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%61.74	107		
%13.65	49		
%33.05	54		
%12.35	105		
%12.94	110		
%12.82	109		
%10.11	86		
%13.647	116		
%10	85		
%10	85		
%9.64	82		
%100	988		

379

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381

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5	-	11 – 10 – 9 – 8 -7		2
7	18 – 16 – 13 – 12	17 – 15 – 14		3
5	22 - 19	23 – 21 – 20		4
5	27 – 26 – 25 – 24	28		5
4	-	32 – 31 – 30 – 29		6
3	34	35 – 33		7
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1. Face Validity:

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382

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Cronbach's Alpha

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4 ÷ 5 = 0.80.

$$\text{المتوسط الحسابي للإجابة عن البند} \over 4$$

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		% 20 - 0	0.80 – 0
		% 40 -% 20.25	1.60 – 0.81
		% 60 % 40.25	2.40 – 1.61
		% 80 % 60.25	3.20 – 2.41
		% 100 - % 80.25	4 – 3.20

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385

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388

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:**(Dimitrov et al, 2002)**

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:**(Thomas, 2008)**

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391

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(5)   (T-test)

	(T-test)			(Leven)			( )	( )			
Sig				Sig	F						
0.000	986	5.06	1.96				0.56	3.60			
0.000	243.07	6.59	1.96	0.000	27.95		0.82	3.23			1
0.000	986	8.68	1.96				0.70	3.45			
0.000	195.34	9.32	1.96	0.048	3.90		0.77	2.84			2
0.001	986	3.44	1.96				0.44	3.13			
0.000	224.22	4.22	1.96	0.000	12.87		0.59	2.95			3
0.000	986	3.74	1.96	0.007	7.36		0.60	3.55			4

392

0.000	208.65	4.30	1.96				0.73	3.30			
0.183	986	1.33-	1.96	0.557	0.34		0.56	3.10			5
0.196	180.82	1.29-	1.96				0.54	3.16			
0.000	986	6.88	1.96	0.045	4.01		0.86	3.61			6
0.000	198.62	7.52	1.96				0.97	3.00			
0.000	986	6.14	1.96	0.073	3.22		0.78	3.65			7
0.000	201.71	6.83	1.96				0.91	3.15			

(5)

$(Sig = 1.83 > 0.05)$

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[1] يُقصد بالكليات الطبية: .

[2] يُقصد بالكليات الهندسية: .

(6) **(T-test)**

Sig	(T-test)		1.96	Sig	F (Leven)		( )	( )		
0.21	489	1.240-	1.96				0.87	3.06		
0.21	126.82	1.24-	1.96	0.60	0.270		0.86	3.19		1
0.07	489	1.98-	1.96				0.89	2.74		
0.10	115.58	1.69-	1.96	0.03	4.35		0.75	2.92		2
0.81	489	0.20-	1.96				0.59	2.87		
0.82	131.35	0.20-	1.96	0.97	0.001		0.62	2.88		3
0.57	489	0.49-	1.96				0.72	3.19		
0.57	131.7	0.61-	1.96	0.45	0.54		0.75	3.24		4
0.41	489	0.81-	1.96				0.58	3.10		
0.44	119.64	0.75-	1.96	0.11	2.41		0.52	3.25		5
0.30	489	1.025-	1.96				0.97	2.83		
0.29	130.514	1.045-	1.96	0.68	0.170		1.00	2.95		6
0.20	489	1.267-	1.96				0.84	2.97		
0.17	139.036	1.363-	1.96	0.094	2.815		0.95	3.11		7

(6)

Sig > 0.05

395

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% 52.75	115		% 22,1	218
%47.24	103			

‎(7)‏

‎(% 77.9)   (% 22.1)‏

‎(% 52.75)   .(%47.24)‏

(326)

.(8)

(8)

% 29.44	%26.45	41		96		1
	% 32.16	55				
% 26.38	%29.67	46		86		2
	%23.39	40				
% 21.16	% 21.93	34		69		3
	%20.46	35				
% 10.73	% 9.03	14		35		4
	%12.28	21				
% 9.81	% 10.32	16		32		5
	% 9.35	16				
% 2.45	%2.58	4		8		6
	%2.33	4				
% 100		326				

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403

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% 34.82	119			

31.7)   (313)

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.(10)

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%36.47	% 36.69	40	147		1
	%36.39	107			
% 26.79	%27.52	30	108		2
	%26.53	78			
% 16.62	%16.51	18	67		3
	% 16.66	49			
% 9.42	%9.17	10	38		4
	% 9.52	28			
% 5.70	% 5.50	6	23		5
	%5.78	17			
% 4.96	%4.58	5	20		6
	%5.10	15			
% 100		403			

404

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-    (1994).

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-    (1999).   :

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-    (2008).

:   http://ipac.kacst.edu.sa/eDoc/1430/1737321.pdf

24/2/2013.

-    (2011).

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-    (2011).

27   243   278   .

-    (2011).

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412

- (2011).

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http://www.damascusuniversity.edu.sy/mag/edu/images/stories/327-358.pdf

2013/3/11.

- (2000).

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- (2002). (Data

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- (2013). ( )

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273 315.

- (2006).

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http://faculty.ksu.edu.sa/manal.m/DocLib1/Forms/DispForm.aspx?ID=16

- (2011). Data Show

5 2011/5/6.

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http://www.uoanbar.edu.iq/TeachingMethodsCenter//catalog/file/search%2017.p
df   .2013/3/2

13   5/011006/6/   :   .(2013)   -

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.2004/10/25

:

- Dimiter M. Dimitrov, Steven McGee, Bruce C. Howard (2002). Changes In Students' Science Ability Produced by Multimedia Learning Environments: Application Of The Linear Logistic Model For Change, School Science And Mathematics, 102 (1), 15-24, U. S. A.

http://www.researchgate.net/publication/227628311_Changes_in_Students%27_Science_Ability_Produced_by_Multimedia_Learning_Environments_Application_of_the_Linear_Logistic_Model_for_Change

- Judson, W. Thomas (2008). A Study of the Use of Web-based Benchmark Assessment by Middle School Mathematics Teachers. Thesis for Mathematics for Teaching, Master of Liberal Arts in Extension Studies, Harvard University, U. S. A