Why EAP is necessary: A survey of Hong Kong tertiary students

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Abstract

This article revisits a question posed by Hyland [(1997). Is EAP necessary? A survey of Hong Kong undergraduates. *Asian Journal of English Language Teaching*, *7*, 77–99] in the Hong Kong higher education context: Is EAP necessary? The article presents the overall findings of a large-scale, multi-faceted investigation into the language problems experienced by Cantonese-speaking students at Hong Kong's largest English-medium university. Baseline data for the study were derived from a questionnaire survey of almost 5000 undergraduates from all 26 departments in the university. In terms of the number of student participants, the investigation is one of the largest ever undertaken in the field of EAP research. The findings from the student survey are illuminated by data from interviews with students and discussions with and surveys of departmental programme leaders. The findings indicate that a significant percentage of the subjects experience difficulties when studying content subjects through the medium of English. The evidence suggests that students' problems centre on academic writing (particularly style, grammar and cohesion) and academic speaking (particularly grammar, fluency and pronunciation). The findings also indicate that students' receptive and productive vocabularies are generally inadequate. Academic listening appears to present students with fewer difficulties than writing, speaking and reading. The article concludes by discussing the implications of the findings for EAP course and materials design in light of the changing tertiary-education landscape in Hong Kong.
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1. Introduction

In the past two decades, tertiary education in Hong Kong has undergone a period of remarkable change and growth. Driven by substantial increases in public funding, particularly during the 1990s, the percentage of school leavers able to gain places on degree or sub-degree programmes has risen from 2% to 18%, while the number of government-funded universities has risen from two to seven. This period has also witnessed an expansion of post-secondary education generally, with an ever-growing number of colleges and institutes offering various kinds of vocational, technical and professional courses at certificate and diploma levels. As in other post-colonial contexts, the main medium of instruction and assessment in Hong Kong's institutions of higher education is English.

The rapid development of tertiary education since the mid-1980s has inevitably been accompanied by increasing concern among academics and administrators about the problems experienced by many Cantonese-speaking undergraduates when studying academic subjects through the medium of a second language (Gow, Kember, & Chow, 1991; Li, Leung, & Kember, 2001; Lucas et al., 1997). One consequence of this has been the increasing use of Cantonese by university teachers to present and discuss English-language instructional materials in lectures, seminars and tutorials (Balla & Pennington, 1996; Harris, 1989; Pennington & Balla, 1996; Walters & Balla, 1998), thus mirroring classroom language practices in the unreformed English-medium secondary stream before the introduction of a Chinese-oriented language policy in the late 1990s (Evans, 2002; Johnson, 1998). This period has also witnessed growing dissatisfaction with graduates' language proficiency in Hong Kong's influential business and professional sectors (Berry & Lewkowicz, 2000; Garlick, 1989), where English continues to function as the principal language of written communication (Evans & Green, 2003). Hitherto, the territory's perennial preoccupation with 'declining' English standards had centred on apparent deficiencies in the secondary schools; it was perhaps assumed that when higher education was restricted to an elite–as it was for much of the colonial era–that students were sufficiently proficient to study effectively in English. In fact, there is some evidence to suggest that language standards at the colony's premier English-medium university, The University of Hong Kong, were perhaps not as high as might have been expected during the 'elite' era in tertiary education (Harrison, 1962; Ho, 1979; Kvan, 1969; Kwok & Chan, 1972; Lord, 1974; Sun, Chan, & Kwok, 1970).

To address the language-related problems that accompanied the shift from 'elite' to 'mass' tertiary education, Hong Kong's universities have provided—with government support in the shape of language enhancement grants—various kinds of courses in English for academic, business and professional purposes. These institutions have also established self-access centres where students can work independently or in small teacher-supervised groups on language and study skills related to their needs and interests (Detaramani & Chan, 1999; Klassen, Detaramani, Lui, Patri, & Wu, 1998). One consequence of this growth in English provision is that the centres and departments established to develop and operate these courses and facilities have become important sites for research in the field of English for specific purposes (Swales, 2001), particularly in relation to the teaching and learning of English for academic purposes (e.g., Allison, Berry, & Lewkowicz, 1995; Flowerdew, 2003; Flowerdew & Miller, 1992, 1995; Flowerdew, Li & Miller, 1998; Lee, 1999; Littlewood, 2001; Lu & Julien, 2001; Peacock & Ho, 2003). Given the centrality of needs analysis in EAP course and materials design (Flowerdew & Peacock, 2001; Hyland & Hamp-Lyons, 2002), it is perhaps not surprising that determining students' needs and

preferences and lecturers' requirements and expectations has occupied a prominent place on the research agenda (e.g., Bhatia & Candlin, 2001; Braine, 2001; Chan, 2001; Chase, 1993; Fan, 2001; Hyland, 1997; Jackson, 2005: Littlewood & Liu, 1996; Spratt, 1999).

In recent years, however, the pedagogical (if not the scholarly) work of these centres and departments has come under intense scrutiny by university policy-makers, academic departments and funding bodies, who, at a time of public-sector budget cuts, have questioned the efficiency of and necessity for what are seen as peripheral 'service' courses in EAP. One institution's response to these questions has been to replace a mandatory, credit-bearing EAP course with a suite of voluntary, non-credit-bearing modules focusing on 'remediation' and 'general' English, a move that is likely to reduce the status of English in the students' eyes and therefore their motivation to improve (Allison, 1992; Dudley-Evans & St John, 1998). Perhaps heeding Allison's (1993) cautionary words in the early years of the language enhancement 'boom,' few researchers have attempted to examine the efficiency of EAP courses in terms of measurable proficiency gains (as opposed to affective gains) (but see Fu, Pierson, Tsui & Poon, 1993). As Allison observed, investigating the surrender value of short courses covering a range of language and study skills are highly problematic and, if undertaken, is unlikely to be to the course provider's advantage. Instead of grappling with the complex question of efficiency, researchers have understandably preferred to address—directly or indirectly—the question posed by Hyland (1997) in the Hong Kong tertiary context: Is EAP necessary? As might be expected, the findings of needs analyses conducted in the past decade indicate that most Hong Kong undergraduates not only require language support at university (and probably more than they currently receive), but also that this support should be oriented towards academic rather than general English.

To determine whether EAP was necessary, Hyland surveyed 1619 students from eight disciplines at five Hong Kong tertiary institutions. Hyland's study revealed that students generally saw the value of EAP classes as they recognised that proficiency in English was an important determinant of academic success in an English-medium environment although, as might be expected, the need for language instruction varied according to proficiency level, discipline and year of study. The findings indicated that less proficient students, particularly those who had attended Chinese-medium schools, attached more importance to English classes than their more linguistically able counterparts, that the subjects' language problems centred on the productive skills of writing and speaking and the acquisition of specialist vocabulary, and that students' need for language support gradually diminished as they progressed through their programmes.

While Hyland's survey underlined the necessity for EAP, from the perspective of course and materials design it offers only a general picture of undergraduates' language problems. Thus, while his subjects identified academic writing as an area of weakness, the precise nature of their problems is outside the scope of the paper. In this respect, the findings of another major investigation conducted in the mid-1990s, that of Littlewood and Liu (1996), provide EAP practitioners with a wider range of data to complement Hyland's broad brush strokes. Littlewood and Liu's study examined the English-language experiences, attitudes and proficiency of 2156 first-year students at four local universities. As far as the present study is concerned, the most interesting findings are those which relate to the assessment of the subjects' academic writing, reading, speaking and listening skills (cf. Tables 2–5 in Section 2). As in Hyland's study, academic writing was the main source of concern for both students and teachers, and indeed students' perceived shortcomings in this key area were confirmed by the results of objective tests, which

revealed notable limitations in grammar and vocabulary both in terms of accuracy and range. On the basis of their findings, Littlewood and Liu concluded that "a large proportion" of the subjects experienced difficulties meeting the English-language demands of university study, and therefore recommended that language enhancement measures be reviewed and improved as a matter of "urgency" (p. 106).

The large-scale surveys conducted by Littlewood and Liu, and Hyland, in the mid-1990s have provided EAP practitioners in Hong Kong with valuable insights into the problems experienced by local undergraduates when studying in a second language. While the findings of these projects are still of immense practical value to teacher-researchers, recent developments at tertiary and secondary levels in Hong Kong mean that there is an urgent need to build on these pioneering studies. There are two particular reasons for this.

First, reductions in time and resources for EAP provision make it ever more necessary for course designers to identify and prioritise students' English-language study needs as precisely as possible in order to ensure the effectiveness of such teaching as the timetable and budget allows. One of the limitations of Hyland's study (as noted above) is that the precise nature of his subjects' language problems is not specified, and this is because the section of his questionnaire that focused on students' difficulties with English elicited information about language skills at the macro rather than the micro level. Thus, while writing was found to be the subjects' principal area of difficulty at university, the exact nature of their problems (cohesion, style, planning, etc.) was not revealed. Although Littlewood and Liu's questionnaire included seven sub-skills in this important area, a close analysis of their research instrument reveals a number of limitations, both in terms of writing-related items that were unnecessarily included, such as the ability to "use idioms or colloquial expressions correctly" (a skill that is generally not required in academic writing), and key sub-skills that were surprisingly excluded, such as the ability to summarise, paraphrase, synthesise and refer to academic sources.

Second, the shift towards Chinese-medium instruction at secondary level and the diminution in the roles and status of English in society generally since 1997 mean that the language and educational backgrounds of today's university entrants are different from those examined by Littlewood and Liu, and Hyland, in pre-handover Hong Kong. The subjects of these studies were mainly graduates of the unreformed English-medium secondary stream, where over 90% of local students received their schooling during the last two decades of British rule. The adoption of a Chinese-oriented language policy in 1997 means that only around a quarter of the students in each age cohort are now allowed to study in English, whereas the majority are required to attend Chinese-medium schools (where English is taught as a language subject). The consequences of this policy shift are now becoming apparent, with increasing numbers of students having to make the difficult transition from Chinese-medium secondary education to English-medium tertiary education. In light of these reasons, there is clearly a need for a fine-grained analysis of the language problems experienced by the new generation of undergraduates, a need which the present study seeks to meet.

2. Design of the study

2.1. Data collection

The study presented in this article forms part of an on-going, multi-faceted investigation into the study and use of English at the Hong Kong Polytechnic University (HKPU), the

territory's largest university. This investigation has involved the collection of a variety of quantitative and qualitative data, including self-report questionnaire surveys of students and programme leaders, interviews with students and lecturers, structured focus-group discussions with programme leaders, and–notwithstanding Allison's (1993) advice–tests of students' writing and speaking skills at four stages in their university careers.

This article presents the overall findings of the questionnaire survey, which provided the baseline data for the investigation. Where relevant, the survey findings will be supplemented by data from the interviews and the focus groups as well as the results of a small-scale survey of programme leaders. The research instrument used in the survey elicited information about students' perceived strengths and weaknesses in academic writing, reading, speaking and listening, together with their assessment of the relative importance of different writing and speaking tasks in their studies.

2.2. Subjects

The data presented in Tables 1–5 were derived from a survey of 4932 undergraduates from all 26 academic departments at HKPU during the 2003–2004 academic year. The six faculties into which these departments are grouped are represented in the following proportions: Business (21%), Engineering (19%), Health and Social Sciences (19%), Applied Science and Textiles (14%), Construction and Land Use (13%), Communication (7%), Hotel and Tourism (7%). Just over two-thirds of the subjects were first-year students (who were all taking a mandatory EAP course), while the remainder were in the middle of their second year. Most of the subjects (85%) were engaged in full-time study, although care was taken to ensure that a representative sample of part-time students (15%) was included in the survey. Around two-thirds of the subjects were enrolled on degree programmes, while the remainder were engaged in sub-degree programmes (mostly at Higher Diploma level). In terms of subject area, study mode and programme level, the sample is highly representative of the wider HKPU undergraduate population and broadly representative of the wider Hong Kong tertiary-level population. With almost 5000 subjects, it is also one of the largest sampling exercises ever conducted in the field of EAP research.

Table 1
Degree of importance of academic writing and speaking tasks

Assignment types	Important (%)	Unimportant (%)	Neutral (%)	Mean	SD
Oral presentations	75	6	19	3.97	0.89
Projects	61	10	29	3.70	0.93
Reports	60	10	30	3.68	0.91
Seminar discussions	57	11	32	3.59	0.90
Tutorial discussions	56	10	34	3.57	0.89
Essays	56	13	31	3.54	0.91
Case studies	48	15	37	3.43	0.93
Problems	46	10	44	3.43	0.80
Term papers	42	18	40	3.33	0.97
Literature reviews	28	27	45	3.00	0.94

Scale: 1 = Not at all important, 5 = Very important.

Table 2
Level of difficulty of academic writing skills

Language/study skills	Easy (%)	Difficult (%)	Neutral (%)	Mean	SD
Writing introductions	29	26	45	3.02	0.88
Referring to sources	24	25	51	2.98	0.79
Revising written work	22	26	52	2.94	0.78
Writing references/bibliography	24	30	46	2.91	0.87
Writing conclusions	25	32	43	2.90	0.89
Writing body sections	21	32	47	2.87	0.85
Summarising/paraphrasing	23	34	43	2.86	0.87
Planning written assignments	20	32	48	2.85	0.80
Expressing ideas clearly/logically	23	36	41	2.83	0.92
Synthesising information/ideas	20	35	45	2.83	0.86
Writing coherent paragraphs	20	35	45	2.82	0.85
Proof-reading written assignments	19	37	44	2.78	0.89
Linking sentences smoothly	18	45	37	2.66	0.93
Expressing ideas in correct English	19	47	34	2.65	0.95
Using appropriate academic style	17	46	37	2.63	0.91

Scale: 1 = Very difficult, 5 = Very easy.

Table 3
Level of difficulty of academic reading skills

Language/study skills	Easy (%)	Difficult (%)	Neutral (%)	Mean	SD
Identifying supporting ideas/examples	25	23	52	3.02	0.77
Reading carefully to understand a text	22	25	53	2.96	0.77
Identifying key ideas	24	28	48	2.95	0.82
Understanding organisation of a text	20	27	53	2.93	0.77
Taking brief, relevant notes	21	28	51	2.91	0.79
Using own words in note taking	25	33	42	2.90	0.90
Reading quickly to get overall meaning	25	33	42	2.88	0.91
Reading quickly to find information	23	35	42	2.84	0.89
Working out meaning of difficult words	13	47	40	2.59	0.82
Understanding specialist vocabulary	11	53	36	2.49	0.86

Scale: 1 = Very difficult, 5 = Very easy.

2.3. Procedures

After a series of consultations with students about its content, wording and layout, and a pilot study involving 175 subjects, the final version of the questionnaire was distributed to 8561 undergraduates between November 2003 and February 2004. Most of the subjects completed the questionnaire in class under the supervision of their English teachers. A total of 4932 correctly completed questionnaires were returned, yielding a response rate of around 57%. The results were analysed using SPSS.

The questionnaire elicited detailed information about students' academic communication skills. The same instrument (with modified rubrics) was also completed by 32 programme leaders from 20 departments in December 2004 (many of whom had also

Table 4
Level of difficulty of academic speaking skills

Language/study skills	Easy (%)	Difficult (%)	Neutral (%)	Mean	SD
Using visual aids	40	16	44	3.28	0.88
Speaking from notes	37	17	46	3.24	0.83
Asking questions	27	22	51	3.04	0.81
Participating actively in discussions	24	32	44	2.90	0.90
Presenting information/ideas	20	31	49	2.87	0.83
Answering questions	19	32	49	2.84	0.81
Communicating ideas confidently	21	35	44	2.83	0.90
Speaking clearly (pronunciation)	23	40	37	2.77	0.96
Communicating ideas fluently	18	42	40	2.70	0.89
Speaking accurately (grammar)	12	58	30	2.40	0.92

Scale: 1 = Very difficult, 5 = Very easy.

Table 5
Level of difficulty of academic listening skills

Language/study skills	Easy (%)	Difficult (%)	Neutral (%)	Mean	SD
Understanding classmates' accents	37	13	50	3.27	0.77
Understanding questions	37	15	48	3.25	0.78
Understanding the main ideas of lectures	37	17	46	3.22	0.82
Understanding the organisation of lectures	36	17	47	3.21	0.80
Taking brief, clear notes	30	22	48	3.09	0.83
Understanding lecturers' accents	29	20	51	3.09	0.80
Identifying differing views/ideas	28	20	52	3.08	0.77
Following a discussion	28	20	52	3.08	0.77
Recognising supporting ideas/examples	26	19	55	3.08	0.83
Understanding key vocabulary	26	25	49	3.01	0.83

Scale: 1 = Very difficult, 5 = Very easy.

participated in 6 h-long focus-group discussions in December 2003). Given the small sample, caution needs to be exercised when comparing the programme leaders' perceptions with those of the students. However, as they are responsible for monitoring the admission, progression and graduation of students at university, programme leaders are particularly well placed to assess their charges' strengths and weaknesses in English. Where appropriate, data from this survey—together with their observations in the focus groups—will be used to illuminate the findings of the student survey.

3. Findings and discussion

3.1. Academic writing and speaking tasks

The first section of the questionnaire asked the subjects to assess the relative importance of ten key academic writing and speaking tasks on a Likert scale ranging from 1 ('not at all important') to 5 ('very important'). Table 1 presents the students' responses in ascending

order of importance in the forms of means and percentages (which, as in Tables 2–5, conflate the responses to the positive and negative points on the scale).

The evidence suggests that presentations, projects and reports play the most important roles in the subjects' academic lives, while term papers and (particularly) literature reviews appear to be somewhat less important. These findings tend to bear out the responses of the programme leaders, who, by virtue of their role, have an especially close understanding of the English-language demands posed by university study. Just over 60% of the programme leaders reported that presentations, projects and reports were 'very important' in their departments' subjects, which is perhaps not surprising given the applied and/or professional orientations of many programmes at HKPU. The only notable disjunction between the perceptions of the two groups concerned the role of literature reviews: whereas most programme leaders attached some degree of importance to literature reviews, only a minority of the students reported that writing such texts was an important part of their university studies. These contrasting findings may stem from the fact that the subjects were mainly in their first term at university and thus had not been exposed to the full gamut of academic genres, including literature reviews (which, as several progamme leaders pointed out, are an important element in students' final-year dissertations).

The findings in Table 1 provide some indication of the variety and complexity of the demands which departments place on students' written and spoken communication skills; and there is evidence, both from the focus groups and interviews, that the new generation of Hong Kong undergraduates find it difficult to cope with these demands, particularly in their first year at university. This is perhaps not surprising: most students will have received little formal instruction in specialist academic genres such as project reports and case studies before entering university; nor will they have had much experience of the research and planning process that precedes the writing of such texts. These findings thus lend weight to Bhatia and Candlin's (2001) recommendation—made in relation to business education in Hong Kong—that students receive a well-designed EAP course aimed at developing a common core of academic discourse in their first year, followed by a modular ESP course focusing on the linguistic and rhetorical features of key academic genres. Although (as the next section reveals) the subjects' problems centre on the lexical and grammatical aspects of writing, an English programme that seeks to address these weaknesses by focusing on remediation or general language proficiency is unlikely (by itself) to help students meet the new challenges of writing in the academy; nor would such a programme be especially motivating as students would perceive it to involve 'more of the same.'

3.2. Academic writing skills

Writing is arguably the most important language skill at university because students' grades are largely determined by their performance in written assignments, tests and examinations (Leki & Carson, 1994; Zhu, 2004). Research conducted in the past decade indicates that academic writing is the principal source of difficulty for Hong Kong undergraduates (Bhatia & Candlin, 2001; Hyland, 1997; Littlewood & Liu, 1996). The importance and difficulty of writing in English at university are reflected in the emphasis given to academic writing skills in the present study. As the first column in Table 2 indicates, the questionnaire contained 15 items on various aspects of academic writing (which for ease of comprehension were expressed as far as possible without metalinguistic

language). The subjects were required to assess the degree of difficulty they experience with these aspects of writing on a scale ranging from 1 ('very difficult') to 5 ('very easy'). Table 2 summarises the subjects' responses in relation to these sub-skills in the forms of means (in descending order of difficulty) and percentages.

If we assume that a mean of 3.50 or over indicates some degree of ease, it would appear that the subjects generally have little real confidence in their academic writing skills: with one exception (3.02 for writing introductory sections) the means are under 3.00, ranging from 2.98 (referring to sources) to 2.63 (using an appropriate academic style). The percentages in Table 2, which conflate points 1–2 (difficult) and 4–5 (easy) on the scale, indicate that a minority of the subjects (around a quarter) find academic writing easy to a greater or lesser extent, whereas a slightly higher proportion (around a third) experience some degree of difficulty with this key language skill. The remainder (40–50%) circled point 3 on the scale, indicating that they find the various aspects of academic writing neither easy nor difficult.

The findings suggest that the subjects experience greater difficulty with the language rather than the content or structure of academic texts. As the last three items in Table 2 reveal, the subjects generally find it difficult to communicate their ideas appropriately (mean 2.63), accurately (mean 2.65) and smoothly (mean 2.66) in their writing. Data from the focus groups and questionnaire survey indicate that grammar, style and cohesion are also sources of concern for programme leaders. Students' problems with the language-related aspects of academic writing are also reflected in the comparatively low mean for proofreading, a process that typically involves correcting grammar, vocabulary and punctuation rather than improving content and organisation, which tend to be the focus of the revision process. In this respect it is interesting that the subjects seem to find it easier to revise (mean 2.94) than proof-read (mean 2.78) their written assignments. The subjects' perceived difficulties with the lexical and grammatical aspects of academic writing are consistent with the perceptions of tertiary students and teachers in previous studies in Hong Kong (Bhatia & Candlin, 2001; Flowerdew, 2003; Jackson, 2005; Littlewood & Liu, 1996) and also with the findings of research conducted in other contexts where non-native speakers are required to write in English for academic purposes (Hinkel, 2003; Leki & Carson, 1994; Shaw & Liu, 1998; Silva, 1993).

3.3. Academic reading skills

Table 3 presents findings related to student perceptions of a range of reading sub-skills. While means are spread over a relatively narrow range, it is clear that students find the processing of information at the micro level more demanding than that carried out at the macro level. Understanding previously unencountered subject-specific (or 'technical') vocabulary causes the greatest trouble, and attempting to understand difficult words is also revealed as problematic. Here 'difficult words' refers to the sub-technical or 'common core' lexis found in most disciplines. Taken together, these concerns reveal a substantial body of lexis blocking comprehension and impeding progress. Student strategies for dealing with the problem include asking classmates and teachers to explain meanings. Remarkably, none of the students participating in focus group and one-to-one interviews consult a dictionary (including on-line versions) on a regular basis, preferring instead to annotate texts with Chinese characters after consulting peers and teachers.

These strategies stand in stark contrast to those reported by Kamhi-Stein (1998) in her case study of three Spanish-speaking students enroled on a Health Sciences programme in the United States. Kamhi-Stein termed her subjects 'word bound' as a result of their determination to understand every new item of lexis they encountered by referring to dictionaries. The evidence emerging from the present study is that consulting a dictionary constitutes marked behaviour among Hong Kong university students; the result perhaps of a pragmatic and time-efficient approach to study-related reading developed in secondary school (see Lin, 1999, for a description of secondary students' English-reading strategies). There may also, of course, be an element of familiarisation at play here in that the majority of students participating in the interviews had been at university for no more than a few weeks and so were in the process of accommodating the concepts and terms in their subject areas. This phenomenon is central to the discussion in Lucas et al. (1997), who report problems encountered by inexperienced students as they attempted to acquire terminology related to human anatomy.

The findings just discussed are largely corroborated by those reported in Littlewood and Liu (1996) and Hyland (1997). Hyland's subjects placed the category 'understanding specialist words' mid-way in a comparison of the relative difficulty of various language-related skills and tasks. Subjects ranked the understanding of specialist words as easier than writing and speaking-based tasks, but more difficult than those related to listening and reading generally. However, statements provided to the present researchers by departmental programme leaders reveal a deep concern with students' lack of under-standing of both technical and non-technical vocabulary. Programme leaders from the Department of Applied Biology and Chemical Technology remarked that vocabulary was a problem for their students both receptively and productively, and noted that these problems were compounded by students' extreme reluctance to consult dictionaries.

3.4. Academic speaking skills

Just as grammatical accuracy was identified as problematic in the findings for writing and reading, so it is in the results for spoken academic communication (Table 4). Almost 60% of the subjects reported finding it difficult to speak accurately. Accuracy is by no means the only concern; fluency is also seen as a serious challenge, with just over 40% of the subjects revealing that they have difficulty in communicating ideas fluently in English. Presenting information and ideas appears to cause less concern, presumably because students have become familiar with presenting information orally for assessment purposes in the University. Nevertheless, nearly a third of the students feel that presenting information orally is difficult. This perception was confirmed by comments made by departmental programme leaders in needs analysis meetings. The programme leader from the Department of Industrial and Systems Engineering, for example, reported that the quality of students' presentations is unsatisfactory in terms of both verbal and non-verbal communication. The programme leader from the Department of Logistics remarked on students' inadequate basic skills in grammar, vocabulary and pronunciation.

There is, then, a strong perception among students and teachers that, while students manifest a certain strategic competence in presenting information and ideas in English orally, they lack the language resources to do so in an accurate and fluent manner; perceptions that relate to writing as much as to speaking. The development of students' fluency and accuracy is probably impeded by a further factor that emerged from the

data drawn from interviews with both students and programme leaders: that subject teachers tend to give far greater weight in assessment to content than to any other criterion. This is true even to the extent that teachers 'look behind' grossly flawed communication in order to identify and give credit for key content-related points (Jackson, 2005).

Of equal concern is the fact that about a third of the students reported that they find it difficult to participate actively in discussions. On this point, Littlewood and Liu's (1996) results reveal an interesting distinction between planned and unplanned spoken academic communication. Their respondents were clearly more comfortable with the planned variety; more than 40% felt able to communicate effectively with little difficulty if the communication was planned. In sharp contrast to this, only 17% reported experiencing little difficulty in unplanned communication. Discussions by their very nature are likely to present participants with unpredicted language challenges and so may well give rise to anxiety. However, the findings of the present study diverge from Littlewood and Liu's in that our respondents failed to register a sharp statistical difference in their perceptions of the relative difficulty of presenting information orally (always a planned event) and of participating in discussions.

That said, it is important to note here that interviews with student participants revealed that across the whole range of the University's faculty areas participation in seminars is rarely required of students, either as a part of the regular teaching of subjects or as a means of subject assessment. These findings lend support to those reported by Flowerdew and Miller (1995) and Jackson (2005), and can be related to the dominance of science and technology programmes in the University; universities with a greater number of humanities programmes are likely to make far more extensive use of seminar (and tutorial) formats.

3.5. Academic listening skills

The high rates of neutrality expressed in response to questions about academic listening skills (Table 5) show that listening is of rather less concern for students than the three other language skills. This claim is further supported by the fact that greater numbers of students expressed some degree of ease with most of the listening sub-skills investigated compared with the sub-skills of reading. This finding lends support to those presented by Flowerdew and Miller (1992), whose first-year university subjects rated themselves quite highly in their ability to understand lectures delivered in English. Nonetheless, about a quarter of the respondents participating in the present study reported difficulty in understanding key vocabulary in listening, and this proportion coheres with that reported earlier for writing and reading.

The results reported here underscore the blocking effect on comprehension of key (but unfamiliar) technical lexis. Interviews with our students revealed that students rely far more on written than spoken texts in acquiring discipline-related knowledge. And so again we return to issue of vocabulary; there is little doubt that the cumulative effect of inadequate vocabulary for processing information and producing assignments is probably the key factor in creating students' negative overall view of their competence in English. This echoes Saville-Troike's (1984) view that knowledge of vocabulary is of prime importance in the development of second language competence—claim echoed a little more recently in Corson (1997).

4. Conclusion

Of the findings that have emerged from this large-scale baseline survey of Hong Kong tertiary students the most striking is that relating to vocabulary. Put simply, inadequate receptive and productive vocabulary in English is the main problem confronting the almost 5000 students who participated in the survey. Clear pedagogical concerns emanate from the findings presented here: one is that EAP programme design should place a great deal of stress on the teaching and learning of subject-specific and common core lexis.

Another major concern involves relating students' limited ability in processing unfamiliar vocabulary to the notion of learner autonomy. Hong Kong students show a marked reluctance to consult dictionaries when reading, manifesting instead a dependency on other students and teachers. And yet the achievement of learner autonomy is heavily dependant on the development of expert reading strategies. With this in mind, both EAP programme designers and front-line practitioners will need to encourage students to develop strategies that foster greater independence, especially in the area of understanding key vocabulary. This applies not only to processing written information but also to handling lecture input.

Vocabulary is by no means the only language resource deemed unsatisfactory; grammatical resources are also generally perceived as inadequate to meet the challenges placed on them in the production of academic assignments. Pedagogical strategies aimed at improving and extending students' grammatical resources will need to involve some form of collaboration between subject teachers and EAP practitioners to encourage the former away from the identified tendency in assessment to give far greater consideration to content than to other criteria, including language. The separation of content and language is artificial and clearly has considerable fossilisation potential.

The concerns expressed here should not, of course, be construed as a plea for more 'remedial' English courses in Hong Kong universities. The main problems identified in this study—students' inadequate understanding of subject-specialist vocabulary, their limited ability to express complex ideas in grammatically correct English, and their lack of fluency in oral presentations—will not be improved by replacing academic purposes programmes with either remedial or general English courses. By the time they enter university, most Hong Kong students have spent at least 13 years studying English. They possess a substantial foundation of knowledge in the language, but need help in applying what they know in academic contexts; that is, in becoming academically literate. Given the time constraints in operation—many EAP courses in Hong Kong involve no more than 42 h of classroom contact over a single semester—a general or remedial English course would be extremely difficult to organise, particularly in terms of specifying the language items to be taught and learned.

Rather better results might be obtained by focusing existing EAP programmes more sharply to accommodate identified student needs. It follows from the findings that such a programme would foreground work on lexis, grammar and discourse, with reading and listening texts mainly used as input to activities and as models of performance. This is not, of course, to advocate a return to any form of structural syllabus. Indeed, the kind of approach envisaged could be accommodated quite comfortably within a task-based and content-driven framework, permitting a substantial focus on language analysis and application. Such an approach could be a modified form of that presented by Willis (1996), with its three-stage (pre-task, task cycle and language focus) structure. Successful

content-driven learning of English at tertiary level has been reported by O'Brien (1993) and more recently by Jackson (2002). A content-driven approach will necessitate close consultation with Departmental programme leaders to ensure their input into EAP programme design. In turn, the programme leaders should be prepared to implement an 'English across the curriculum' approach to assessing students' work in order to avoid the fossilising effect of assessing content by 'looking beyond' language.

This study represents a contribution to the steadily growing body of knowledge, which seeks to underscore the value of EAP programmes. Previous studies, such as Hyland (1997), emphasised the importance of EAP from the perspective of programme and materials design and in doing so presented very helpful sketches of the language problems experienced by Hong Kong undergraduates in their English-medium studies. Littlewood and Liu (1996) provided a rather more detailed picture and their study is particularly interesting in its revelations of subjects' perceptions of their proficiency in English. However, because of its large scale and the relatively fine-grained nature of its instruments of enquiry, the present study is able to substantiate and extend the work of these earlier studies.

What emerges from this study is a picture in which inadequate basic language competence results in lack of confidence as students struggle to accomplish macro-linguistic tasks of a complex nature. This problem is likely to intensify in the local context as increasing numbers of students educated in Chinese-medium secondary schools enrol on programmes in English-medium universities. Indeed, students from Chinese-medium schools interviewed for this study reported experiencing a wider range of language problems than those from English-medium backgrounds, particularly in the area of academic listening. Over the next decade, Chinese-medium secondary students will come to dominate Hong Kong's tertiary education sector. This will almost certainly give rise to an urgent need for improved language skills among the student body. The result of the radical change in secondary-level medium of instruction will surely be that faculty and students— and indeed administrators—come to regard academic literacy as rather more important than may have been the case in earlier times.

Acknowledgements

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