discussion forums (BALEAP, n.d.).

The pathways also includes various indicators at each stage concerning: positive signs of development, ways in which teachers should be supported by their institution, things to beware of and how these sorts of potential dangers can be tackled by the teacher's institution.

Whilst fully acknowledging that this scheme is, potentially, an extremely valuable contribution to promoting, encouraging and recognising the importance of development, there are three concerns relating to reflection, experienced and novice practitioners, and values that we wish to raise regarding the conceptual underpinning of the accreditation scheme.

First, the emphasis on reflection in the accreditation scheme reflects the new orthodoxy in language teacher education with a focus on (social-) constructivism (Crandall, 2000; Richards, 2008; Wright, 2010), emphasising teacher education (in the broadest sense) as theorising practice. Reflection is a 'widely accepted' axiom in education (Burton, 2009:298) and a great deal hinges on the view that reflection drives and sustains development.

However, the promise of development through reflection has been questioned on a number of grounds, such as: there is little evidence of a link between reflective practices and teacher or student performance (Akbari, 2007); reflection has a range of meanings mirroring very different and competing educational ideals (Fendler, 2003:20); reflective practices redefine theory as practice with a commitment to a relativist and subjective stance on knowledge and theory (Lawes, 2003:22); reflection will depend on the practitioners' opportunities to participate in institutional decision making (Aoki, 2002); and academic reflective practices assume that teachers are unable to reflect without direction from experts (Fendler, 2003). These critiques of reflection and the multiple meanings attached to reflection for divergent ideological and educational ends raise questions as to the status, quality and purpose of reflective practices.

Second, EAP practitioners often come to EAP as ‘novices’, with only a teaching qualification of some kind. The reality appears to be that EAP practitioner education usually takes place as development, and that expertise is accorded by virtue of experience. An inherent experience bias is evident in these schemes, which seems to reflect the general tendency in the EAP literature for presenting a deficiency model of ‘novice’ EAP teachers, with a seeming over-concern for pointing out how these teachers are ill-prepared for an EAP role (see for example, Alexander, 2007, 2010; Bruce, 2011) and for investing their more experienced counterparts with greater value and privileges, solely by virtue of the fact that they have been doing the job for a longer period of time. A glance at the Pathways descriptors relating to ‘how to progress at this level’, for example, tells us that while ‘experienced teachers’ should be ‘contributing to articles about EAP’ and ‘attending and speaking at workshops, seminars and conferences’, those with less experience should only aspire to engage in ‘reading EAP teacher development literature’ and ‘attending EAP staff development workshops and conferences’ (BALEAP, n.d.). The effect is thus to limit the aspirations of teachers at the beginning of their EAP careers, effectively denying them a voice. In addition, the reliance on learning by a form of reproduction (i.e. ‘close mentoring’ from more experienced colleagues (Pathways) and meeting preordained descriptors (CFTEAP)) might have the effect of stifling potential for transformation, or failing to provide any space for innovation by newcomers (and indeed experienced practitioners). How EAP is to grow and develop as a praxis, when its ambitions for teacher development are primarily to seek to reproduce existing practice, is unclear.

There is inevitably a pragmatic need for new EAP practitioners to learn about the new contexts that they find themselves in, but the problem seems to be one of balance. Much more nuanced, sensitive and careful consideration of novice EAP practitioners’ experience, skills and qualifications, and how these might enhance EAP rather than simply act as a threat to good practice, is needed.

Finally, the BALEAP TEAP Accreditation Scheme contains a section entitled ‘Profession knowledge and values’ (p. 14). Among the eight areas of knowledge (including a range of norms, conventions and values relating to teaching and learning, feedback, assessment and evaluation), of particular note is the area of ‘institutional values and their implications for professional practice’ (ibid), which is reduced to only three domains (equality of opportunity, sustainability and internationalisation). Furthermore, and of greater concern, practitioners are required to apply knowledge of values, conventions and norms. Clearly, it is essential that practitioners do have knowledge of the values, norms and conventions of their institution and, more broadly, of academia. However, this raises a serious issue concerning the role of EAP practitioners in higher education, and it appears that practitioners are again cast in a subservient position where there is no suggestion (or encouragement) that they ought to be more actively engaged in shaping the values, norms and conventions of education. The casting of the practitioner as one who applies the rules of others is detrimental to the recognition and status of practitioners, and risks contributing to their (continued) marginalisation.

The framing of values is also unnecessarily restrictive. We would argue that practitioners should be engaging in broader research, and contributing to debates surrounding critical sociological and political discourse regarding higher education and its values, because they profoundly shape EAP. The EAP discourse community should be much more visibly engaged and reflexively committed to articulating and questioning perspectives on values (although there are examples from critical EAP pursuing this directly or indirectly, e.g. Appleby, 2009; Chun, 2009; Singh and Doherty, 2004; Macallister, this volume). In short, EAP practitioners need to reflexively articulate their own values and to question the values that emerge, somewhat surreptitiously at times, within the EAP discourse community.

Concluding remarks

Tasked with surveying EAP teacher education and development, we have adopted a critical approach highlighting challenges, obstacles and (huge) gaps in this area, which contribute to a somewhat dystopic overview. Our chapter mirrors Belcher's observation that the 'community that ESP professionals know the least about is their own' (Belcher, 2012:544) with a tendency to neglect the needs of ESP/EAP practitioners (Richards, 1997). The status and marginalisation of the practitioner is a constant, if often minor, theme in the literature (e.g. Hall, 2013; Strauss, 2012; Robinson, 1991).

A persistent trope in the literature relates to the impoverished status of EAP practitioners, the reasons for which are often attributed to social/economic factors. EAP centres in UK universities and elsewhere are subject to ideologies and policies enforcing a neoliberal agenda of increasing commodification, competition, marketization and the promotion of student-as-consumer. Stevenson and Kokkinn (2007) provide a recent litany of concerns: lack of a common title for professional roles, roles poorly understood by others, no clear or appropriate career structure, promotion or rewards system, and the increasing casualisation of teaching. Hamp-Lyons (2011b:4) notes that EAP in Britain is entering a period of declining status, citing three universities (Glamorgan, Edinburgh and Nottingham) divorcing EAP academics from practitioners in different departments, and renaming practitioners as support workers, professional or teaching-only staff. One recent and increasingly common trend is the outsourcing of university EAP provision to private for-profit providers.

BALEAP's noteworthy (particularly in the absence of other initiatives) systematic initiatives to guide or standardise practitioner competencies, development and education have been singled out for critical analysis. It is significant that BALEAP has chosen to focus on development and education at this particular historical moment, and this could be interpreted at least in part as a response to fundamental changes in UK higher education that, as noted above, have contributed to an uncertain, fragmented and fragile professional environment.

BALEAP's response both to this, and the significant expansion in demand for EAP practitioners, is to try to promote professionalism within EAP, and seek greater recognition of EAP in the wider higher education community (through education and development) by laying out the competencies and standards required to teach EAP. Practitioners are assimilated into the EAP discourse community through a norm-enforcing practitioner development framework. One of the unfortunate consequences of assimilation is a neglect of EAP strands which stress a norm-transgressing critical perspective; those that can encourage change and innovation rather than reproduction.

The potential for innovation and change in EAP is further hampered by the legacy of ESP on current EAP teaching. EAP as a profession is, it seems, capable of inflicting damage on itself. Turner (2004: 96) suggests that EAP has 'colluded in its own marginalisation'. Hamp-Lyons (2011a:92) situates the origins of EAP as a 'grass roots, practical response' which immediately positioned EAP as poor relation and damaged the development of EAP as a legitimate field. This can be partly attributed to its ESP legacy of adopting 'the butler's stance' (Raimes, 1991) – where teachers have contributed to allowing universities to marginalise EAP units by adopting a support role within departments (Hyland, 2012). The legacy of 'the ad hoc, small-scale, quick fix attitude' (Hamp-Lyons, 2011a:92) and an 'intellectual short-cut mentality' (Turner, 2004:97) remains as legacy of its ESP/EAP origins and contributes to a 'more patchwork and fragmented field' (ibid). This quick-fix attitude has persisted, particularly in preessional courses, and perpetuates the 'maximum throughput of students with minimum attainment levels in the language in the shortest

possible time' philosophy (Turner, 2004:97). This propagates the notion or myth that having achieved the minimum attainment required in the shortest period possible 'implies a finality' (ibid:98). A concomitant notion is that insessional provision caters for weak students – what Swales eloquently calls the 'ivory ghetto of remediation' (Swales, 1990:6). The focus in EAP on study skills and language work promotes the notion that EAP is intellectually vacuous (Turner, 2004). This raises the question of the pertinence and purpose of assimilating practitioners, through norm-enhancing/enforcing education and development into EAP practice which, potentially, maintains and reinforces marginalisation and perpetuates self-inflicted wounds.

We are aware that the concerns raised in this section may not resonate with all readers, and readers in various contexts and locations may have a different cluster of educational issues to contend with in their everyday professional lives. This observation highlights the need for more accounts of practitioner education and development globally to enable more inclusive and pluralistic models for education and development to emerge that better represent the diversity of EAP, and also federate the profession around a more comprehensive understanding of the needs of practitioners. The risk at the moment is that because UK initiatives, through BALEAP and UK universities, are the most explicit and complete models of development and education, they will dominate discussion, even though they are largely a response to (UK) specific social, economic and ideological circumstances, as well as enactments of UK visions of and for EAP. The relevance and pertinence of their expectations and frameworks to others elsewhere is unclear.

EAP practitioner development and education, regardless of context, should, we argue, be underpinned by reflexivity. This would entail critical understanding and assessments of the range of ideologies, theories, pedagogies and research that have shaped the teaching of EAP (such as those in this handbook). Equally significantly, reflexive education and development should entail developing a deep understanding of the values, socioeconomic forces and politics that frame local, as well as global, education and enactments of EAP. Through a thorough and critical understanding, practitioners can, first, begin to question, reaffirm or modify their own values, actions and commitments, and, second, assess the extent to which their values are dissonant with the values that prevail. Suggesting a worldlier, more sociologically informed vision of education and development enables practitioners to transform praxis with a deeper understanding of their own values, the values that shape their practice, the affordances and constraints of their educational context for transformation and, importantly, where norms need to be enhanced and where they can or should be transgressed.

Notes

- 1 EAP and Teacher Education, 29 November 2014, Sheffield Hallam University.
- 2 LSE refers to the London School of Economics and Political Sciences.
- 3 NILE refers to Norwich Institute of English Language Education.
- 4 SOAS refers to The School of Oriental and African Studies, University of London.

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NEEDS ANALYSIS FOR CURRICULUM DESIGN

Ana Bocanegra-Valle

Introduction

Needs analysis (or needs assessment) refers to the systematic investigation of needs for the design of a language course and the optimisation of language teaching and learning, and has been identified as a defining characteristic in the field of languages for specific and academic purposes from the start (Upton, 2012). Needs analysis has a long history and, still today, “[a] confusing plethora of terms exists” (Dudley-Evans & St John, 1998, p.123) to refer to the concept of needs: demands, motivations, deficiencies, goals, gains, wishes, concerns, necessities, lacks, wants, requirements, desires, expectations, constraints, difficulties, preferences, communicative reasons, or communicative situations.

Different sources will provide the analyst with the necessary data and information to conduct the assessment. These may be documentary, like (un-)published literature provided by organisations or corporations that mainly contains job descriptions or occupational tasks, or concern different groups of individuals or stakeholders. In the particular context of English for academic purposes (EAP), there are three levels of participants: primary stakeholders are present and past students, and EAP teachers; subject-matter instructors and subject tutors, faculty and administrators, applied linguists, language experts, domain experts, educational authorities, policy-makers and decision-takers perform as secondary stakeholders; on a third level, professionals, sponsors, employers, company representatives, and society in general may also become interested in a needs analysis and its outcomes, given the social concern with accountability and the increasing demand for accountable educational policies.

Needs can be collected and analysed by means of quantitative or qualitative and inductive or deductive research methods, and with the use of specific data collection instruments or techniques – Jordan (1997), Long (2005), and Brown (2009) list 14, 17 and 26, respectively. Indeed, the available instruments for eliciting and gathering data pertaining to needs are varied and they all show benefits and disadvantages. The most popular are questionnaires and interviews which may be supplemented with other choices like text- or materials-analysis, tests, or participant observation.

Needs analysis should be ideally conducted in three stages and a number of steps (see Figure 42.1). As shall be discussed, it is a necessary procedure for curriculum evaluation and course and materials design and development; it allows for the refinement of a course

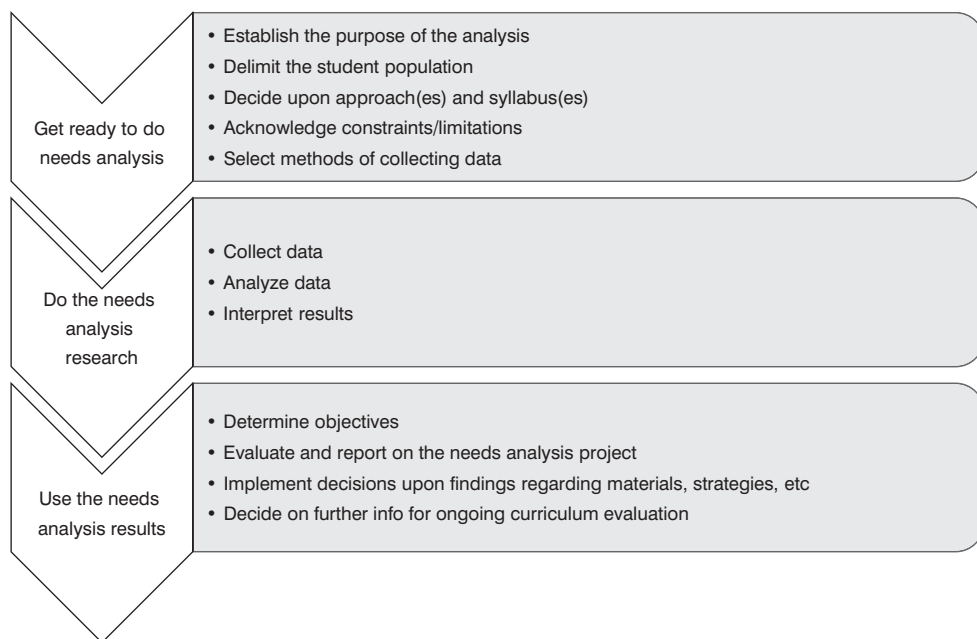


Figure 42.1 Steps in needs analysis, based on discussion in Brown (2009, pp.271–286) and Jordan (1997, pp.22–23)

and should not be therefore accepted as a single-act procedure or “one-off activity” but as a “cyclical process” (Dudley-Evans & St John, 1998, p.121) that can be carried out at different times of the course (previously, during, and once finished) in view of improvement.

A brief history of needs and needs analysis

Needs have been studied extensively in language teaching, and particularly in English for specific purposes (ESP), since Munby’s (1978) seminal work on the communication needs processor model and its application to the design of purpose-specific language programmes. But the concept of needs and its assessment has evolved significantly since then – even earlier, with the beginning of language for specific purposes (LSP) research – and these past decades have witnessed a progressive change in researching techniques and focus (Basturkmen, 2010; Belcher, 2009; Braine, 2001; Upton, 2012). The available literature provides a good historical overview of needs analysis in ESP/EAP from its origins as a formal concept to its more recent approaches with the peculiarities, complexities, and challenges of the process (see Basturkmen, 2010, 2013; Belcher, 2006, 2009; Braine, 2001; Dudley-Evans & St John, 1998; Flowerdew, 2013; Huhta et al., 2013; Hutchinson & Waters, 1987; Hyland, 2006; Jordan, 1997; Upton, 2012, among others).

Needs analysis is a complex process that involves six types of sub-analyses, each of which is concerned with the establishment of different overlapping elements (see Figure 42.2). Taken together as a whole, it is possible to capture the redefinition of the term, its evolution, and the broadening of the concept throughout the years. Following Munby’s (1978) work, two main needs analysis trends emerge in the literature, and a distinction is made between what the learner needs to know in a target situation (“target needs”) and what the learner needs to do to attain effective learning – “learning needs”, in the terms of Hutchinson &

Waters (1987). These two main trends (target situation and learning situation analyses) have gradually evolved and been woven together. As a result today's needs analysis is a process in which the demands of the target situation (necessities), the determination of the learning gap ("present situation analysis"), and the learners' views, lacks and wants together with learning needs ("learner factor analysis") interplay along with (i) the teaching context and local situation – "means analysis", according to Holliday & Cooke (1982); (ii) target language descriptions – "discourse analysis"; and (iii) target tasks – "task-based analysis" which is strongly advocated by Long (2005) and also referred to as "second-generation analysis" by Huhta et al. (2013) in contrast with the preceding language-centred approaches or "first-generation analysis". Today, ethnographic- and critical-oriented approaches pose the latest challenge to traditional needs analysis (Flowerdew, 2013).

Critical issues on the basis of current research

In her overview of ESP needs analysis, Flowerdew (2013, p.332) found that "[n]eeds analyses conducted in the academy usually take a skills-based approach at the macro-level". It is certain that a broad inquiry into the research published on needs for study purposes in higher education shows that skills-based studies feature in the EAP literature. However, there is also some leeway for very interesting and enlightening research that pins down relevant issues and topics in EAP needs analysis, this time at the micro-level.

What follows is a discussion on current needs analysis research in varied academic settings worldwide (see Table 42.1). It has been organised around five key issues and although it takes into account preceding research (for a complementary discussion of earlier studies see Flowerdew, 2013, pp.332–337, or Huang, 2010, pp.518–519), it is mainly focused on the findings from 20 empirical works published in the last decade in different parts of the world, and contextualised in diverse disciplinary contexts – students following EAP courses and majoring in computing, economics, pharmacology, etc.

An efficient needs analysis should involve different stakeholders

Different parties may be concerned with different needs; therefore, data should be gathered from different stakeholder groups in order to streamline a needs analysis procedure. Today, it is widely acknowledged that diverse participant sources will provide a more complete picture of the whole set of needs that should be addressed in a particular situation and will serve to complement each other. The involvement of different stakeholders and sources facilitates the alignment of each group's diverse self-interests which, together with the triangulation of research data collected by different instruments, contributes to the validity and reliability of the whole process. The case may arise where two different groups are in conflict with each other or where some groups are more representative than others in the need for change and demand of remedial actions – for Brown (2009), students alone may not be a reliable source of information because they are not fully familiar with the teaching context. Even participants in a particular group may provide complementary views and perspectives that, together, inform course content and enhance the final outcome (e.g. undergraduates and postgraduates, or students in different academic years).

The fact that needs are "jointly constructed between teachers and learners" (Hyland, 2006, p.74) is evident in the sample studies detailed in Table 42.1: with the exception of Gilbert (2005), all of them take students (undergraduates, graduates and master students) into account, and most of them (exceptions are Cai, 2013; Elisha-Primo et al., 2010;

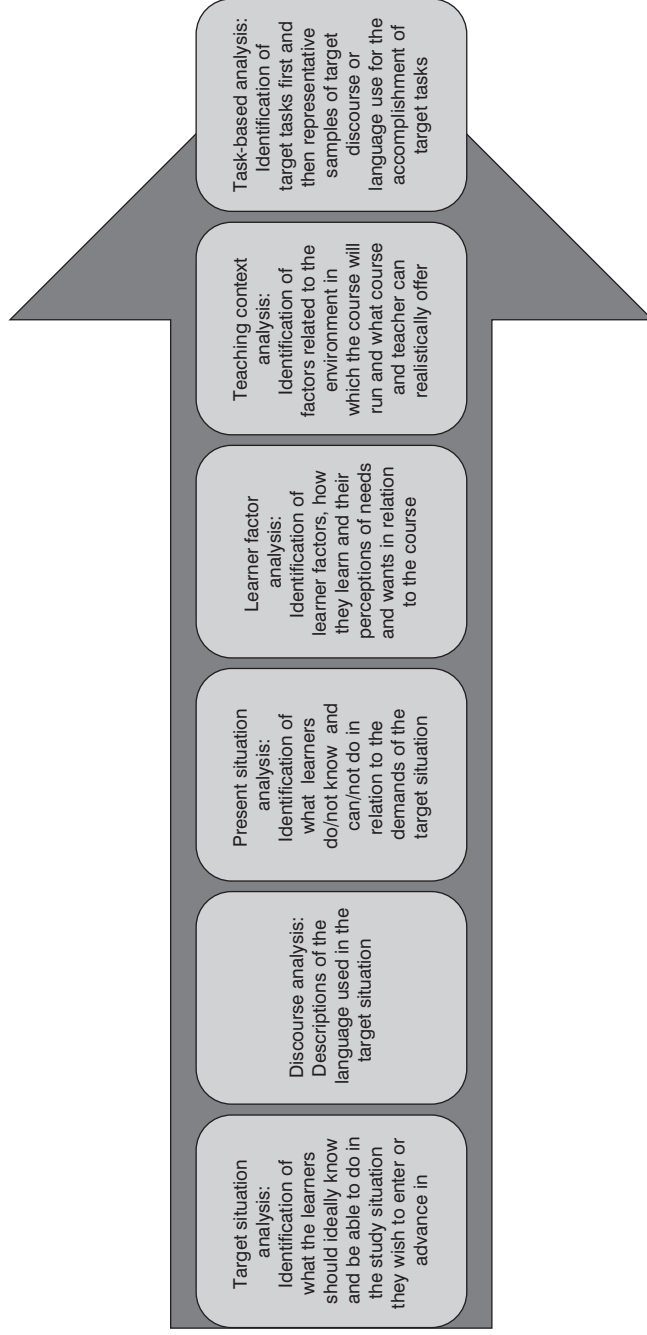


Figure 42.2 The needs analysis process, based on discussion in Basturkmen (2010, p.19; 2013, p.421) and Long (2005)

Table 42.1 A sample of the latest research on EAP needs analysis

<i>Study/Country/ Degree</i>	<i>Source(s)</i>	<i>Research instrument(s)</i>	<i>Lessons learned</i>
Gilabert (2005) Spain Communication Studies	3 scholars 8 company representatives 11 experts 59 journalism companies	Scholars: Interview Representatives and experts: (un-) structured interviews Companies: questionnaires Non-participatory observation Discourse samples	Use of multiple sources and methods helps to obtain more reliable and validated findings Domain experts provide the most accurate information about the required tasks and language needs in the domain
Holme & Chalauisaeng (2006) Thailand Pharmacology	37 students	Participant observation Semi-structured interview Five-part questionnaire	Participatory Appraisal enhances the development of learner- centred classrooms By finding their own needs, students help to set learning targets
Evans & Green (2007) Hong Kong Varied	4932 undergraduates 32 programme leaders from 20 departments	Students: questionnaire Leaders: questionnaire and group discussions	Students' problems centre on academic writing and speaking Programme design should stress subject-specific lexis instruction and promote greater learner autonomy
Taillefer (2007) France Economics	126 postgraduates 125 undergraduates 28 language teachers 30 subject teachers	30-item questionnaire	Language learning targets should be linked to the profession Oral communication is perceived as the most difficult skill
Bacha & Bahous (2008) Lebanon Business	324 students 37 instructors	Students: 6 item- questionnaire Faculty: 6 item- questionnaire and interview	Faculty and students do not hold similar views of students' business English needs Courses would improve by adding more discipline-specific writing tasks
Mazdayasna & Tahririan (2008) Iran Nursing, Midwifery at 7 universities	681 undergraduates 168 subject- matter instructors 6 English language instructors Heads of depts	Student: 35-item questionnaire and interview Faculty: 47-item questionnaire and interview	Opinions are consistent among instructors across different universities Present course does not fully prepare students for their studies and should be revisited

<i>Study/Country/ Degree</i>	<i>Source(s)</i>	<i>Research instrument(s)</i>	<i>Lessons learned</i>
Molle & Prior (2008) USA Varied	20 students 7 instructors	In-depth interviews with faculty and some students Text-based analysis of course materials	Teaching resources privilege the linguistic features of texts rather than the practices of genre systems Genres should be used to help students better understand discipline-specific discourse
Abdullah (2009) UK TESOL	197 Malaysian students 35 teachers from 11 institutions	Students: questionnaire, IELTS test and reading workshop Teachers: questionnaire	Academic reading profile can be attained on the basis of present wants, lacks and difficulties, and target situation needs Little mismatch between students' and teachers' perceptions and views
Eslami (2010) Iran Technology, Sc., Medicine	693 students 37 instructors	53-item questionnaire	Perceptions of learners and instructors differ Differences exist among groups and based on their field of study
Elisha-Primo et al. (2010) Israel All academic disciplines	460 undergraduates	18-item questionnaire	Current emphasis on writing and reading should be re-evaluated to favour oral skills Curricular changes should cater to students' tracks (thesis/non- thesis) and specialised fields
Huang (2010) Canada Varied	337 undergraduates 95 graduates 64 instructors	43-item (undergraduates) and 45-item (graduates) questionnaires Instructors: any of the two	Students' and instructors' assessments show a great divergence in terms of skills status Support service is needed at the discourse discipline-specific and local levels of writing
Lambert (2010) Japan Business Education	198 students	Job placement records Interview Open-item, follow- up and closed-item questionnaires	Multiple rounds of data collection are important to identify and balance findings Little difference in priorities for tasks across workplace domains.
Atai & Nazari (2011) Iran Health information management	15 graduates 180 undergraduates 10 EAP teachers 15 content teachers	59 item-questionnaire (adapted per group) GEP test & Self- assessment Semi-structured interviews Non-participant observations	Course should be renewed to favour reading comprehension instruction Teaching should be based on students' needs and not on utopian goals prescribed by syllabus designers

continued ...

Table 42.1 continued

<i>Study/Country/ Degree</i>	<i>Source(s)</i>	<i>Research instrument(s)</i>	<i>Lessons learned</i>
Liu et al. (2011) Taiwan EFL in 6 universities	972 students	95-item questionnaire	Necessities, wants and lacks may be similar or different depending on the target skill Discrepancies arise between courses and students' perceptions
Chowdhury & Haider (2012) Bangladesh Pharmacy	40 undergraduates 4 EAP teachers at the same university	Students: 10-item questionnaire Teachers: interviews	Course should be redesigned to foster writing, reading and speaking skills Course materials should be customised with core subject in mind
Yürekli (2012) Turkey Computer Sc.	1005 students 17 EAP instructors 35 subject teachers	Questionnaires Subject teachers: semi- structured interviews	Teaching should integrate task-based and content-specific approaches Needs analysis is a pre-requisite for the identification of course objectives and curriculum renewal
Al-Khairi (2013) Saudi Arabia English	75 students 5 English teachers	Students: questionnaire Teachers: interview	Course should strengthen writing skills Course contents should be tailored to the students' identified needs
Cabinda (2013) Mozambique Varied	28 students EAP/ESP practitioners at different faculties	Students: reading comprehension test Teachers: questionnaire Text-based analysis	Textbooks fail to provide the skills and strategies needed to succeed in academic settings Textbooks are outdated and should take the discourse level into account
Cai (2013) Mainland China Arts	50 Master students	All students: 15-item questionnaire Focus group (6 students): Follow-up interview	Academic writing course does not face students' perceived difficulties EAP genre-based pedagogy could solve problems in academic writing
Önder Özdemir (2014) Turkey Medicine	510 students 10 academics 5 doctors	Ethnography (sustained observation & participation) Reflective journals Questionnaire based on students' essays Semi-structured interview	Administrators and instructors may provide wrong diagnoses of learners' needs Listening, reading and speaking are salient learning needs

Holme & Chalausaeng, 2006; Lambert, 2010; Liu et al., 2011) consider EAP teachers as a reliable source of information. Together with students and EAP teachers, other stakeholders contribute to the efficacy of the assessment: domain experts and subject-matter teachers, language teachers, faculty, administrators, company representatives, and in-service professionals, either from the same institution (e.g. Bacha & Bahous, 2008) or outside (e.g. Mazdayasna & Tahririan, 2008). Only a few studies go beyond the educational context to survey third-level stakeholders (Gilabert, 2005; Önder Özdemir, 2014).

Needs are neither universal nor everlasting

Although similar groups of students (e.g., students from countries where English is the most popular foreign language) in similar language learning situations (e.g., social sciences students at university level) may share similar needs, these may vary across educational contexts, disciplines and student groups, and be influenced by society. A needs analysis cannot be generalisable, not only because sources are different but also because different views on teaching and learning, differing institutional practices, local attitudes, and socio-cultural practices are highly likely to produce a different set of needs (Jordan, 1997; Long, 2005). Even similar situations will portray dissimilar needs and these may change over time; however, if the settings and conditions are roughly comparable and it is possible to identify a set of “shared needs” (Basturkmen, 2013, p.4210), teachers can use those needs analysis reports “as a starting point for conceptualizing needs” (Basturkmen, 2010, p.26). Also, the far-reaching expectations of today’s globalised society contribute to the identification of “glocal needs” that bring about the global needs that are shared by internationally demanding educational policies and the local needs of particular EAP settings and courses.

The sample research in Table 42.1 evidences the existence of shared and glocal needs, but also the fact that perceptions, expectations and opinions may vary significantly between and across stakeholder groups (Bacha & Bahous, 2008; Huang, 2010; Önder Özdemir, 2014). Differences may also appear within the same parties on the basis of the study programme (Eslami, 2010), and even the analysis of the many faces of the construct “needs” as necessities, lacks and wants may provide an inconsistent outcome (Liu et al., 2011). Exceptions also attest that viewpoints may be consistent across groups even though participants belong to different institutions (Mazdayasna & Tahririan, 2008) or that the mismatch between stakeholders may be irrelevant – see Abdullah (2009) who found similar perceived elements of reading needs between students and staff. Last, needs may be subject to change over time. A good example is Evans and Green (2007), who found that over a span of a decade, issues related to EAP course and materials design needed to be redefined “in light of the changing tertiary-education landscape” (Evans & Green, 2007, p.3), therefore bringing to the fore the continual evolution of EAP requirements together with glocal needs.

An efficient needs analysis should be systematic and based on a triangulation of research methods, data gathering techniques and sources

For many years, needs analyses have suffered from a lack of empirical work. Most needs assessments were carried out by course teachers, once in a course life, based on their intuitions or observations and/or a basic questionnaire delivered among students, and as the situation of a particular course required; then, findings were extended to similar courses

despite changes in student groups or educational settings. For the efficiency of the teaching and learning process, these slipshod techniques should be avoided, and needs analyses should be conducted with a “mixed-methodology approach” (Huhta et al., 2013) that makes use of systematic data collection procedures, takes into account the views of different stakeholders, and is based on a triangulation of data collected from multiple research methods and sources. This would present course designers and materials developers with a more complete picture of the needs to be addressed by an efficient course. As main conclusions from the sample studies in Table 42.1 show, the use of multiple sources, multiple methods and multiple rounds of data collection are important to build consensus and support the reliability and validity of the needs analysis (Gilbert, 2005; Lambert, 2010; Önder Özdemir, 2014).

Hyland (2006, p.78) claimed that “there has been a heavy over-reliance on questionnaires on needs analysis, despite the rather restricted reliability and one-dimensional picture that this kind of data provides”; the sample research shows that although more research instruments are being gradually employed, this is still the case. Questionnaires are used in all cases and interviews rank as the second most preferred data collection technique (Molle & Prior, 2008 is the only exception). Cases like Atai and Nazari (2011), in which a wide combination of both quantitative (questionnaires, a GEP test and self-assessment) and qualitative instruments (semi-structured interviews and non-participant observations) are used, are scarce. Together with (open or closed) questionnaires with a low or high number of items, and (structured or semi-structured) interviews, other data-gathering instruments that prevail in this decade are: observations (Atai & Nazari, 2011; Gilbert, 2005; Holme & Chalausaeng, 2006; Önder Özdemir, 2014), self-assessments or tests (Abdullah, 2009; Atai & Nazari, 2011; Cabinda, 2013), text and materials analysis (Cabinda, 2013; Molle & Prior, 2008), discourse samples (Gilbert, 2005), group discussions (Evans & Green, 2007) and workshops (Abdullah, 2009), job records (Lambert, 2010) and reflective journals and ethnography (Önder Özdemir, 2014).

Needs analysis is fundamental to curriculum renewal, course and syllabus design, materials development and methodology updating

There is a strong consensus in the literature on the linkage of needs analysis to course planning, curriculum design and materials development (Basturkmen, 2010, 2013; Belcher, 2006, 2009; Brown, 2009; Dudley-Evans & St John, 1998; Huhta et al., 2013; Hyland, 2006; Jordan, 1997; Long, 2005; Upton, 2012; among many others). In the case of EAP, the “needs-identifying responsibility” noted by Belcher (2009, p.3) is often borne by teachers who are required to assume multiple roles (course designer and needs analyst being two of them), and both teaching and learning will benefit from this circumstance. Findings from the sample research in Table 42.1 present needs analysis as a window of opportunity for course renewal, and also demonstrate that a course will not be successful if it fails to address the needs of learners and other stakeholders (Cai, 2013; Evans & Green, 2007; Holme & Chalausaeng, 2006; Liu et al., 2011; Mazdayasna & Tahririan, 2008). The following hints for implementation in EAP programmes are suggested:

- EAP courses should not only be skills-based but promote the development of subject-specific vocabulary and be customised with the core subject in mind (Bacha & Bahous, 2008; Chowdhury & Haider, 2012; Evans & Green, 2007).
- EAP courses should foster learner-centred approaches, self-direction and greater autonomy (Evans & Green, 2007; Holme & Chalausaeng, 2006).

- EAP courses should link learning targets to the disciplines and professions, particularly regarding oral communication and task attainment (Lambert, 2010; Taillefer, 2007; Yürekli, 2012).
- EAP courses should be more focused on genres and disciplinary discourse rather than linguistic features (Cabinda, 2013; Cai, 2013; Molle & Prior, 2008).
- EAP courses should be re-evaluated and renewed on the basis of proper needs analyses, and changes regarding learning objectives, teaching method, materials, etc. should be applied accordingly (Al-Khairi, 2013; Atai & Nazari, 2011; Cabinda, 2013; Elisha-Primo et al., 2010; Evans & Green, 2007; Yürekli, 2012).
- EAP courses should supply support services for discourse discipline-specific tasks (Huang, 2010) and for internationalised classrooms (Abdullah, 2009 – also see discussion in the last section).

Needs analysis favours the integration of EAP with disciplinary programmes

Basturkmen (2012, p.63) has stressed that “[a] key challenge in the tertiary sector is the integration of EAP with disciplinary programmes”. Indeed, needs analysis provides a suitable approach for narrowing the gap between EAP and the teaching and learning of specific disciplines since many science and non-science degrees offer EAP courses – either as a part of it (Bacha & Bahous, 2008) or to support English-medium instruction (Chowdhury & Haider, 2012). A closer look at students’ needs reveals that there is a demand for a higher integration of EAP courses within the disciplines (Taillefer, 2007), not only through the implementation of skills-based approaches but also through the strengthening of vocabulary and tasks that match core subjects (Bacha & Bahous, 2008; Chowdhury & Haider, 2012; Evans & Green, 2007). As perceived by Bacha and Bahous (2008), EAP courses can be enhanced if brought closer to discipline-specific requirements. Because little difference in priorities for disciplinary tasks across domains has been found to exist on the basis of needs analysis (Lambert, 2010), EAP courses may adopt an integrated approach to EAP teaching which is task-based and content-specific (Yürekli, 2012). Also, needs analysis demonstrates that each disciplinary programme requires a different emphasis on the skills that learners need to function successfully in their studies: pharmacy students in Chowdhury & Haider (2012) claim that more attention should be paid to writing, reading and speaking skills, while in other health-related areas students demand less writing and more listening (Önder Özdemir, 2014). Al-Khairi (2013) and Cai (2013) demand more attention to writing, and Taillefer (2007) a greater focus on speaking and listening. Again, each EAP course requires its own needs analysis in line with its own disciplinary programme.

Future directions in EAP needs analysis

Today, the analysis of EAP needs is faced with a number of challenges: first, to gain insights into the academic needs of students that take university courses in English in non-Anglophone countries and are required to demonstrate an acceptable academic performance in that language. Second, to make full use of needs analysis approaches to bring EAP courses into line with the benchmarking framework in force in the European Higher Education Area (EHEA). Last, to instil the needs analysis component into the quality assurance approach system that is currently being implemented across many higher education institutions.

Mobility programmes and internationalisation of higher education institutions

The internationalisation of higher education institutions, fostered by the post-Bologna context and nurtured by structural factors such as a rise in fee income and higher visibility and credibility, has led to a greater mobility of students and teachers across countries and an increased demand for courses in which instruction in non-Anglophone countries is delivered in the English language – 252,827 students from 33 states participated in the 2011–12 Erasmus Programme, with English used in 22,889 teaching assignments according to the European Commission (2013). EAP class groups are today more heterogeneous than ever, with students coming from different cultures and educational systems, and in this new context special needs arise, new challenges are created for the institutions in addressing the students' needs (Read, 2008), and problems that already exist are made “more acute and above all more explicit” (Shaw et al., 2008, p.279). Thus, EAP needs analyses are destined to take full account of this diversity, and EAP courses may become a feasible option to support the academic needs of learners and respond to the demands of English-medium tuition and research.

A general claim is that in many countries, “[it] is widely assumed that students will develop the relevant English language skills automatically when they are faced with tasks that require them” (Breeze, 2014, p.144); hence, no language support is necessary. In Sweden, for example, university authorities are consistently demanding more teaching in English, but as yet only “piecemeal responses to particular needs” have been received (Shaw et al., 2008, p.280). Finland is also facing the necessity to assess and support “the EAP learning needs of mobile students with varying levels of proficiency and academic study skills”, given the increasing role of English as an international academic language in higher education (Räsänen, 2008, p.249).

A step ahead in this regard was taken by Crawford Camiciottoli (2010) who anticipated the potential problems of her outgoing Italian Erasmus students and developed a pre-departure lecture comprehension course for business studies lectures to help them “to cope with the demands of attending lessons taught in English and settling into a new educational culture at the same time” (p.269). For this scholar, helping mobility students to address the needs of this new teaching context presents EAP instructors working in European universities with unique challenges. In Spain, Breeze (2014) surveyed 83 law and 63 medicine students, and listed a set of “difficulties” which impact on listening skills and lecturers' performance. She found that teachers might be required to apply changes to their lecturing mode in order to support English-medium courses and satisfy the academic needs of, particularly, international students.

Internationalised English-medium classrooms, however, are not exclusive to European countries. International students in Australia and New Zealand have increased considerably in this past decade, and their particular academic needs have been respectively identified by Doocy (2006) and Butcher and McGrath (2004). Also, the University of Auckland has developed a Diagnostic English Language Needs Assessment (DELNA) programme to identify those international students with academic language needs, and provide them with additional language support via EAP courses that specifically address such needs while at the same time preserving the academic standards of the institution (Read, 2008).

Academic needs under the European Higher Education Area requirements

Needs analysis is considered a fundamental methodological principle of the Council of Europe's educational model which for many years has promoted an approach to the methodology of language teaching that is based on the communicative needs of the learners (Munby, 1978; Richterich & Chancerel, 1977). Today, the Common European Framework of References for Languages (CEFR or CEF in the literature) (Council of Europe, 2001) is the main instrument for the elaboration of language syllabuses and curriculum guidelines under the EHEA requirements.

The CEFR considers that knowledge of the needs, drives, motivations and interests of individual learners in their social context will make informed decisions for setting the aims and objectives of language learning and teaching, and it is rich in references to the needs of both learners and society (i.e., the needs of a multilingual and multicultural Europe). The Council recognises herein that there exist different contexts of language use (e.g., the educational domain), but no decisive steps have been taken towards a detailed specification of needs in academic contexts beyond the study statements set by the Association of Language Testers in Europe ("ALTE study statements") and contained in Appendix D (see CEFR, pp.244–257). The "educational domain" involves different locations (e.g., laboratories, seminar rooms), institutions (e.g. college, learned societies), persons (e.g., teaching or library staff), objects (e.g., writing material, computers), events (e.g., visits and exchanges), operations (e.g., debates, tutorials), and texts (e.g., reference books, journal articles).

The specific adaptation of CEFR descriptors to EAP courses has been scarcely explored, although some initiatives have been taken. An example is to be found in the University of Jyväskylä (Finland), where teachers of all academic languages (not only EAP) have worked together to adapt levels A2–C2 for language learners in academic settings, and provide descriptors for spoken interaction and production, reading, writing, and communication strategies (see <https://kielikeskus.jyu.fi/opetus/englanti/proficiency-level-descriptions-1/assessmentcriteria>). Also, Räsänen (2008, p.266) sketches the general and specific competences to be attained by graduates in terms of language and information management skills, and exemplifies how the CEFR contributes to the development of a macro-level approach that integrates language, learning and discipline-specific communication skills in academic contexts. Last, and still under development, is MAGICC (Modularising Multilingual and Multicultural Academic Communication Competence), a project of the EU Lifelong Learning Programme, which aims at providing "transnational tools for integrating academic and professional communication competences, intercultural and lifelong learning skills and competences as part of students' academic profile" (www.unil.ch/magicc/home.html).

In Spain, Durán et al. (2009) have developed the Academic and Professional European Language (ACPEL) Portfolio, an English–Spanish version of the English Language Portfolio for use both in a higher education and in a professional environment. Its main contribution lies in the academic and professional bank of descriptors arranged by communicative skills that, as an appendix, supplement the work. Thanks to this bank of descriptors it is possible to list a number of needs and sub-needs that enhance the "can-dos", competences and profiles established in the original CEFR and that are specific to the academic context.

The CEF Professional Profiles, an action-oriented evidence-based approach to needs analysis from the tenets of the CEFR developed by Huhta et al. (2013), are also significant to this chapter because, even though they do not address EAP needs directly, they can serve

as a model for providing hands-on assistance when conducting a needs analysis that deals with the demands of academic communication. The Profiles take the task to be performed by individuals as the primary unit of needs analysis (a way forward in the direction of Long's (2005) claim) together with the needs of experienced professionals and society. The framework, guidelines and detailed instructions provided show the flexibility of the process and can be very purposeful if attempting to create CEFR-based profiles in the academic context (e.g., CEF Academic Profiles) which may be applicable across different cultures and educational systems under the EHEA scheme.

The contribution of needs analysis to quality assurance

Many scholars (Basturkmen, 2010, 2013; Belcher, 2006, 2009; Brown, 2009; Dudley-Evans & St John, 1998; Hyland, 2006; or Jordan, 1997) have for some time advocated the continuous examination of needs in ESP/EAP courses to assess learning, narrow down the focus of instruction, revise content and refine the existing course. This view of needs analysis as a dynamic, on-going process rooted in course and programme evaluation that is “negotiated by learners, other community members, and instructors” (Belcher, 2006, p.137) lies at the forefront of quality assurance procedures, and shows a window of opportunity for integrating quality assurance mechanisms into institutional quality frameworks and strengthening the accountability-driven performance of education.

The international association EAQUALS (Evaluation and Accreditation of Quality in Language Services) shows particular concern about the identification of learners' needs, and notes the diagnosis and revision of course participants' needs as one of the main focus points in the inspection process (eaquals.org). It also emphasises that teachers should be professionally prepared to conduct needs analyses and provided with support to ensure that the teaching process addresses those needs – the role of EAP teachers as needs analysts or assessors and already discussed in Table 42.1. Also, LANQUA (Language Network for Quality Assurance) offers guidance on the ways quality assurance processes can enhance language learning quality (www.lanqua.eu).

Quality means “client satisfaction”; therefore, quality management procedures “need to take greater account of client needs” and reconcile the needs of all stakeholders (i.e., clients) in language education (Heyworth, 2013, p.292). Quality practices are in line with the tenets of critical EAP (CEAP) and the “rights analysis” trend (Benesch, 2001) whereby education is more participatory, and students are active agents in an academic community who can challenge the conventions of EAP courses and collaborate in negotiating its development. A quality assurance approach supervises whether, to what extent, teaching materials etc. have been developed in relation to learning objectives, and whether, and to what extent, these learning objectives have been attained and, therefore, whether, and to what extent, students' needs have been covered. If the outcome of a needs analysis is used as a basis for critical reflection about teaching (which indeed it is – see “lessons learned” in Table 42.1), this reflective practice contributes, by implication, to linking theory and practice, improving the quality of teaching and helping teachers to achieve professional growth (Heyworth, 2013).

There have been some attempts to link quality assurance to needs analysis in a coherent and profitable manner for ESP/EAP settings. The QALSPELL (Quality Assurance in Languages for Specific Purposes) project, for instance, aims at providing employers with the mechanisms for identifying employees' specific foreign language needs (www.qalspell.ttu.ee/). For the particular case of EAP, Riley (2012) explores the ways needs analysis matches a quality culture. She contends that learners should voice their real needs because

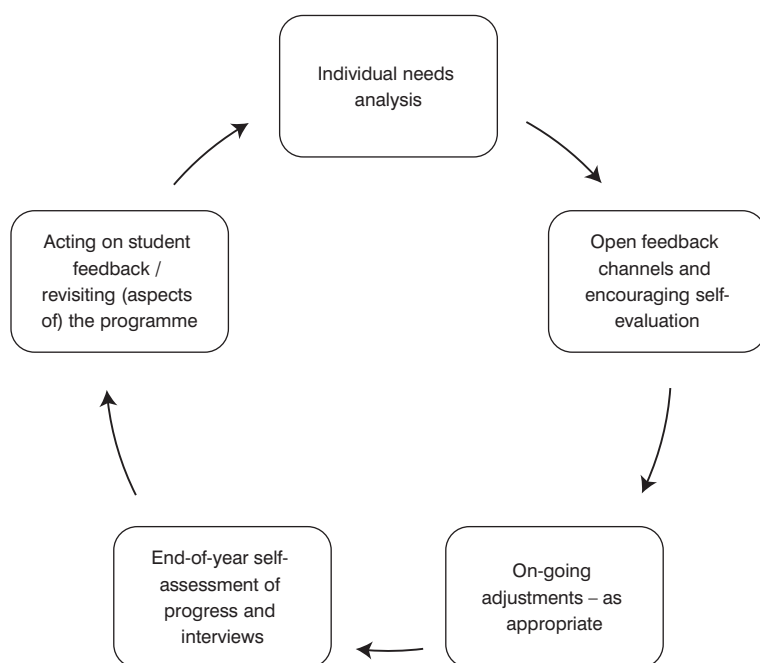


Figure 42.3 A process approach to quality management (Bardi & Muresan, 2012, p.16)

they have “an important part to play in the quality model cycle” (p.57), and argues for (i) a continual dialogue with present and past students and language and content teachers; (ii) a reflective-practice quality model and, most importantly; (iii) a continual analysis of needs, before, during (*in itinere*) and after the course. Other initiatives such as Crawford Camiciottoli’s (2010), whereby post-sojourn interviews were held among out-going Italian Erasmus students who had attended a pre-departure English lecture comprehension course tailored to their particular needs, or Pérez-Llantada’s (2010) implementation of a small-scale management system for quality assurance in a Master’s EAP course, demonstrate that there is concern in the field with quality practices and that it is possible to develop a quality culture in EAP courses.

In their analysis of student perceptions of programme quality of a Master’s degree, Bardi and Muresan (2012, p.15) underscore that student evaluation of programmes is a key indicator of quality because “students have a chance to re-examine their learning objectives and to reflect on their own performance and development”. Additionally, this will provide teachers and course designers with the opportunity to change initial objectives, identify new goals and pinpoint changes to the programme. The process approach outlined is illustrated in Figure 42.3.

Needs analysis dynamics is a driver for (self-)evaluation, progress monitoring and decision-making both during and after the course in the EAP context (see Figure 42.3). Course and materials are re-evaluated in terms of on-going needs analysis procedures and the summative evaluation carried out during the life of a course can be used to modify and fine-tune what is being done. Bardi and Muresan (2012) decided to open channels for feedback and carried out semi-structured interviews that provided them with suggestions for future action and changes to the course programme. For one of these scholars, learners’ language learning needs, interests and expectations have undergone clear changes over the last ten

years, and this trend should not be overlooked by professionals involved in the management of the quality assurance systems (Muresan, 2011).

Small-scale studies or pilot initiatives, such as those above together with the latest research (see again Table 42.1), attest that “[e]ven after an ESP course ends, there is good reason for needs analysis to continue” (Belcher, 2009, p.6), and that the continual assessment of learner and target needs may be a valuable quality assurance tool to take informed decisions on the efficacy of EAP educational practices in higher education. Within this framework, needs analysis becomes a measure for accrediting quality in the EAP context, a timely instrument by which quality can be applied in language teaching, and clients’ (students’ and other stakeholders’) satisfaction fulfilled.

Further reading

Brown (2009); Flowerdew (2013); Long (2005)

Related chapters

- 40 EAP management
- 41 EAP teacher development
- 43 EAP materials and tasks

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EAP MATERIALS AND TASKS

Fredricka L. Stoller

Introduction

Materials and associated tasks are fundamental to teaching and learning English for academic purposes (EAP). Materials, often depicted as “anything” used to facilitate learning (Tomlinson, 2013), include EAP textbooks, commercial materials that are not part of EAP-textbook packages, excerpts from introductory university textbooks, teacher-created worksheets, video recordings, online sites (including technology, entertainment, and design talks (TEDs)), and computer-assisted language learning programs. Inextricably linked to these materials are the tasks associated with them that students engage in to process materials, learn from them, and attain course objectives. In EAP contexts, materials and tasks work in concert to prepare students for future academic pursuits.

A defining characteristic of effective EAP materials and tasks is that they are informed by the needs of students who aspire to study (or who are simultaneously studying) in English. Needs analyses have revealed large skill sets required by EAP students. That students need vocabulary (and lots of it), improved language skills, and grammar is assumed; thus, EAP materials and tasks often centre on these language areas. But EAP students’ needs extend well beyond language; thus, EAP materials and tasks should also guide students in:

- engaging in academic-task sequences;
- using strategies in meaningful combinations to overcome challenges and achieve goals;
- comprehending and producing the spoken and written genres that students will encounter;
- developing study skills;
- strengthening critical thinking abilities;
- using technology for academic purposes;
- developing test-taking strategies for test types that will be encountered (Kurgat, 2008), including tests that serve as gatekeepers for entry into regular classes (e.g., the Cambridge English suite of exams; Common European Framework of Reference for Languages [CEFR]; International English Language Testing System [IELTS]; PTE [Pearson Test of English] Academic; Test of English as a Foreign Language [TOEFL]; country-specific exams such as the South African National Benchmark Tests; language-program placement and exit exams).

Equally important are materials and tasks that prepare students for the underlying expectations of the academy. EAP students may be unaware of the limited role that

memorization plays in most English-medium academic contexts, the importance of attribution and related conventions, or the grave consequences that can result from plagiarism. Furthermore, because EAP teachers cannot predict exactly what students will encounter in their futures (Johns, 1997, 2007), EAP materials and tasks should provide students with analytic tools that will stand the test of time and assist students in navigating future studies independently (Alexander, Argent, and Spencer, 2008; Lynch, 2001).

As revealed by this partial itemization of EAP student needs, EAP preparation is accompanied by ambitious goals, often within formidable time constraints. Thus, a great deal needs to be accomplished in a relatively short time period to prepare EAP students for future studies. Materials and tasks serve as vehicles through which EAP students can make the gains needed to successfully transition into English-medium classes.

Perspectives on varied EAP contexts

EAP materials and tasks vary across locations (e.g., English-medium institutions in Asia and Europe; educational institutions in English-speaking countries), target students with EAP needs (e.g., international students, Generation 1.5 students, language-minority students), instructional foci (e.g., discrete, integrated, and/or study skills), and students' entry-level language proficiencies and academic preparedness. Tertiary-level students often enrol in EAP courses *before* embarking on their undergraduate or graduate studies. Students who require years of academic English preparation often begin underprepared, with little, if any, experience engaging in conventional academic tasks (including extensive reading). More prepared EAP students may be just one or two semesters away from entering regular classes; others may take EAP support classes while concurrently enrolled in regular English-medium courses. Also dedicated to EAP instruction are English-medium K–12 international schools (Scholz, 2012) and secondary schools with culturally and linguistically diverse students in English as a first language contexts (Johns and Snow, 2006). In these varied EAP settings, students' needs are pressing and stakes are high. It is through materials and tasks that EAP teachers help students become “academic insiders” (Alexander, Argent, and Spencer, 2008, p.9), who are prepared for the language, texts, tasks, and expectations of the academy.

Critical issues and topics

The literature on materials and tasks in English language teaching (e.g., Harwood, 2010; McDonough, Shaw, and Masuhara, 2013; McGrath, 2013; Mishan and Chambers, 2010; Tomlinson, 2012; Tomlinson and Masuhara, 2010; Van den Branden, 2006; Willis and Willis, 2007), and EAP more specifically (e.g., Alexander et al., 2008; de Chazal, 2014; Hyland, 2006), raises critical issues of relevance to EAP. The issues fall into numerous broad areas, including authenticity, selection and development of materials and tasks, relationships between materials and tasks, vocabulary, and student engagement.

Authenticity

The role of authenticity in materials and tasks has permeated EAP discussions for decades (Alexander, Argent, and Spencer, 2008; de Chazal, 2014; Gilmore, 2007; Jordan, 1997; Widdowson, 2000). The adoption of authentic materials (i.e., materials not created specifically for language-learning purposes) for EAP instruction is advocated by some because it is believed that authentic materials provide the most expedient way to prepare EAP students

Table 43.1 Materials adaptation processes

<i>Adaptation processes^a</i>	<i>Sample outcomes</i>
Adjustments	Preserved rhetorical purpose without the burden of challenging vocabulary or content
Conversions	Reading passages converted into listening texts
Expansions	Added redundancy, concrete examples, background information, key-term definitions, signals of organization
Shortening and reordering	Altered length or sequencing
Simplifications	Modified content, grammar, lexicon, textual density
Supplementation	Additional texts with accessible content

Note

a Adapted from Alexander et al., 2008; Bocanegra-Valle, 2010; Tomlinson, 2011, 2013; Tomlinson and Masuhara, 2004

for regular-class demands. Some EAP professionals support the use of authentic materials “as early as possible” because EAP students discover not only academic conventions through encounters with authentic texts but also the difficulties that will be faced and the strategies that will be needed to overcome them (Alexander, Argent, and Spencer, 2008).

Authenticity, however, is not a straightforward concept. A popular science article (written for the layperson) is distinct from an article written for experts (e.g., in chemistry) on the same topic, yet both texts are authentic. Similarly, authentic materials written for middle or high school students could be appropriate for older EAP students (Fitzsimmons-Doolan et al., 2012). The sustained content of such texts (i.e., popular science articles and middle school texts) might approximate the academic experience that EAP students will encounter in regular classes.

As appealing as authentic materials may be for EAP preparation, they are oftentimes too challenging, thus, inaccessible, frustrating, and demotivating for EAP students, especially those with low proficiencies and minimal academic preparedness. In place of authentic materials, EAP professionals often turn to adapted materials in commercial EAP textbooks or materials that they adapt themselves, the latter resulting from various processes (Table 43.1).

Some professionals claim that adapted materials overprotect students, distort language, and deprive learners of opportunities to prepare for the realities of academia (Bocanegra-Valle, 2010). Others argue that authenticity is conveyed not by sources of materials but rather by the authenticity of learning purpose; from this alternative perspective, texts that best help students achieve pedagogical aims are considered most authentic in that instructional context (e.g., Widdowson, 2000). Despite claims and counterarguments, most methodologists and materials developers believe that adapted materials have an important place in EAP contexts where students would only be frustrated by authentic materials. In EAP programs that offer a sequence of courses, early courses can be structured around adapted materials, while more advanced courses can use materials that are closer approximations of academic texts.

Linked to discussions of authentic materials are those focused on authenticity of task, task sequences, and task purposes (Alexander, Argent, and Spencer, 2008; de Chazal, 2014; Hyland, 2003, 2006). Willis and Willis (2007) depict authentic tasks as those that focus

on meaning and tangible outcomes. What is typically seen in EAP classrooms, however, is a combination of authentic and pedagogic tasks, the latter designed to assist students in improving their language, content learning, and study skills (Waters and Waters, 2001), in addition to helping them access materials that might be challenging for them, whether they are authentic or not. Pedagogic tasks can be designed to approximate the tasks (and their purposes) that students will encounter in academic contexts.

Selection and development

Whether EAP teachers use authentic materials, adapted materials, or a combination of the two, the issues of materials selection and development remain. EAP materials often stem from commercial EAP textbooks, yet, even in such settings, EAP practitioners often bring additional materials into class (from magazines, newspapers, academic journals, introductory academic-textbook chapters, or YouTube) to meet students' needs. When seeking supplementary materials, EAP practitioners face the challenge of locating materials that build upon textbook content, lend themselves to academic tasks, and complement students' needs, proficiency levels, and interests. Further considerations involve topic, genre, audience, register, rhetorical function, organization, and purpose.

Related to these issues are discussions of "where to begin" for the selection and development of EAP materials and tasks. Starting points could entail the identification of interesting content; specifications of target tasks, texts, genres, and vocabulary; or use of corpus-research findings. The Task-Based Language Teaching (TBLT) association (www.tbtl.org/) promotes the task as the "central unit for defining language learning needs, determining curriculum goals, designing [language classroom] activity, and assessing language competencies." Mishan (2005), similarly, advocates working within a framework of task authenticity, which permits "rehearsal for real-world situations" (p.70). Alexander, Argent, and Spencer (2008), however, emphasize the difficulties of using tasks as starting points "because it is not clear what makes one task more difficult than another and, hence, how they might be sequenced developmentally in terms of language" (p.93); they suggest that "genres and rhetorical functions provide a better starting point to allow for progression, recycling, and transferability" (p.93).

Relationship between materials and tasks

EAP materials and tasks should work in tandem. Materials without accompanying tasks are not particularly effective in preparing students for the demands of academia; similarly, stand-alone tasks, detached from materials, do not prepare students for the realities of academia where tasks are typically connected to written and aural materials. Tomlinson (2013) mentions the value of combining authentic texts (i.e., materials) with pedagogic tasks to raise students' awareness about language, and provide practice opportunities. Alexander, Argent, and Spencer (2008) advocate the opposite when they claim that authenticity of task can be allowed to override authenticity of content (or text).

EAP textbooks typically include pedagogic tasks, in the form of exercises and activities. Such tasks might be designed to build and recycle vocabulary, assess comprehension, provide strategy training, increase fluency, integrate skills, and guide students in the application of content for speaking or writing purposes (when, e.g., preparing oral presentations, participating in group discussions, writing summaries). Tasks that are integral to EAP textbooks are sometimes approximations of authentic tasks (e.g., choosing a topic related to

core materials, researching it, and writing a paper; taking notes and using them for authentic academic purposes).

EAP materials and tasks are often scaffolded as a way to offer students support (Hyland, 2006). Mishan (2005) makes reference to “task approximating” (p.81) as a form of scaffolding. Through carefully constructed task sequences, students gradually move toward being able to handle more challenging texts and tasks independently. With time, increasingly long, conceptually more complex texts and tasks replace easier versions, assisting students in making progress toward EAP course goals. By means of scaffolding, a built-in progression of materials and tasks becomes integral to EAP instruction.

For materials that are not accompanied by tasks, which would be the case with most authentic materials, EAP teachers typically create accompanying tasks to achieve EAP course goals. They might design tasks to give students access to the materials, model strategies, improve skills, build vocabulary, guide students in discovering helpful language features, and/or engage students in task sequences that approximate the academic process (e.g., listen to a lecture and take notes, read a related passage while noting main ideas in the margins, search the web for other related texts, use readings and lecture notes to write a synthesis).

Relationships between materials and tasks are complicated by the fact that materials and tasks are not always easily distinguishable. For example, “reading guides” (developed as course materials and distributed to students as hand-outs) can be used as part of an elaborated task sequence that engages students in purposeful reading to promote comprehension, raise students’ text structure awareness, and model effective reading strategies. Thus, in some instances, materials and tasks are one and the same.

Vocabulary

That vocabulary is essential for EAP students and key to their academic success is indisputable (Nation, 2013). Thus, a commitment to EAP students’ vocabulary growth and, equally important, their guided use of vocabulary-learning strategies for autonomous vocabulary building is important for EAP curricula. Together, materials and tasks serve as excellent tools for (a) introducing students to academic vocabulary in context; (b) providing students with the multiple encounters needed to consolidate vocabulary learning; and (c) giving students opportunities to explore and engage actively with pertinent vocabulary.

Academic vocabulary is oftentimes depicted as the lexical items that occur across academic disciplines and that are uncommon in non-academic texts (Nation, 2013). Corpus analyses have led to the identification of academic vocabulary and the creation of academic word lists, including the Academic Word List (AWL, Coxhead, 2000; cf. Gardner, 2013; Hyland and Tse, 2007) and the Academic Vocabulary List (AVL, Davies and Gardner (n.d.), see www.academicvocabulary.info/). To date, the AWL has guided numerous EAP textbook projects (e.g., Schmitt and Schmitt, 2005). The Compleat Lexical Tutor (www.lextutor.ca), a versatile online tool that makes use of the AWL, is used by developers of EAP materials and tasks to assess the lexical difficulty of texts (and much more). A similar online tool can be accessed from the AVL homepage, noted above.

Vocabulary researchers, especially those interested in vocabulary size and frequencies (e.g., Gardner, 2013; Nation, 2013), agree that there is simply too much academic vocabulary to teach. Thus, designers of EAP materials and tasks must recognize the value of incidental vocabulary learning, and the all-important reciprocal relationship between reading and academic vocabulary knowledge (Gardner, 2013).

Student engagement

Materials and tasks that complement students' immediate and future needs can contribute to students' affective and cognitive engagement (Tomlinson, 2013), and motivate students to improve their language abilities, critical-thinking skills, and content learning (Alexander, Argent, and Spencer, 2008). Active student engagement in the academic process, critical for EAP learners' futures as well, entails, at a minimum, information gathering (from written and aural sources), information processing (including decisions about what is and is not pertinent for particular assignments), and information reporting in written and oral forms (Stoller, 2006).

Current contributions

That materials and tasks are central to language teaching, in general, and EAP, more specifically, is indicated not only by the works cited above but also by numerous professional associations (all accessible on the web) focused on language learning materials and tasks: (a) the Materials Development Association; (b) TESOL's Materials Writers Interest Section; (c) the International Consortium on Task-Based Language Teaching; and (d) the Japanese Association of Language Teachers Special Interest Group on Task-based Learning. Other contributions to current interests in EAP materials and tasks centre on inventories of academic tasks and findings from corpus- and genre-based analyses.

Inventories of academic tasks

Particularly helpful to EAP task design are research-based inventories of academic tasks. Hafernick and Wiant's (2012) inventory of formal, semi-formal, and informal academic tasks, organized by predominant skill area, serves as an excellent resource for designers of EAP materials and tasks. In the area of speaking, for instance, Hafernick and Wiant identify formal tasks (e.g., presentations, speeches, discussion-leader responsibilities), semi-formal tasks (e.g., class participation and small-group discussions), and informal tasks (e.g., face-to-face interactions with peers and instructors). They introduce parallel inventories for academic listening, reading, and writing. Adding to the value of their academic-task inventories is the identification of the other language skills involved in each predominant skill area.

Equally important for EAP task design are the efforts of de Chazal (2014), who itemizes common tasks associated with:

- critical thinking (e.g., comparing, contrasting, identifying and evaluating supporting evidence, identifying author stance);
- reading for academic purposes (e.g., establishing purposes for reading, matching reading approach to purpose, identifying main and supporting arguments);
- academic writing at pre-, during-, and post-writing stages (e.g., reading and analysing the assignment, gathering pertinent information, drafting, critically reading what has been written and rewriting as necessary);
- academic listening (e.g., listening and note taking, listening to highly rehearsed and spontaneous content, processing content of lectures and relating it to content from other sources);
- academic speaking (e.g., formulating and expressing arguments, responding to and building on others' comments, asking pertinent questions that arise from others' contributions).

de Chazal also itemizes the multimodal dimensions of contemporary lectures, which EAP materials writers and task designers can simulate to prepare students for today's realities. (For other EAP task inventories, see Alexander, Argent, and Spencer, 2008; McCarter and Jakes, 2009.)

Findings from corpus and genre analyses

Findings from corpus- and genre-based analyses have made important contributions to our understanding of spoken and written academic language (e.g., Biber, 2006; Biber and Gray, 2010; Hyland, 2004, 2006; Nesi and Gardner, 2012; Paltridge, 2006; Swales, 1990, 2004) and to EAP material and task design (e.g., Bunting, Diniz, and Reppen, 2013; Feak and Swales, 2014; McCarthy and O'Dell, 2008; Reppen, 2010; Swales and Feak, 2012; Timmis, 2013; Tribble, 2010; Walsh, 2010; Zwier, 2009). The large databases (i.e., corpora) of academic language created by corpus linguists have made possible analyses that offer insights into language use that are relevant for both EAP students and designers of EAP materials and tasks (Hyland, 2013). (See Nesi, this volume, for more on corpora.) Genre-based analyses, too, have contributed insights into the characteristics of academic texts, including the linguistic and organizational patterns that exist across texts, and sections within them.

The public availability of online corpora makes EAP teacher and student use feasible (Hyland, 2013; see also Yim and Warschauer, this volume, for more on EAP student use of corpora as learning resources). Reppen (2010) provides guidelines for using existing online corpora (and teacher-created corpora) for materials development and task design. Similarly, genre-analysis tasks, advocated by Hyland (2004), Johns (2007), Paltridge (2001), Stoller and Robinson (2015), and Swales and Feak (2012) showcase the value of raising students' awareness of the linguistic and non-linguistic features of the genres that they need to comprehend and produce (Alexander, Argent, and Spencer, 2008; Tardy, 2009).

Recommendations for practice

When it comes to EAP materials and tasks, there is no one-size-fits-all (Hyland, 2006). Yet, what all EAP contexts have in common is the goal to prepare students for study in English-medium classrooms. With this overarching goal in mind, a number of recommendations for practice can be made that are applicable, with adaptation, to most EAP contexts.

Make use of coherent sets of content materials

An effective way to devise tasks that mirror those that EAP students will encounter in regular classes is to make use of coherent sets of content materials (Alexander, Argent, and Spencer, 2008). Coherence can be achieved by adopting multiple content sources that share a common theme, but that add new perspectives, opposing viewpoints, culture- or discipline-specific examples, elaborated explanations, and/or successive studies. The sustained content that results from the use of multiple content sources (e.g., mainstream course textbook sections, journal articles, popularizations, videotaped lectures, websites, charts, and graphs) permits EAP students to engage in systematic progressions of tasks that integrate skills (reading to write, reading to prepare for oral presentations) and lead to higher-level thinking (e.g., syntheses, comparisons, contrasts, analyses). Academic-task sequences that students are unfamiliar with can be staged, with more teacher support initially and more independent student work later. Stand-alone materials—with no connections to one another—simply do not lend themselves

to such purposeful academic tasks (or training). An added benefit of coherent sets of materials is the natural recycling of key vocabulary that occurs. A commitment to vocabulary building, vocabulary-learning strategies, and vocabulary recycling (Gardner, 2013; Nation, 2013; Schmitt, 2000) is more easily achieved with coherent sets of materials and related tasks.

Compiling sets of coherent materials can be achieved in numerous ways. Some EAP textbooks are organized around units comprising more than one content source (e.g., two reading passages, one lecture, a web link); if those units have been compiled with coherence in mind, the EAP teacher has a ready-made set of content materials that can be tied to tasks such as those described above. Yet not all EAP textbooks are organized in this way and they oftentimes need supplementation so that meaningful academic tasks can be devised.

In settings where EAP textbooks are not adopted, there remains a need for coherent sets of materials. Some EAP teachers achieve this by adopting (or adapting) introductory mainstream-course textbook materials, linked naturally by the theme of the course. More common, however, is the need to supplement authentic or adapted materials selected for instruction, thereby creating a “thematic unit” with tasks that require, for example, critical thinking, meaningful review, and the exploration of connections across texts, thereby mirroring common academic practices.

Devise pre–during–post tasks around EAP materials

When EAP instructional units are structured around pre, during, and post stages, many EAP goals can be achieved. Pre, during, and post tasks, centred around content materials, can introduce students to useful stage-specific strategies, guide students in accessing and making use of content materials purposefully, and provide students with practice that over time translates into independent use of common academic practices. Each stage serves distinct purposes, thus each will be accompanied by its own set of tasks, oftentimes with the same materials being used across them. Table 43.2 itemizes goals for pre, during, and post segments

Table 43.2 Sample goals for pre–during–post stages of EAP classes focused on reading-skills development^a

<i>Stages</i>		
<i>Pre</i>	<i>During</i>	<i>Post</i>
<ul style="list-style-type: none"> • Establish purpose for reading • Tap prior knowledge • Provide information needed for comprehension (e.g., vocabulary, background) • Explore text organization • Set up expectations (e.g., make predictions) • Stimulate interest • Build confidence and motivation 	<ul style="list-style-type: none"> • Guide reading to facilitate comprehension • Help students construct meaning and monitor comprehension • Connect what is read with what is known • Revisit predictions and revise, when needed • Evaluate what is being read • Engage in ongoing summarization 	<ul style="list-style-type: none"> • Check comprehension • Explore how text organization supports comprehension • Consolidate learning through summaries, syntheses, evaluation, application, etc. • Critique author and text • Recognize comprehension successes • Build fluency through purposeful rereading

Note

^a Adapted from Grabe and Stoller (2011)

of lessons centred on reading (Grabe and Stoller, 2011; Hedgcock and Ferris, 2009); parallels certainly exist for instruction in other skills.

EAP textbooks, adopted as primary EAP course materials, often include pre and post tasks, though students often complete them without understanding their purposes or relevance to future studies. During-stage tasks are often absent or poorly developed. EAP teachers can supplement course materials with during-stage tasks to enrich students' academic preparation, and introduce them to strategies that could have immense value in their futures.

Devise tasks that require students to revisit materials purposefully

EAP students are not accustomed to revisiting course materials for well-defined purposes. Yet that is exactly what they will need to do in future classes to make sense of the dense, lengthy, and challenging texts that they are assigned to read; study for exams; draft papers; plan oral presentations; and contribute to study-group discussions. EAP students benefit from tasks that oblige them to revisit materials for authentic, explicitly stated purposes such as these (from Stoller, 2002):

- confirming and clarifying understanding;
- evaluating information;
- exploring relationships among different ideas, chapters, and other information sources;
- finding contradictions;
- personalizing information;
- reviewing for a quiz;
- searching for details;
- sharing information;
- synthesizing information from varied sources.

An added benefit that results from what we might call “revisiting tasks,” especially in the case of rereading, is that they help students develop their reading fluency.

Make use of model texts

The written and aural materials that are integrated into EAP instruction can serve numerous purposes, including training students in targeted skills (e.g., reading and listening) and providing models of text types that may be encountered in regular classes. EAP students benefit from becoming familiar with the linguistic, non-linguistic, and organizational features of these genres so that they can better comprehend and produce them (Hyland, 2004; Johns, 1997; Tardy, 2009; Wingate, 2012). EAP teachers can guide students in discovering genre features by means of numerous genre-analysis tasks, involving text previewing, critical reading and listening, scrambled paragraphs, the explicit teaching of signal words, and the use of graphic organizers (discussed below).

One instructional approach that combines the consideration of target-genre models (entire texts, full sections, excerpts, and textual elements, such as figures and tables) with their analyses is the iterative *read-analyse and write* approach advocated by Stoller and Robinson (2015; see also Tardy and Courtney, 2008). With this approach, students are guided in their analyses by focusing on audience and purpose, organization, conventions (particular to the genre), grammar and mechanics (that run across genres), and mode of presentation (e.g., prose or graphics). By analysing genres across these dimensions, students learn to identify

Table 43.3 Five essential components of writing^a

<i>Components</i>	<i>Example features</i>
Audience and purpose	Level of formality Level of detail Word choice
Organization	Broad organization (main sections) Moves and submoves within each section (Swales, 1990, 2004)
Conventions (specific to the genre or academic discipline)	Formatting of tables and figures, in-text citations and references Use of abbreviations Use of verb tense and voice
Grammar and mechanics (which run across academic genres)	Parallelism Punctuation Subject–verb agreement Word usage
Mode of presentation	Graphics (e.g., tables, figures, graphs) Prose

Note

a Adapted from Robinson, Stoller, Costanza-Robinson, and Jones (2008)

and appreciate the various features that must coalesce to meet academic, and possibly disciplinary, expectations. Instructionally, this approach represents a manageable way to break down larger analytic tasks into smaller, more achievable goals. Table 43.3 expands upon these areas in the context of classes that focus on analysing written texts.

After reading and analysing examples of the target genre (and its parts), students begin to write using excerpts as models. While writing, students return to the sample texts for additional rounds of reading and analyses, to check, verify, or seek further insights into the genre that they are trying to emulate. By means of this iterative cycle—accompanied by explicit instruction, discussion, practice, and feedback—students develop the skills needed for access to and control of the genres that will be important for them (Tardy, 2009). Similar steps could be taken with models of other genres (in some cases videotaped) that students will need to produce, including oral presentations, PowerPoint presentations (with or without accompanying hand-outs), and group discussions.

Use graphic organizers to raise EAP students' awareness of discourse organization

Tasks involving the use of graphic organizers (Jiang, 2012; Jiang and Grabe, 2007, 2009) contribute to EAP students' awareness of discourse organization. Graphic organizers (i.e., visual displays such as timelines, sequence charts) help students recognize recurring patterns and their variations in written and spoken materials. Students' active engagement in filling in graphic organizers with information from the materials being used in class, such as definition-of-term frames (Figure 43.1) or sequence charts (Figure 43.2), not only raises students' awareness of common discourse patterns but it also promotes comprehension. Completed graphic organizers can be used to transition students from reading to writing tasks, minimizing instances of plagiarism.



Figure 43.1 Definition-of-term graphic organizer



Figure 43.2 Process or sequence graphic organizer

Devote time to fluency tasks

EAP students do not often realize, before enrolling in regular classes, how their lack of fluency (in reading, writing, and/or speaking) can impact their academic performance. Students are typically surprised to learn how much they will have to read in regular classes and how accountable they will need to be for textual information. They do not recognize how limited reading fluency might negatively impact their reading comprehension, ability to complete reading assignments, and chances for academic success. Similarly, they do not comprehend how much time will be needed to complete written assignments in and out of class; and, for those who lack fluency in speaking, they may not grasp how it will hamper their ability to communicate with classmates and instructors.

EAP tasks targeting fluency development are worthwhile. Reading fluency tasks, for instance, are rarely standard EAP textbook features. Such tasks can be devised around the materials that students are assigned to read (Grabe and Stoller, 2011). One of the most efficient ways to promote reading fluency is by asking students to reread materials for different, explicitly defined, purposes. Parallel tasks could be devised for writing and speaking fluency development.

Engage EAP students in elaborated tasks with tangible academic outcomes

One way to engage EAP students in the academic process is through elaborated tasks and projects (Beckett and Miller, 2006). When project-related materials and tasks are geared toward students' EAP needs, students engage in relevant sequences of tasks (e.g., information gathering, processing, and reporting). Through such tasks, students' language and content learning improve in addition to their self-confidence, motivation, and engagement (Stoller, 2006). The importance placed on tangible outcomes (e.g., multimedia presentations, posters, PowerPoint presentations, written reports) permits students to set achievable goals, track their progress, and assess the results of their work. When outcomes are prepared with real audiences in mind, a degree of authenticity is added to the projects, unlike so many language-classroom activities.

Future directions

Ongoing needs analyses

EAP professionals and students benefit from ongoing commitments to needs analyses, locally and in broader EAP contexts. The results of recent needs analyses are useful, but they cannot be seen as fixed depictions of EAP student needs, which evolve with changes in classroom delivery, assignment types, the demands of technology, and EAP student populations. It used to be, for example, that lectures were given in teacher-fronted modes. The talking-head videos that accompanied published EAP textbooks in the past were not particularly effective, and now they are terribly dated. Today's lectures are often supplemented with PowerPoint slides, video streams, and hand-outs. Materials and tasks need to be developed that reflect current academic practices. A decade ago, web-based learning management systems (LMSs) were not standard components of university instruction, but they are in many settings now. LMSs offer virtual tools for (a) delivering, managing, and supporting classroom instruction; (b) posting written documents and videos for easy student access; (c) viewing students' work and providing online feedback; (d) encouraging online "discussions" among students; and much more. Linking EAP classes to LMSs, to model the realities of regular classrooms, is the ideal. If that is not possible, creating tasks that simulate the demands of LMSs is beneficial. Because of such changes, ongoing needs analyses are critical; those who conduct them should share results with professionals in the field so that everyone can keep track of EAP students' evolving needs.

New technologies in EAP materials and tasks

Similarly, the use of technology in EAP materials and tasks should keep up with the realities of academia. EAP students benefit from learning to communicate electronically in ways that are academically appropriate, and to use technology for common academic tasks (e.g., accessing and submitting course materials on LMSs, using electronic library databases, communicating with instructors and classmates through e-mail, crafting and giving effective PowerPoint presentations, consulting online collocation dictionaries, and conducting Internet searches). EAP practitioners should align materials and tasks, to the best of their abilities, to the new realities of technology that is used for academic purposes (Kiddle, 2013). The incorporation of technologies into EAP instruction—including concordancers, online corpora, smart phones, digital audio and video, podcasts, weblogs, wikis, web quests, discussion boards, massive open online courses (MOOCs), TEDs, YouTube—adds relevance to students' EAP preparation (Alexander, Argent, and Spencer, 2008; Walker, 2014). Blended EAP course delivery (Mishan, 2013), through a combination of more traditional and electronic materials and tasks, has also recently become a reality. Adding to the mix are open educational resources (OER)—freely accessible, openly licensed digitized documents and media in the public domain—that can be considered for EAP teaching, learning, and assessment (Blyth, 2014).

A call for more empirical research

At present, we have an incomplete understanding of EAP teaching materials and related tasks because of the limited research on their actual use by teachers and learners, their effect on students' learning, and their influence on classroom discourse, among other areas (Garton and Graves, 2014; Tarone, 2014; cf. Guerrettaz and Johnston, 2014; Harwood,

2014; Tomlinson and Masuhara, 2010). The field would benefit greatly from less anecdotal reporting on EAP materials and tasks, and more systematic research that controls for other variables influencing language learning (see Garton and Graves, 2014, who propose various research agendas).

Further reading

Alexander, Argent, & Spencer (2008); de Chazal (2014); Tomlinson (2013); Tomlinson & Masuhara (2010)

Related chapters

- 2 General and specific EAP
- 23 Undergraduate assignments and essay exams
- 25 Textbooks
- 36 EAP pedagogy in undergraduate contexts
- 42 Needs analysis for curriculum design

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44

CALL AND ELECTRONIC MEDIA

Soobin Yim and Mark Warschauer

Introduction

Technology-mediated research, writing, and collaboration are core components of academic work in today's world. Recognizing this, researchers and teachers are increasingly exploring how use of digital media helps to improve students' development of English for academic purposes (EAP). This chapter provides an overview of computer-assisted language learning (CALL) research that is particularly pertinent to EAP teaching and learning. It discusses historical developments and critical issues of EAP-relevant CALL research, as well as the tool applications and main research methods that have particular affordances for EAP instruction and research. Through this overview, we aim to explore the potential of CALL and electronic media, which lies not only in enhancing the learning and teaching of EAP language skills, but also in promoting broader participation of second language (L2) students in academic discourse communities.

Historical discussion

Perspectives on CALL have shifted over the years, paralleling the shifts in language learning theories and approaches to language teaching (Kern & Warschauer, 2000; Warschauer, 2004). The major theoretical perspectives are illustrated in Table 44.1, summarizing the difference between the three perspectives in terms of principal role of technology, objectives, and exemplary use in EAP contexts. The multiplicity of roles and contexts that technology has assumed over time has contributed to the development of both CALL and EAP, and informs our understanding of current practices and options.

The first phase, *structural/behavioristic CALL*, derived from the dominant behaviorist theories of language learning in the 1960s and 1970s (Warschauer, 1996). The prime focus of structural/behavioristic CALL is rooted in the structuralism of language teaching, which mainly adopted grammar-translation and audiolingual methods. With the objective of improving learners' accuracy, EAP-related CALL research under this framework focused on the effectiveness of online drill tools and related academic reading programs designed to teach grammar and vocabulary.

The next generation, *communicative CALL* (1980–1990s), utilized communicative tools that incorporated a wider range of student choice, control, and interaction compared to the

Table 44.1 CALL framework and application to EAP (modified from Kern & Warschauer, 2000)

<i>Framework</i>	<i>View of language teaching paradigm</i>	<i>Principal role of technology</i>	<i>Principal objective</i>	<i>Technology examples in EAP</i>
Structural/behavioristic CALL (1960s–1970s)	Structural (a formal structural system); Grammar-translation & audio-lingual approach	To provide unlimited drill, practice, tutorial explanation, and corrective feedback	Accuracy	Vocabulary drills, grammar checker
Communicative CALL (1980s–1990s)	Cognitive (a mentally constructed system through interaction); Communicative Language Teaching	To provide communicative exercises through language input and analytic/inferential tasks	Fluency	Multimedia simulation software, concordancing
Integrative CALL (21st century)	Sociocognitive (developed in social interaction through discourse); community of practice; EAP/ESP	To provide authentic contexts for social interaction; to facilitate access to existing discourse communities and the creation of new ones	Agency (the satisfying power to take meaningful action and see the results of our decisions and choices, from Murray, 1997, p. 126)	Computer-mediated communication and social media integrated in EAP instruction, online academic forums

drill and practice programs (Warschauer, 1996). Grounded in the cognitive view of language learning (e.g., language as an internal mental system developed through interaction), this approach aimed to enhance learners' fluency by giving them opportunities to manipulate linguistic input. For example, concordancing programs support the process of deductive learning of academic vocabulary by exposing students to multiple occurrences of keywords from designated corpora in context.

The more recent approach of *integrative CALL* broadly emphasizes meaningful interaction in authentic discourse communities (Kern & Warschauer, 2000). This approach is grounded in the sociocognitive view of language as a process of apprenticeship or socialization into particular discourse communities (Gee, 1996). Common research topics include students' authentic and purposeful learning of academic study skills using social media, as well as collaborative processes of knowledge, discourse, and identity development through online platforms.

Finally, it is important to note that the historical development of CALL should not serve as a record of outdated methodologies, but rather as a window of options that EAP teachers can skillfully adopt in the appropriate context. Effective integration of technology depends on the affordances of the particular technology and the ways its strengths and challenges can be coordinated as a pedagogical tool (Levy, 2009).

Critical issues

In today's knowledge economy, one of the biggest challenges for EAP learners is to effectively engage in collaborative research and writing. As communicative technologies improve, pair or group collaboration has become increasingly important in academic research and publication. In what Pearce et al. (2010) call the "digital scholarship" age, the use of web-based communication technology has become "a necessary, but not sufficient, condition for a radical opening up of scholarly practice" (p. 40). Hence, EAP researchers are increasingly aware of the role of CALL and electronic media in apprenticing learners to enhance their technology-mediated collaboration, which involves participating, communicating, sharing information, and co-constructing knowledge in academic disciplines (Hamp-Lyons, 2011).

Many L2 researchers are interested in how social media tools, such as educational wikis, blogs, and cloud-based platforms, can provide students with opportunities to access collaborative learning environments (Kuteeva, this volume). Studies have suggested that these tools help strengthen L2 students' academic identity and authorship, enhance their confidence in and motivation for writing, and facilitate the development of writing skills (see Table 44.2 for research examples). However, empirical research on the effects of incorporating these media tools into L2 learning environments is still in its infancy stage (Golonka et al., 2014), particularly in the EAP context. Further research is needed in order to, for example, investigate how specific characteristics of technologies (see Table 44.2; Miyazoe & Anderson, 2010) may have differential effects on students' collaborative feedback and revision patterns.

Maximizing the value of these writing environments requires careful training of students in the nature and stages of collaborative writing. Academic writers need to reflect on why and how the negotiated changes are made during the process, as well as to understand the complex collaboration process, which includes role-assigning, planning, brainstorming, drafting, reviewing, revising, and editing (Calvo et al., 2011), and collaboration patterns (joint writing, parallel writing, single writing with feedback, Noël & Robert, 2004). Researchers have also warned that without a clear goal and guidance, students are reluctant to participate in the collaborative writing process. For example, students tend to express discomfort about having their unfinished work seen by others (Parker & Chao, 2007), or about editing others' work due to their concerns regarding their own editing skills (Lund, 2008).

Automated writing evaluation or peer review systems can facilitate the necessary training to be involved in the diverse patterns and stages of collaborative academic writing by guiding students through feedback and revision processes. For example, Scholar, an online peer review tool, helps students identify the flow of collaborative knowledge production by providing distinct work space for the "creators," who are the main authors, the "contributors," who review and annotate works, the "publishers," who coordinate groups in the collaborative knowledge production flow, and the "community," which reads and discusses works (Cope et al., 2013). This program also has a self-review window that helps students reflect on the changes they have made from version to version. A similar web-based reciprocal peer review system called SWoRD (scaffolded writing and rewriting in the discipline) uses the entire cycle of the journal publication process as its practice model (Cho & Schunn, 2007). These tools are designed to enhance the metacognitive and reflective processes that are considered important components of becoming a successful academic writer.

iWrite, an online academic writing system designed for engineering students, is another collaborative writing tool that can be helpful in EAP contexts. This tool provides support for assigning topic-specific writing tasks and automated feedback, as well as analyzing group revision behaviors and patterns of collaboration through functions such as the revision

Table 44.2 A typology of social media in L2 post-secondary academic writing contexts

	<i>Technological characteristics</i>	<i>Research examples</i>	<i>Key findings</i>
Academic forums	Threaded presentation; controlled by moderator; one or more administrators; editing typically not allowed	Kol & Schcolnik (2008)	The use of academic forum in an EAP course was perceived as positive, but there were no significant improvements in students' writing.
Blogs	Reverse chronological presentation; controlled by author; one administrator; editing by creator	Noytim (2010)	The use of blog helped increase the sense of authorship, self-reflection, and self-expression.
		Sun & Chang (2012)	Blog served as a learning community through multiple channels of online social support.
		Bloch (2007); Sun & Chang (2012)	Blog served as a forum to bridge L1 with a more academic form of L2 English.
Wikis	Final product with revision processes displayable upon request; open structure; multiple administrators; enables asynchronous editing by multiple users	Turgut (2009)	The use of wiki led to improvements in students' idea-sharing, critical feedback, confidence, and motivation in writing.
		Mak & Koniam (2008)	Collaborative feedback and revision in a wiki led to a greater quantity, quality, and coherence of written text.
		Kuteeva (2011)	Wiki-based academic writing contained a high use of reader-oriented features and interactional metadiscourse markers, suggesting the potential role of wiki use in raising reader awareness.
		Aydin & Yildiz (2014)	Different task types (e.g., argumentative, informative) facilitated varying levels and amounts of collaborative feedback and revision behaviors.
Google Docs	Final product with revision processes displayable upon request; open structure; one or more administrators; enables both synchronous and asynchronous editing; simultaneous auto saving	Kessler et al. (2012)	Collaborative space helped increase student participation and focus students' attention on the accuracy of their texts and their revision practices; students perceived the collaborative process as a positive and productive experience.

map or the topic evaluation chart (Calvo et al., 2011; Southavilay et al., 2013). Analysis has revealed that high writing performances achieved by students are related to the students' approach in using iWrite, and not necessarily whether they used the tool (Calvo et al., 2011). The finding confirms the prime role of the pedagogical approach in utilizing collaborative online tools to improve students' academic writing ability.

Current contributions

This section discusses the affordances of CALL applications that are particularly well suited to teaching and learning academic reading (textual scaffolding), vocabulary (concordancing program), and writing (automated feedback and evaluation). While a wide range of available CALL tools have contributed to EAP, this section limits its discussion to these three applications, which hold significant affordances for both academic content learning and domain-specific language skills.

Textual scaffolding

With advances in technological development and research on reading processes, a number of textual scaffolding tools have been developed to support struggling readers in coping with the challenge of analyzing complex academic texts. As summarized in Table 44.3, technology-based reading environments transform electronic text to increase its accessibility and comprehensibility (Anderson-Inman & Horney, 2007). Techniques range from embedded translational supports (e.g., online dictionaries), to illustrative supports with multiple modalities (e.g., audio, video) and enrichment supports with hyperlinks to useful resources (e.g., background information, concept maps).

More recently, syntactically-based text scaffolding tools have gained attention as a way to help L2 readers both read and learn to read. Compared to spoken English, academic English is characterized by the use of expanded noun phrases and nominalizations, a lack of contextual cues, complex grammatical features, and a less explicit use of logical linkages such as conjunctions (Snow, 2010). Text reformatting tools that provide more explicit syntactic cues at the phrase or sentence level have the potential to help L2 students understand complex layers of meaning, thus enhancing comprehension of academic reading texts (Warschauer et al., 2011).

Recent technological developments using eye-tracking and cognitive science provide an advanced approach to increase text accessibility and readability of lengthy web documents. For example, the visual syntactic text formatting (VSTF) tool presents text in a cascading pattern (see Figure 44.1). Such a pattern is a more accurate measure of the human eye span and highlights the syntactic meaning units of texts, enhancing the readability of massive online texts (Walker et al., 2005). Based on eye-tracking and natural language processing techniques, VSTF breaks up sentences along salient clause and phrase boundaries, as well as highlighting the content verbs. These techniques result in visual clusters across multiple rows to denote syntactic hierarchies of dense texts (Walker et al., 2005). Jenga, a similar syntactic parsing tool, converts text into a block-shaped Jenga format by using white spaces to divide a paragraph into interlocking sentences (Yu & Miller, 2010).

Students using these syntactic scaffolding tools have shown improvement in their reading comprehension (Walker et al., 2007; Yu & Miller, 2010) and retention of academic content, for example, in social science (Walker et al., 2007). These findings suggest the potential benefits of using this tool in disciplinary-specific contexts to support the complex process

Table 44.3 Types of textual scaffolding and exemplary applications in EAP (modified from Anderson-Inman & Horney, 2007)

<i>Type</i>	<i>Description</i>	<i>Applications in EAP</i>
Presentational	Enables the text and accompanying graphics to be presented in varying ways, hence customizable to meet the needs of individual readers	Basic MS Word or web-based word processing programs that enable the adjustment of text (e.g., font size, style, text, background color)
Navigational	Provides tools that allow the reader to move within a document or between documents	E-books with across/within-document links, embedded menus, links from other resources such as table of contents, glossary, bibliography
Translational	Provides a one-to-one equivalent or simplified version that is more accessible or familiar to the reader	Text modification or reformatting tools that provide simplified or sophisticated versions provided for varying reading levels
Explanatory	Provides information that seeks to clarify the what, where, how, or why of some concept, object, process, or event	Online reading programs with scaffolding questions or background information
Illustrative	Provides a visual representation or example of text designed to support, supplement, or extend comprehension of the text	Multimedia glosses with photos, simulations, videos, sounds, music that illustrate the definition, topic, or concept of the given word or sentence
Summarizing	Provides a summarized or condensed way of viewing some feature of the document	Graphic organizers or text-mining tools that provide concept map, list of key ideas, chronology, which may support summarizing
Enrichment	Provides supplementary information that adds to the readers' appreciation or understanding of its importance or historical context	Hyperlinked texts with broader background information (e.g., publication history, biography of the author, influence on other writers)
Instructional	Provides prompts, questions, strategies, or instruction designed to teach some aspect of the text or how to read and interpret the text	Reading tutorials with instructional prompts, study guides, or embedded study strategies
Notational	Provides tools for marking or taking notes on the text to enable later retrieval for purposes of studying or completing assignments	Annotation tools with electronic highlighting, bookmarking, margin notes, or outlining
Collaborative	Provides tools for working or sharing with other readers, the author, or some other audience	Collaborative platforms such as blogs, wikis, Google Docs, that support threaded discussion, online chat, e-mail or hyper links
Evaluational	Provides materials, prompts, and assignments designed to assess student learning from the text	Reading assessment tools with questions, quizzes, tests, surveys, online interviews, assignments leading to products

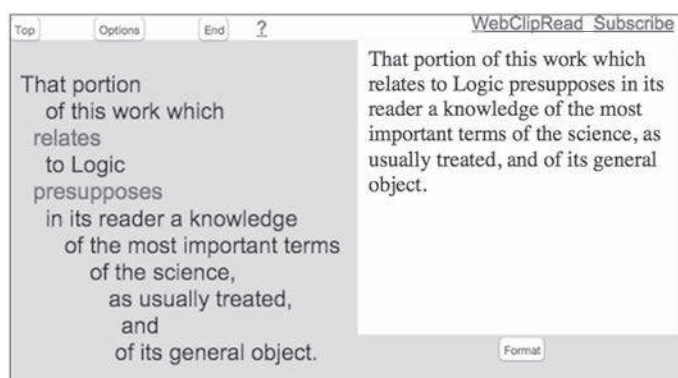


Figure 44.1 VSTF format (on the left) and block format (on the right) text

Text source: George Boole (1854), *An investigation of the laws of thought*

of comprehending content-area academic text with multiple layers of meanings due to the saliency of syntactic structures. Most interestingly, there is some evidence that use of these programs may help students develop their reading skills, even on reading passages that are in traditional block format (Walker et al., 2005). This presumably occurs through developing students' understanding of the structure of written English, or simply by increasing their confidence in reading. Further research is needed to confirm these results as well as to better understand the possible underlying mechanism.

Concordancing

One of the major applications of computers in EAP teaching and learning is the use of corpora and concordances (Hamp-Lyons, 2011; Yoon, 2011). Corpora have been deployed in EAP for decades. Today, with a range of corpora and concordancing software now freely available online, including the British Academic Written English corpus (BAWE), the Michigan Corpus of Academic Spoken English (MICASE), and the International Corpus of Learner English (ICLE), researchers are exploring a wide range of ways to incorporate online concordances into EAP instruction (see Nesi, this volume).

Several studies have examined the effect of using concordances on academic vocabulary acquisition. Kaur & Hegelheimer (2005) showed that a concordancing approach combined with the use of an online dictionary is more effective than online dictionary use without concordancing in helping students write sophisticated academic language. Others have reported how the use of a specialized concordancer intended to teach a specific grammar and vocabulary unit helps L2 academic writers' metacognitive development, for example, in understanding the use of connectives (Cresswell, 2007). Chang and Kuo's (2011) study examined how a discipline-specific concordancer guides L2 computer science majors through the process of analyzing disciplinary vocabulary, move structure, and discourse conventions. Their study suggested that the tool helped improve students' writing outcomes, as well as their awareness of rhetorical moves and their functions. Qualitative examination further suggested improvements in students' competence, responsibility, and independence as writers through use of the software (Yoon, 2008).

However, there are some elements to be cautious of, including a lack of rigorous observation and logical reasoning during corpus investigation (Kennedy & Miceli, 2001), and a lack of long-term retention of the lexicogrammatical awareness gained through corpus

use (Gaskell & Cobb, 2004). Presenting marked variations in corpus use among three adult L2 learners with differing language proficiencies, Kennedy and Miceli (2010) stressed that requisites for effective concordancing, especially among students of lower proficiency, are explicit learner preparation and ample practice. They conclude that mastering corpus consultation is a gradual, long-term process that needs to be treated as an integral part of the overall language-learning process. They propose to integrate training in the use of corpora through a series of homework and class activities throughout the curriculum so as to monitor and overcome learners' difficulties and possible negative responses. Obstacles and pessimistic feedback, they claim, are expected in the early stages of mastering an important but challenging tool, such as concordancing. Given that there are only a few freely accessible academic writing websites that utilize concordancers, it would also be desirable to develop more EAP concordancers that can provide a genre-based and corpus-informed approach for writing research articles in specific disciplines (Chang & Kuo, 2011).

Automated feedback and evaluation

Automated scoring programs have been used in EAP since at least the 1970s. Their presence has been necessitated by the high demand for academic writing skills and the need for practice opportunities. These automated scoring programs assign essays a numerical rating based on their similarity to prototypical essays previously scored by human raters (for an overview, see Warschauer & Ware, 2006). Some have criticized these programs as conflicting with the goals of a sociocognitive approach to writing, warning that their prevalence leads to the potential demotivation of student writers (e.g., Chen & Cheng, 2008). In the last two decades, these issues have been addressed in part with the development of broader automated writing evaluation (AWE) programs, which combines an automated scoring feature with a range of other tools (e.g., model essays, scoring rubrics, graphic organizers, word banks, discussion boards, chat system) that can support an interactive writing process (Grimes & Warschauer, 2010).

Research on major AWE programs such as the Criterion e-rater, MY Access!, and Intelligent Essay Assessor has reported the tools' affordances in facilitating more writing practice and improvement in students' motivation to write and revise (e.g., Burstein et al., 2003). The programs have also been found to ease classroom management by offloading response to earlier drafts to the software (Grimes & Warschauer, 2010). In recent years, many studies on AWE used in L2 academic contexts have emphasized that automated feedback should be used in conjunction with teacher feedback, ultimately supplementing, but not substituting for, classroom instruction (Cotos, 2011; Hyland & Hyland, 2006). For example, Chen and Cheng's (2008) study of L2 college students' use of AWE in academic writing revealed that AWE was perceived more favorably by students when it was used in the early stages of the writing and revising process, followed by feedback from both the teachers and peers. This study also revealed that more advanced learners expected AWE to allow content-specific feedback and interaction with readers, as well as help transcend conventional writing styles.

In recent years, progress in computational linguistic approaches such as textual machine learning and natural language processing (NLP) techniques has favored the development of better-targeted and more sophisticated AWE tools tailored to meet the disciplinary needs of academic writing. For example, the Intelligent Academic Discourse Evaluator (IADE) analyzes the writer's use of discourse conventions within a specific section (e.g., introduction) and generates individualized and discipline-specific feedback on the

appropriate use of discourse markers (Cotos, 2011). With the help of preprogrammed scripts, percentages of the move distribution in the students' draft are automatically calculated and compared with the distribution of moves in the corpus of the students' academic field. Cotos' (2011) study of international graduate students' use of IADE found that the tool helped raise students' awareness of genre and discourse form and improved the rhetorical quality of their writing.

The multi-faceted information about student writing available through AWE can support teachers' long-term instructional plans and assessment, for example, when integrated into a teacher dashboard (Grimes & Warschauer, 2010). Using programs that include such dashboards, teachers can view spreadsheets that record student scores, frequency of revisions, minutes spent on a task, questions asked, and error analysis reports. This may serve as a valuable assessment resource as it creates longitudinal portraits of student work, which helps track progress across time. AWE's potential to support the iterative and collaborative process of EAP writing and publishing appears promising. Nevertheless, only a few studies have investigated AWE in EAP contexts, and those studies mainly focus on writing outcomes, not the learning process (see discussion in Cotos, 2011). Given that the success of AWE largely depends on how educators implement and integrate the tool within a social writing process (Chen & Cheng, 2008; Grimes & Warschauer, 2010), additional research is needed to demonstrate the benefits and challenges of the tool's classroom applications, and the contextual factors that contribute to its successful use.

Main research methods

Both case studies and experimental studies are commonly employed in technology-mediated EAP research. Given the rapidly changing trends of educational technologies, case studies employing measures such as interviews, surveys, classroom observations, content analysis of teacher logs, lesson plans, or chat discussions can help explore and document teachers' and students' use of new tools (e.g., Liu & Jiang, 2009; Hafner, 2014). At the same time, experimental and quasi-experimental studies measuring comprehension, deploying working memory measures (e.g., non-word repetition, reading span tests), or analyzing feedback and revision can focus more on quantifiable learning outcomes (Golonka et al., 2014). Both within and beyond case studies and experiments, two additional methods are potentially promising in exploring the use of digital media in EAP: computational text analysis and social network analysis.

Computational text analysis

Advances in a variety of computational linguistics tools have propelled research into linguistic and text characteristics of L2 academic writing. Such research aims to identify the challenges and needs for improvement in L2 writing. One of the earliest web-based text analysis tools that has been widely employed in EAP is Vocab Profile (Cobb, 2002), which performs lexical text analysis measuring the proportions of low- and high- frequency vocabulary and of academic work use (Coxhead, 2000). Using Vocab Profile, Cons (2012) revealed an overall lack of academic vocabulary use in L2 writing and a differential use of academic vocabulary by L2 students of varying language proficiencies. Compared to native English speaking peers and advanced L2 students, low-proficiency L2 students used limited academic words both in quantity and quality, for example, in creating cohesion and precision, and adding vivid detail.

Recent developments in natural language processing has opened up the possibility for a more sophisticated tool for analyzing linguistic features of L2 academic writing, including online text complexity measures such as Lexile (MetaMetrics) and Coh-Metrix (Graesser et al., 2004), and in-house programs such as SourceRater (Educational Testing Service). These text complexity measures provide information on both superficial linguistic features (e.g., word frequency, sentence length) and in-depth features (e.g., text cohesion) of writing. They are helpful in assessing text difficulty for materials selection, and also in enhancing teachers' understanding of the linguistic and textual characteristics of L2 academic texts compared to that of native speakers. For example, several studies used the Coh-Metrix to measure the differences in cohesion and lexical network density between native speaker and non-native speaker academic corpora (Crossley & McNamara, 2009). The findings revealed that L2 texts, compared to native speakers' texts, are characterized by an overuse of explicit cohesive markers and less dense lexical networks (Crossley & McNamara, 2009), suggesting the need for more instructional attention on the appropriate use of these markers in teaching cohesion.

Characteristics pertaining to discourse conventions and organization in L2 academic writing have also been widely investigated in EAP by using, for example, a tagging technology of corpus linguistics (see Nesi, this volume). More advanced textual mining techniques, although new to EAP research, have significant potentials to reveal L2 academic text characteristics (e.g., development of argumentation) or to elucidate processes of knowledge building and critical thinking in asynchronous discussion forums (Schrire, 2006). In collaborative writing research, new text mining tools specifically designed to extract information on writers' collaborative behaviors can quantify or visually represent the collaborative writing patterns (see Figure 44.2), particularly across large numbers of exemplars. These tools can provide important usage statistics, such as amount of writing and revision, number of words written, number of edit sessions that can be examined at the individual- and group-level. These usage statistics can also be studied over the course of time, which can provide rich insights into L2 students' academic writing and learning process in collaborative online environments.

Social network analysis

Many academic settings utilize social media tools such as blogs or wikis to integrate collaborative discussion, writing, and sharing. Social network analysis (SNA), which examines the articulation of a social relationship among nodes (e.g., individuals) through both quantitative (e.g., interaction frequency) and qualitative (e.g., observation, case-study) network data (Laumann et al., 1989), is a promising, yet less-investigated, method for exploring the opportunities and patterns of participation among L2 students in technology-mediated academic forums (Gallagher, 2012). Through modeling and visualizing interaction patterns (e.g., sociograms), these analyses can discern the form and frequency of participation across academic forums and situations, as well as the context-dependent factors of participation. Despite the potential for analyzing how EAP students network into academic discourse communities, only a few SNA studies have been carried out on technology-based interaction in L2 academic contexts.

As an example, Zheng and Warschauer (2015) conducted a social network analysis of L2 adolescent writers' online discussion threads and posts in classroom blogs over the course of a year. Their study found that interaction patterns changed from teacher-centered to student-centered. Interestingly, students with low English proficiency skills exhibited the fastest growth in group discussion frequencies, suggesting the potential of the blog as an

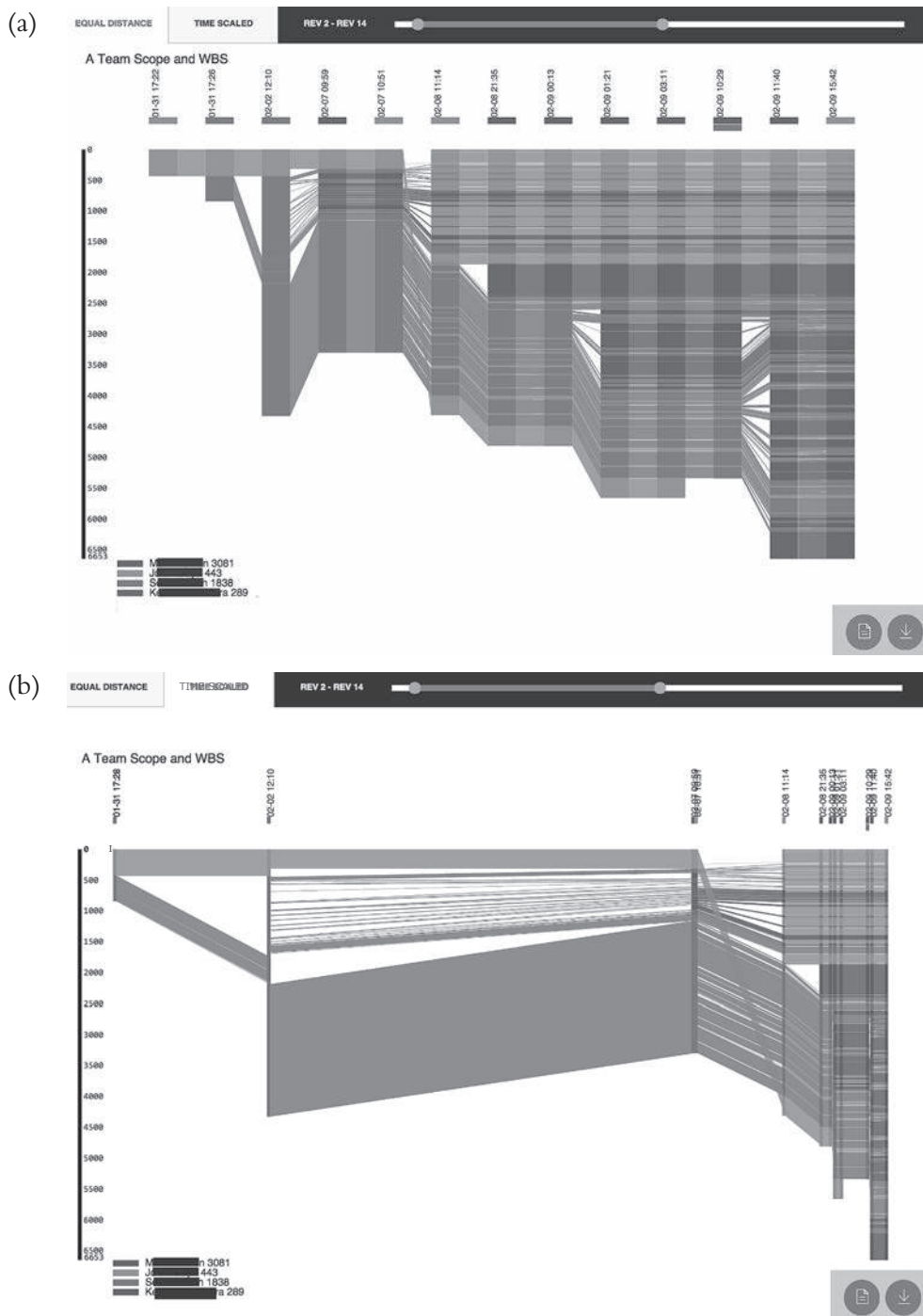


Figure 44.2 DocuViz tool that visualizes the revision history of a collaboratively written document on Google Docs (Olson et al., 2015)

Each column represents the editing sessions, with the heights of the bar representing the amount of text. Authorship of the segments of text is noted in different colors. (a) shows the slices in order of appearance; (b) shows the slices on a timeline, where one can see bursts of activity and then delays. The key at the bottom shows which person corresponds to which color and how many characters in the final document they contributed.

active participation channel for this otherwise marginalized group. Ferenz's (2005) qualitative study of a college EFL (English as a foreign language) academic writing course investigated the relationship between the audience network (i.e., with whom the students discussed their L2 writing tasks) and their desired social identity and future goals. Through interviews and analyses of online chat interactions, Ferenz (2005) found that those oriented towards their academic network reported a more organized, systematic pattern of decision-making in their writing. The result of Ferenz's study showed that L2 students' social identity when writing to their preferred academic audience networks differed from that presented to their non-academic audience networks. Considering the increasingly popular use of technology-based academic forums and their critical affordances as spaces for developing identity and a broader discourse community (e.g., Hafner, 2014), it is worth exploring the issue of L2 participation and interaction using a more diverse range of research methods, including SNA.

Recommendations for practice

Given the ever-increasing importance of academic collaboration, information sharing, and knowledge construction mediated by technology, digital media is increasingly valuable in EAP instruction. The diverse options of EAP technology tools, however, have to be carefully chosen and integrated depending on the instructional contexts and purposes in order to maximize their capabilities. In doing so, technology should be used to tailor instruction to a learner's needs and characteristics (Stevens, 1988), such as language proficiency. Students with lower proficiency often need more scaffolding support and explicit training, as seen in the examples of automated feedback (e.g., Chen & Cheng, 2008) or learner-centered use of concordancing programs (e.g., Kennedy & Miceli, 2010).

Although the main role of CALL in EAP lies in supporting the development of domain-specific academic skills, a need exists for broader research into how technology can support EAP students in developing individual and collaborative research skills that are based on robust information literacy (Stapleton, 2003). Such approaches could include, for example, multimedia projects for science experiments (e.g., Hafner, 2014) or WebQuest activities (e.g., Ramachandran, 2004) that guide students through the process of searching, evaluating, annotating, and citing the sources for their own disciplinary research. These approaches can also embrace collaborative writing platforms so that EAP students can apprentice their way into academic discourse communities, and develop appropriate disciplinary identity (Duff, 2010).

EAP teachers and researchers are also advised to consider students' naturally-occurring technology practices and discover ways to incorporate them into their curriculum and instruction. This will help teachers better understand how technology relates to both the personal and academic lives of L2 learners, and thus enhance student engagement (Yi, 2013). Out-of-school digital literacy practices typically involve a high volume of reading and writing reading and writing, but also present challenges such as frequent exposure to non-standard forms of English and the instability of online genres (e.g., Black, 2009). Instructional effort is needed to help students critically evaluate their digital literacy practices, for example, by implementing e-portfolios, in which students collect daily writing activities through social media and record their own reflections on how their writing may connect to academic literacy (Babae, 2012).

What remains crucial in implementing the technology-integrated EAP curriculum is the teacher's role: that of facilitating and guiding students in the language-learning process, as well as providing them with the appropriate materials and approaches that are currently within reach. EAP teachers should embrace their multiple roles as co-inquirers, researchers,

and instructors during the process of utilizing digital media in instruction. Lastly, teachers' personal and professional online networks can facilitate the sharing of technology skills, lesson plans and collaboration across disciplines, which enable more effective use of technology in the EAP classroom.

Future directions

This brief overview of technology-mediated EAP hints at the abundant opportunities that CALL and electronic media can provide for researchers and practitioners to better understand and help expand L2 students' academic language and literacy. Advances in computational analysis of texts are particularly worthy of attention due to their affordances to broaden the range and scope of EAP instruction and research. For example, new forms of machine learning can potentially allow more sophisticated automated analysis of text, thus providing not only scores to students but also more helpful feedback (see, e.g., Mayfield & Rosé, 2013). Similar machine learning techniques can enable automated agents to monitor and intervene in computer-mediated student discussion, generating questions and comments to help learners expand their thinking and writing skills. Existing software for analyzing texts can be better integrated into cloud-based environments to better scaffold students' use of vocabulary, syntax, and writing strategies, and also to help teachers assess students' individual development as writers. The wide variety of tools for scaffolding digital reading can also be better integrated, so that non-native students can easily and automatically access formatting, presentation, corpus, and networking tools to aid them in understanding and interpreting texts. In summary, teachers, scholars, and software developers interested in uses of digital media for EAP face a rapidly changing and highly promising terrain.

Further reading

Lawrence, et al. (2013); Onrubia & Engel (2009); Warschauer et al. (2004)

Related chapters

- 14 Acquiring academic and disciplinary vocabulary
- 16 Corpus studies in EAP
- 20 Multimodal approaches to English for academic purposes
- 33 Research blogs, wikis, and tweets

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ASSESSMENT OF ENGLISH FOR ACADEMIC PURPOSES

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Introduction

Assessment is a critical aspect of any English for academic purposes (EAP) program. In this chapter we start by distinguishing between testing and assessment, and discuss major purposes for assessment. We review the history of language assessment and EAP testing specifically, as well as current critical issues and topics in EAP assessment. Of particular importance in this section is the very definition of EAP. We then examine the current contributions of research to assessing EAP, and the research methods used to investigate it. Based on this review, we make recommendations for practice. Finally, we discuss future directions in testing, particularly with regard to the use of technology in test design and scoring.

We begin our consideration of EAP assessment by defining some critical terms. One area where clarification is needed is the frequent confusion between the terms “assessment” and “testing.” As Bachman and Palmer (2010, p 19) point out, these terms are often used interchangeably to describe a process by which information is gathered in order to make decisions about teaching and learning. For the sake of simplicity, in this chapter we use the term “assessment” primarily to refer to low-stakes, classroom-based assessments, and “tests” to refer to large-scale, standardized assessments that are used to make high-stakes decisions for teaching and learning such as university entrance or school accountability. By this definition, assessments take place in the classroom and are developed by teachers, and tests are developed by professionals and administered to large numbers of students on a school, district, state, national, or international level. In determining whether an information-gathering activity on student performance is a test or an assessment, we must start with the purpose and stakes of the activity. We have said that assessment tends to take place in a classroom and is conducted by an instructor, with the results informing the classroom. These results may be used summatively (William and Black, 1996) to assess students’ achievement as part of a grade, for example; or formatively to give information about the success or failure of what has been taught and learned (or not) in a specific course, or even whether the instructor should intervene to provide more support for a specific student. By contrast, tests tend to have a broader purpose with higher stakes. For example, a national, state, or district-wide test may provide information on not only the extent to which individual students are meeting the goals of a course but also to what extent individual teachers and schools are successfully teaching the intended material. Similarly, a test that students must pass to meet high school graduation or university entrance requirements is administered on a large scale, and has

serious ramifications for the students' future. Tests such as these are considered high stakes because the consequences for the student (in the case of graduation tests) and the teacher (in the case of district or state-wide tests) are high and surpass that of an individual course grade.

In addition to the stakes of a test or assessment, it is important to consider test purpose. Two of the most important test purposes for EAP are *proficiency* and *achievement*. A proficiency test is not tied to a particular curriculum but is intended to provide global information about language ability. Good examples of EAP proficiency tests are the Test of English as a Foreign Language (TOEFL) and the International English Language Testing Service (IELTS), which are used to determine a student's readiness for participating in academic settings. By contrast, assessments used in classes to determine the extent to which specific academic language or content goals have been attained are considered achievement tests. Two additional test purposes important for assessing English for academic purposes are *placement* testing and *diagnostic* testing. Placement tests are typically used within institutions to determine what level of English instruction is appropriate for students, and diagnostic tests are used to provide information about specific skills that students should work on. An example of a placement test is the English Placement Test given at the University of Illinois (www.linguistics.illinois.edu/students/placement/); a well-known diagnostic test of EAP is the Diagnostic English Language Needs Assessment (DELNA) developed by the University of Auckland in New Zealand (www.delna.auckland.ac.nz/en.html). Finally, we need to consider what makes a test academic rather than general in nature. A general proficiency test targets for measurement a student's ability to use the language for everyday purposes; test tasks draw from social and nonacademic contexts such as reading a newspaper comic strip or speaking with a sales clerk. An academic test seeks to simulate as much as possible an academic context; thus, it is crucial to ensure that the texts and test tasks in the assessment are academic in nature. Students in an academic English language class focused on reading will need to be assessed on their ability to read academic texts rather than general, everyday texts such as novels or magazines. Similarly, academic tests of listening should focus on listening to lectures or classroom discussions rather than, for example, announcements in airports. In summary, the assessment of English for academic purposes can range from classroom achievement tests to large-scale international proficiency tests. As with all tests, the test purpose and stakes need to be considered when designing or adopting an EAP test. What distinguishes EAP tests from more general tests of language includes the content or topics, the nature of the language used in the assessment, and the nature of the test tasks, which should all reflect academic settings. We discuss these issues in more depth below.

Historical overview

We begin our review of language assessment in general, and EAP assessment in particular, in the mid-twentieth century. In the 1950s and 1960s, especially in the US, the field of language testing was heavily influenced by measurement theory, with a strong emphasis on reliability of scoring and the minimization of measurement error (Behizadeh & Engelhard, 2011). Influential scholars in language testing at the time included Lado (1961), who advocated using discrete items to test language knowledge, and Carroll (1961), whose two-way matrix of aspects of language (orthography/phonology, morphology, syntax, lexis) and skills (reading, writing, speaking, listening) dominated language testing for many years. Objective tests, predominantly multiple-choice, were consistent with the dominant pedagogical tradition of grammar-translation or audio-lingual methods for second language teaching. The first major international large-scale test of English for academic purposes, the TOEFL, was introduced

by the Educational Testing Service (ETS) during this time, consisting of multiple-choice tests of vocabulary, reading comprehension, listening comprehension, and knowledge of correct English structure and grammar (ETS, 2011).

Starting in the 1970s, trends in language teaching towards more communicative language teaching (CLT) led to parallel trends in assessment. In second language pedagogy, the notion of CLT shifted the goals of language instruction from mastery of discrete forms and rules to developing communicative ability in the second language. This movement led to ideas about communicative language testing and influential models of communicative competence such as those of Canale and Swain (1980) and Bachman (1990). While multiple-choice testing still predominated in the US, there was a shift from discrete testing to more integrated test formats, such as cloze and dictation (e.g., Oller, 1971). During this time, ETS expanded its suite of EAP tests to include the Test of Spoken English (TSE), designed primarily for students wishing to become graduate teaching assistants in US universities, and the Test of Written English (TWE), consisting of a single essay written in response to a brief prompt (ETS, 2011).

One important component of a focus on communicative language in language testing was a new emphasis on analyzing real-word language use situations that examinees would be likely to encounter in school and other language use contexts. In terms of testing for academic purposes, this focus led to careful study of the academic tasks that university students faced in a variety of disciplines (e.g., Ginther & Grant, 1996; Kroll, 1979).

The 1980s brought the development of another large-scale international EAP test for prospective university students, the IELTS. This test was produced jointly by the University of Cambridge Local Examinations Syndicate (UCLES, now known simply as Cambridge English), the British Council, and the Australian International Development Programme (IDP). This replaced the short-lived ELTS, a test aiming at more discipline-specific academic language (with alternative versions for life science, physical sciences, humanities, etc.) which had been developed a decade earlier but proved impractical to administer on a very large scale (IELTS, n.d.).

The increase in the number of international students at universities, combined with the movement towards increasing access to universities to a broader population, led to the in-house development of placement and proficiency tests of academic skills for native and non-native speakers alike, particularly in the area of writing, and in some cases, reading. During this period, more composition and L2 writing specialists advocated successfully to replace indirect tests of writing with direct ones: typically, timed essays based on a prompt and scored on a holistic scale. White's (1985) influential book on writing assessment argued persuasively against indirect tests of writing, and promoted holistic scoring of writing. In L2 composition, interest in scoring compositions was rekindled when Jacobs et al. (1981) produced a widely used guidebook for assessing L2 composition through weighted analytic scales, incorporating information from L1 composition assessment practices but tailoring it to an L2 audience concerned with specifying linguistic aspects of writing more explicitly.

While the IELTS included a speaking portion from its inception, in the US, the testing of speaking for academic purposes was primarily restricted to the certification of proficiency for teaching assistantships. However, since the introduction of the TOEFL internet-based test (TOEFL iBT®) in 2005, speaking and writing are now explicitly tested on the TOEFL.

Up to this point we have considered EAP testing in terms of post-secondary education. However, in the past 20 years there has been increasing concern about EAP testing for younger learners. In the US, the passage of the federal No Child Left Behind (NCLB) law in 2001 has had a large influence in this area, because all US states are now required to

annually administer a standards-based assessment of English language proficiency for all English language learners. This law has resulted in the development of new tests of English for academic purposes such as the ACCESS test, developed by a consortium of 33 states (www.wida.us/aboutUs/mission.aspx). Development of the ACCESS and other similar tests has engendered new research into classroom language use in K-12 settings.

A recent trend of importance to EAP assessment is the development of natural language processing and corpus analysis tools. Increased use of these tools has led to two developments relevant to second language assessment. First, corpus linguistics has allowed for a greater understanding of the features of different genres of speaking and writing (see, for example, Biber, 1988; Biber, Connor & Upton, 2007; Swales, 1990, 2004). Large corpora such as the Michigan Corpus of Academic Spoken English (MICASE) and the International Corpus of Learner English (ICLE) have provided opportunities to research various aspects of language use such as vocabulary, syntactic complexity, and discourse moves. This research can inform both instruction and assessment by providing empirical evidence of how successful speakers and writers use linguistic resources in different genres and on different task types. Second, a natural extension of these automated tools has been the development of automated tools for scoring and providing feedback on speaking and writing (see Ware, 2011, for a discussion of automated feedback for L2 writers and Weigle, 2012, for a discussion of automated scoring). Some tests, notably Pearson's PTE Academic test (<http://pearsonpte.com/>), are now exclusively computer delivered and scored.

Critical issues

Perhaps one of the most critical issues in EAP assessment is how to define and describe the language to be tested, i.e., the construct. Here we follow the classic definition of Chamot and O'Malley (1994) as "the language used by teachers and students for the purpose of acquiring new knowledge and skills." (p 40). One implication of this definition is that the demands for academic language differ greatly depending on the academic setting, including student age, purpose of academic study, and demands that are specific to a particular academic context. Logically, the academic language needed for kindergarten students is vastly different than that needed for graduate studies. It is important to note, however, that, in both situations, students need to be able to both understand and use the language of that specific academic setting. Thus, academic language must be defined with a particular setting in mind; the more specific, the more specialized the language, and the fewer (if any) large-scale tests available to assess language for that setting.

In defining the domain of academic language, there are several other considerations as well. First, the use of academic language requires a strong awareness of sociolinguistic appropriateness across the settings in which it is used, from the classroom and interactions with colleagues to professional email exchanges and academic writing. Second, academic language consists of both spoken and written language, and students generally need control of both types of language to excel in an academic environment. Finally, the work of Biber and his colleagues (e.g., Biber et al., 2004, Biber, 2006) in collecting and analyzing academic language in university settings has demonstrated that academic language demands at the university level encompass both specific and general academic contexts. Specific academic contexts include courses and course materials, including face-to-face and online instruction, and reading materials and writing assignments for such courses. In terms of general contexts, students must be able to read, on paper and electronically, a variety of texts, from syllabi and directions for assignments, beyond the technical reading for any course.

Defining the domain of academic language use for younger learners requires a slightly different set of considerations. Research underlying the development of EAP tests for younger English language learners (ELLs) suggests that a critical area of academic language use is the ability of ELLs to understand the language of their instructors in academic settings. Valdes (2004) proposes that the development of academic language stems from the modeling of the different genres of academic language for students by their teachers; the lack of such modeling may have detrimental results for students' academic language ability. Furthermore, if mandated state tests presuppose student exposure to such language, students without extensive exposure to this language will not be able to perform well. Thus, the academic language modeled to students by their teachers is considered a critical area of academic language, perhaps more so at this level than at the post-secondary level.

The evolving construct of academic language presents several challenges for EAP testing. First, EAP tests measure only a portion of the academic language that students need to develop to succeed in an academic environment. Necessarily, a standardized test of any kind cannot possibly mimic the idiosyncratic linguistic requirements of any particular academic setting, nor can it reflect the interaction inherent in spoken and written academic environments. Second, such tests do not measure subject area content, and therefore do not necessarily reflect a student's ability to succeed in specific subject areas; that is, a potential student of chemistry may have the general academic speaking and reading ability to survive in a general academic environment but may lack the specific vocabulary and register for chemistry reading and discourse. Conversely, a student well versed in his or her specific academic area nonetheless needs the general academic language to navigate the academic environment beyond classroom content.

Current trends

Advances in our understanding of the nature of academic language along with developments in technology have led to new developments in how EAP assessments are created and delivered. This section focuses on two aspects of these developments: computer-based tests and the assessment of integrated skills.

Computer-mediated testing can provide faster results for students and other stakeholders and also reflects the current technology-driven academic environment for many university students, where online learning practices supplement and sometimes supplant face-to-face courses. At the same time, the development of such tests represents a great deal of effort on the test developer's part, because a computer-based test does not typically mean a direct transfer from paper and pencil to computer. Rather, such changes have required extensive research, including tryouts with students from the targeted population, to ensure not only that the test can be delivered in the computer format (feasibility) but also that students are tested on the same construct and receive similar scores as on a paper and pencil test (validity and reliability).

Since 2000, most international language tests used for admission to English medium universities (TOEFL, IELTS, Pearson) have transitioned, in part or in whole, to computer-mediated testing. The TOEFL iBT® is administered entirely on the computer, with a mixture of human and automated scoring, and the test tasks are quite different from the paper-based TOEFL. The IELTS, in contrast, is currently delivered by paper or computer; both versions are identical in format, and candidates are allowed to write their essays on paper or computer. The speaking portion of the IELTS continues to be a face-to-face interview (Green and Maycock, 2004). As noted above, the Pearson test is fully automated in

administration and scoring. K-12 English language tests in the US are also beginning a shift to computer-mediated administration. The ACCESS test mentioned previously is currently being transformed from a paper and pencil test (for reading, listening, and writing) and a face-to-face, one-on-one interview between a student and a test administrator (for speaking) to a four-skills computer-delivered test. The goal of this transformation is not to transfer the test directly from paper to computer, but rather to harness new technology to deliver a computer-based test that is more authentic, engaging, and administratively efficient than the paper-based test.

A second trend in EAP assessment is skills integration. Whereas in a test of general English ability for low-proficiency learners it is reasonable to test discrete skills (reading, listening, speaking, writing) separately, the case for separating skills is more difficult to make in academic settings because of the inherently integrated nature of academic language tasks. For example, students at a university are expected to attend lectures, read and discuss textbooks or journal articles, and then write papers using the information gleaned through the other skills. It may make more sense to think of “academic literacy” rather than “academic writing” in recognition of the integration of skills in academic settings. Large-scale tests like TOEFL now include integrated tasks where speaking or writing are based on short listening and/or reading passages, along with independent speaking and writing. Integrated writing tasks are also found in other international EAP tests, including the Canadian Academic English Language (CAEL) assessment and the DELNA in New Zealand (Cumming, 2014).

While integrated tasks are more authentic in terms of their relationship to academic tasks, they are not without their challenges. As Cumming (2014) notes, these challenges include developing high-quality integrated prompts that are easy for students to interpret, along with scoring reliability and rating. In particular, a task that integrates both reading and writing should be scored on a detailed rubric that outlines precisely what reading and writing skills are integral to success on the task. Cumming also notes that validity evidence needs to be gathered to ensure that a test using integrated tasks is measuring the intended skill(s), which may be a more complex endeavor than collecting evidence for tests of discrete skills.

Main research methods

A recent comprehensive overview of research methods in language testing can be found in Lumley and Brown (2005), who point out that, while quantitative methods have traditionally predominated in testing research, the past two decades have seen an increase in qualitative approaches to research as well. Quantitative research has been used to investigate both test reliability and test validity, in terms of the internal structure of tests and the validity of inferences based on test scores. The predominant quantitative methods can be generally divided into those that measure similarities between sets of scores (e.g., correlation, regression analysis), and those that measure differences (e.g., analysis of variance). Methods that look at similarities are used to address questions such as the degree to which one (often shorter, less expensive) can predict scores on another (possibly longer, more expensive) test; the degree to which test scores accurately predict success in future academic endeavors; or the degree to which different raters agree on scores of speaking or writing. The other major family of quantitative measures looks at group differences, addressing questions such as whether a test is biased for or against a certain group of test takers, whether tests can detect growth in language learning before and after an instructional period, or whether different test task types elicit different linguistic behaviors which in turn receive different scores.

Quantitative methods are frequently complemented by qualitative methods as the concerns of language testing specialists have broadened to include considerations of both process and product in language testing, and the impact of tests on individuals and societies. Lumley and Brown (2005) mention three main qualitative approaches that are important in language testing: discourse analysis, introspection (verbal report analysis), and ethnographic methods. We discuss these briefly here and then discuss how both quantitative and qualitative methods are used in test validation research.

Discourse analysis refers to a variety of techniques used to analyze and understand test discourse. An important example of discourse analysis in language testing is the role that discourse analytic techniques have played in revealing that the discourse produced in a one-on-one oral interview is qualitatively different from ordinary conversation, thus raising important validity questions about the use of an oral interview to predict performance in other types of interactions (e.g., Johnson, 2001; Lazaraton, 1992). Discourse analysis has also been used recently to investigate validity questions related to writing assessment as well. For example, Cumming et al. (2005) analyzed differences between independent and integrated (source-based) writing tasks, and Knoch and Elder (2010) conducted a discourse analysis of a diagnostic test of academic writing proficiency to investigate differences in the quality of student essays written under different time constraints.

Introspective methods refer to research that involves verbal self-reporting of cognition, primarily of test takers or test raters. Concurrent or retrospective verbal reports have been used to investigate the strategies used by test takers to answer various item types (Cohen, 1984, 1994; Gruba, 1999) and, increasingly, the strategies used by raters in evaluating writing (Cumming, 1990; Lumley, 2002; Weigle, 1994) or speaking (Brown, 2000).

Finally, ethnographic methods, which are meant to provide rich descriptive data of a particular context, include observations, interviews, and questionnaires (Lumley & Brown, 2005). These methods are particularly important in conducting needs analysis when designing tests, and, increasingly, in investigating the uses and consequences of tests in specific contexts. For example, Li (1990) studied the impact of a new test of English for university entrance on teaching in secondary schools.

We now turn to a discussion of how these various methods, both quantitative and qualitative, are used to provide validity evidence for tests. Cumming (2013) lists five areas in which validation research is important: content relevance, construct representation, consistency among measures, criterion-related measures, and appropriate consequences. In this section we define each area and discuss the most commonly used or recommended methods for each.

Content relevance

For a test of academic purposes, the test content should be reflective of the academic domain to be tested. Evidence of content relevance comes from either an analysis of the target domain (in this case, the academic setting) when designing tests, or an analysis of test content when adopting an existing test. Domain analysis research can involve such things as corpus analysis of spoken and/or written texts (e.g., Biber, 2006), observations of classroom interaction, task analysis, or other techniques in needs analysis (cf Bocanegra-Valle, this volume). Test content analysis typically involves expert judgments of test content but can also involve gathering information from test takers through interviews or focus groups.

Construct representation

Test tasks should measure the intended construct, and test results should reflect the construct and not unrelated factors. Qualitative research methods such as observations and surveys, analyses of test-taker responses, and think-aloud protocols of both test takers and raters can be used to investigate how well the test tasks elicit particular behaviors, and whether the scores reflect these behaviors as intended. Quantitative analysis of test scores can involve investigating whether different subgroups of learners score in different ways that are not related to the construct of interest (e.g., males vs. females).

Consistency among measures

It is important to ensure that tests are reliable; that is, that the test taker receives essentially the same score regardless of variations in the testing context. Important variables, particularly in a writing assessment, include task and scoring. If different prompts or test tasks are used for different test takers, or if test takers are allowed to choose what topic to write on, steps must be taken to ensure that the tasks or topics are equivalent in difficulty so that scores are not dependent on the particular task. Similarly, since human judgment is involved in scoring (except in rare cases in which scores are generated automatically via computer), it is important to ensure that different raters come to similar scoring decisions. Typically, quantitative methods such as correlations are used to investigate these issues. More sophisticated analyses of the influence of tasks, raters, and other aspects of the testing situation include generalizability theory (e.g., Bachman, Lynch & Mason, 1995; Gebril, 2009) and multi-faceted Rasch measurement (MFRM, e.g., Eckes, 2008). These quantitative measures, which can give an indication of how consistent the measures are, can usefully be complemented by more qualitative research methods such as think-aloud protocols or stimulated recall to investigate the reasons behind any lack of consistency.

Criterion-related measures

One measure of the validity of an assessment is the degree to which it corresponds to other measures of the same skill. For example, scores on an in-house test of academic writing might be compared to scores on a large-scale standardized test, grades on writing assignments, or teacher judgments of student writing ability. Typically, such studies are quantitative in nature and involve correlations (e.g., Powers et al., 2000; Weigle, 2010).

Appropriate consequences

One important area of validation research involves investigating the use of an assessment and its effects (positive or negative) on different groups of stakeholders. For example, mandatory assessments in schools for accountability purposes may lead to improvements in curriculum in some areas but may also lead to a narrowing of the curriculum in others; this phenomenon is frequently referred to as washback. Scholars in validity research from Messick (1989) to the present day have insisted that investigating test consequences and effects on systems such as schools or governmental policies and individuals (teachers, students, materials writers) is an important component of validity research. Such research is typically more qualitative than quantitative, involving ethnographic methods such as observations, interviews, and the like, rather than statistical analyses.

Recommendations for practice

EAP teachers need to be able to design their own classroom assessments as well as prepare their students for, and interpret the results of, any large-scale tests their students will face, whether they are school-based accountability tests or tests that will make a difference to their future, such as the TOEFL or IELTS. Here we discuss the process of test development and some considerations that need to go into the creation of EAP tests.

As any introductory textbook on assessment states, the test development process involves several stages that are iterative and not linear. Excellent advice for adopting, adapting, or developing tests can be found in Brown (2005), Chapter 2; for designing classroom tests in Brown and Abeywickrama (2010), Chapter 3; and, for developing tests of specific skills or in particular contexts, in chapters in any number of recently published handbooks and encyclopedias on language assessment, notably the *Companion to Language Assessment* (Kunnan, 2014).

The steps in test development for a professional examination include:

- (a) determining the test purpose
- (b) defining objectives
- (c) creating a test plan or test specification
- (d) writing items
- (e) reviewing and revising items
- (f) pre-testing and revising items
- (g) assembling a complete test
- (h) pilot testing
- (i) statistical analysis
- (j) creating a plan for administration, scoring, and score reporting
- (k) ongoing monitoring of the test.

For classroom tests or assessments, these steps will naturally be abbreviated depending on the stakes of the test and the amount of time and resources available; for example, few teachers have the luxury of being able to pilot test their instruments, but teachers may be able to review each other's tests before administering them to get feedback on clarity of instructions, content coverage, and so on.

An important issue to consider when designing an English test for academic purposes is the degree to which language and academic skills can be separated. For example, in a test of reading for academic purposes, some of the subskills of reading that are considered important by scholars include reading to learn and reading to synthesize information across multiple texts (see, e.g., Enright et al., 2000): skills that rely on cognitive processes that are not necessarily strictly linguistic. Indeed, at higher levels of second language proficiency, a test may be more of a test of academic skills than of language skills, as native speakers of English vary in their ability to succeed on such tasks. This becomes an issue if L2 speakers are tested and L1 speakers are not, for example in tests for international teaching assistants or writing placement tests.

There is a growing consensus that lack of academic vocabulary is an obstacle to student success (Nagy & Townsend, 2012) both in terms of general vocabulary and discipline-specific vocabulary. However, it is not always clear whether academic vocabulary should be assessed discretely or as part of a broader test of academic language. As Nagy and Townsend (2012) state,

because it is generally agreed that academic language cannot be isolated from the disciplinary content it is used to convey (Lesaux et al., 2010; Schleppegrell, 2004), it is unclear whether the best assessments for academic language interventions are measures of disciplinary knowledge or measures of those components of academic language that can be isolated for testing purposes.

Here again we see the tension between assessing discrete bits of language and assessing language in a specific context, which involves both language and disciplinary knowledge.

The final area that is worth mentioning here is the area of citation practices and the avoidance of plagiarism, which is a high-level academic skill that requires a long time to master. The movement towards source-based writing on tests inevitably brings with it questions of how students incorporate words and ideas from the source texts into their writing, and how different types of source use are valued by raters. One recent study (Weigle & Montee, 2012) suggests that raters have very different perceptions of how to evaluate certain kinds of textual borrowing in a source-based writing test, indicating a need for rater training on how raters should account for episodes of inappropriate borrowing when assigning scores to essays.

Future directions

An important new trend in EAP assessment is the expanding use of technology in assessment. As Douglas (2010) points out, language test developers have always incorporated new technologies into their assessments. With regard to technologies of the early twenty-first century, such as podcasting, Voice/Video over Internet protocols (VoIP), or simulated environments (virtual worlds), the question is not whether these technologies should be used, but rather how to use these technologies in a manner that is both responsible and efficient. Douglas poses the following essential questions:

- (a) What are the effects of the uses of technology in language assessment on test taker attitudes such as anxiety and motivation?
- (b) How does language performance differ with different technologies?
- (c) How does the use of technology affect the definition of the language ability construct we are attempting to measure?
- (d) How does technology affect the nature of assessment tasks that can be developed?
- (e) What are the limits of technology for scoring constructed response assessment tasks and how does automated scoring differ from human scoring?

(2010, pp. 116–117)

Douglas provides some potential answers to the applications of technology with assessment in general; here we discuss them in terms of their applicability to EAP assessment. First, in terms of motivation, the landscape has changed considerably over the past twenty years, when computers were less likely to be present in homes and classrooms. When the TOEFL went from paper and pencil to computer, for example, scholars were concerned that the computer interface might be unfamiliar and cause undue anxiety to test takers. These days, however, the opposite may be true—students are so used to working on computers that they may feel less motivated to take a paper and pencil test than to write on the computer. However, it is also important to note that technology may both help and confuse instructors, who may need additional technical support to navigate new technologies and, in fact, may in some cases be more reluctant than their students to embrace new approaches.

As for technology's effects on language performance, research has demonstrated that both reading and writing processes differ between paper and pencil and digital environments; it thus becomes important to specify the role of technology in the language use situation of interest. For example, in a test of English for academic purposes at the secondary or post-secondary level, in settings where students will be expected to access readings online, post responses to electronic discussion boards, or write research papers, the ability to use language through electronic technologies might very well be part of the construct to be measured, and thus important to include in test task design.

The area of automated scoring is one that has generated a good deal of interest in recent years; see, for example, a special issue of *Language Testing* devoted to automated scoring and feedback systems (Xi, 2010). While new technologies in assessment, such as automatic scoring, can decrease the costs of assessment rating, these technologies add a new layer of responsibility to the testing company to ensure that the ratings produced by automated scoring engines are consistent and as valid and reliable as those of human raters. Similarly, such efforts raise the question of potential student attitude toward a test they know is partially or completely rated by a computer rather than a human being.

In summary, new technology can be a boon to EAP assessment if it allows for innovative tasks that replicate authentic academic tasks; however, care must be taken to ensure that new technologies enhance rather than reduce assessment validity.

Further reading

Coombe, O'Sullivan & Stoyhoff (2012); Schleppegrell (2004); Shermis & Burstein (2013); Weigle (2002)

Related chapters

- 11 Language and L2 writing
- 35 The Common Core in the United States
- 36 EAP pedagogy in undergraduate contexts

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