



**قضايا العلم والتكنولوجيا و المجتمع المتضمنة في محتوى منهاج الثقافة
العلمية لطلبة الصف الثاني الثانوي ومدى فهمهم لها**

إعداد الطالب

ماجد نبيل القدرة

إشراف الدكتورة

فتحية صبحي اللولو

2008 – 1429



﴿هُوَ الَّذِي بَعَثَ فِي الْأُمِّيِّينَ رَسُولًا مِنْهُمْ يَتْلُو عَلَيْهِمْ آيَاتِهِ

وَيُزَكِّيهِمْ وَيُعَلِّمُهُمُ الْكِتَابَ وَالْحِكْمَةَ وَإِنْ كَانُوا مِنْ قَبْلُ

لَفِي ضَلَالٍ مُبِينٍ ﴿

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قائمة الجداول

الصفحة	عنوان الجدول	رقم الجدول
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قائمة الأشكال

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قائمة الملاحق

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(Yager,1990,44-46)

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: Science Education Approaches

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(Bybee & Mau , 1986)

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	: Water Resources	- 4
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	: Energy Shortages	- 6
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	: Land Use ()	- 7
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	: Mineral Resources	- 8
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: **Extinction of Plants and Animals** - 11

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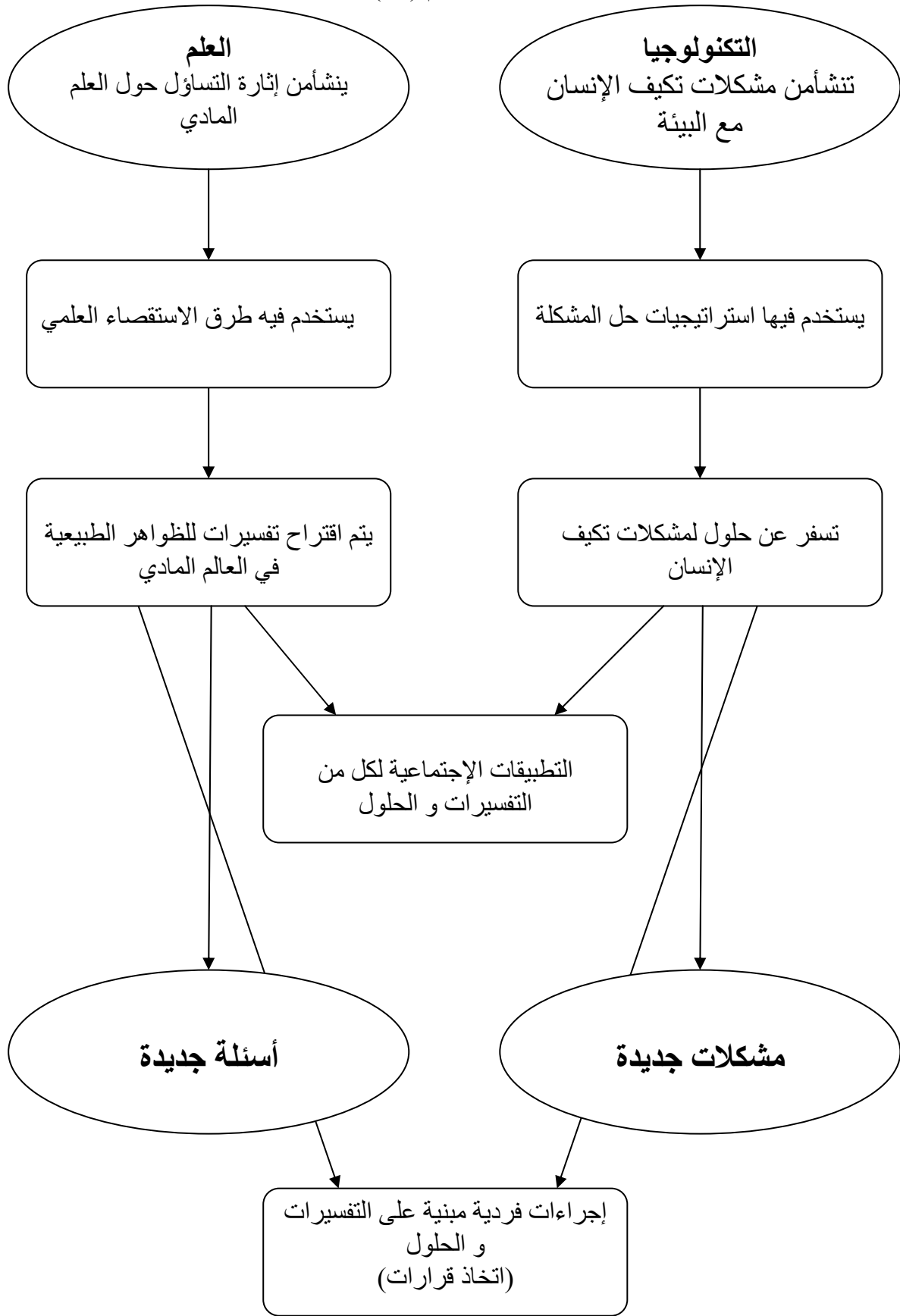
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0.01	0.893	31		0.01	0.513	6	
0.01	0.839	32		0.01	0.608	7	
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0.01	0.855	34		0.01	0.527	9	
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0.01	0.796	38		0.01	0.650	13	
0.01	0.920	39		0.01	0.523	14	
0.01	0.892	40		0.01	0.543	15	
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0.01	0.635	45		0.01	0.750	20	
0.05	0.361	46		0.01	0.567	21	
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0.67	0.44	31	0.56	0.61	7
0.67	0.56	32	0.56	0.39	8
0.33	0.50	33	0.67	0.56	9
0.67	0.44	34	0.33	0.61	10
0.67	0.56	35	0.56	0.61	11
0.56	0.39	36	0.56	0.50	12
0.67	0.44	37	0.56	0.39	13
0.67	0.56	38	0.56	0.39	14
0.67	0.56	39	0.67	0.33	15
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0.56	0.39	44	0.67	0.44	20
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16.67	18	0	0	4.63	5	4.63	5	0	0	7.41	8		
0	0	0	0	0	0	0	0	0	0	0	0		
1.85	2	0	0	1.85	2	0	0	0	0	0	0		
23.15	25	23.1	25	0	0	0	0	0	0	0	0		
6.48	7	0	0	0	0	4.63	5	0	0	1.85	2		
6.48	7	0	0	0	0	0	0	2.78	3	3.7	4		
2.78	3	0.9	1	0	0	0	0	0	0	1.85	2		
2.78	3	0	0	0	0	2.78	3	0	0	0	0		
23.15	25	0.93	1	22.2	24	0	0	0	0	0	0		
10.19	11	0	0	0	0	0	0	0.93	1	9.26	10		
6.48	7	0	0	6.48	7	0	0	0	0	0	0		
100	108	24.9	27	35.7	38	12	13	3.71	4	24	26		

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0.00	0	0	0	0.00	0	0.00	0	0	0	0.00	0	
0.93	1	0	0	0.00	0	0.00	0	0	0	0.93	1	
5.56	6	0	0	0.93	1	1.85	2	0	0	2.78	3	
0.00	0	0	0	0.00	0	0.00	0	0	0	0.00	0	
0.93	1	0	0	0.00	0	0.00	0	0	0	0.93	1	
8.33	9	0	0	3.70	4	1.85	2	0	0	2.78	3	
0.93	1	0	0	0.00	0	0.93	1	0	0	0.00	0	
0.00	0	0	0	0.00	0	0.00	0	0	0	0.00	0	
16.67	18	0	0	4.63	5	4.63	5	0	0	7.41	8	

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0	0	0	0	0	0	0	0	0	0	0	0	-	
0	0	0	0	0	0	0	0	0	0	0	0	-	
1.85	2	0	0	1.85	2	0	0	0	0	0	0)	
0	0	0	0	0	0	0	0	0	0	0	0	(
1.85	2	0	0	1.85	2	0	0	0	0	0	0	-	

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5.56	6	5.56	6	0	0	0	0	0	0	0	0	-
7.41	8	7.41	8	0	0	0	0	0	0	0	0	-
7.41	8	7.41	8	0	0	0	0	0	0	0	0	-
0	0	0	0	0	0	0	0	0	0	0	0	-
1.85	2	1.85	2	0	0	0	0	0	0	0	0	-
0	0	0	0	0	0	0	0	0	0	0	0	-
0.93	1	0.93	1	0	0	0	0	0	0	0	0	-
0.00	0	0.00	0	0	0	0	0	0	0	0	0	-
23.15	25	23.15	25	0	0	0	0	0	0	0	0	-

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0.93	1	0	0	0	0	0.93	1	0	0	0	0	-	
0	0	0	0	0	0	0	0	0	0	0	0	-	
0	0	0	0	0	0	0	0	0	0	0	0	-	
0	0	0	0	0	0	0	0	0	0	0	0	-	
0	0	0	0	0	0	0	0	0	0	0	0	-	
1.85	2	0	0	0	0	0	0	0	0	1.85	2	-	
6.48	7	0	0	0	0	4.63	5	0	0	1.85	2		

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1.85	2	0	0	0	0	0	0	1.85	2	0	0	-	..
1.85	2	0	0	0	0	0	0	0.93	1	0.93	1	-	
0.93	1	0	0	0	0	0	0	0	0	0.93	1	-	
0.93	1	0	0	0	0	0	0	0	0	0.93	1	-	
0	0	0	0	0	0	0	0	0	0	0	0	-	
0.93	1	0	0	0	0	0	0	0	0	0.93	1	-	
6.48	7	0	0	0	0	0	0	0	3	3.70	4		

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0	0	0	0	0	0	0	0	0	0	0	0	-	
0	0	0	0	0	0	0	70	0	0	0	0	-	
1.85	2	0	0	0	0	0	0	0	0	1.85	2	-	
0	0	0	0	0	0	0	0	0	0	0	0	-	
0	0	0	0	0	0	0	0	0	0	0	0	-	
0	0	0	0	0	0	0	0	0	0	0	0	-	
0	0	0	0	0	0	0	0	0	0	0	0	-	
0	0	0	0	0	0	0	0	0	0	0	0	-	
0	0	0	0	0	0	0	0	0	0	0	0	-	
8.2	3	0.93	1	0	0	0	0	0	0	1.85	2	-	

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0	0	0	0	0	0	0	0	0	0	0	0	-
2.78	3	0	0	0	0	2.78	3	0	0	0	0	-
0	0	0	0	0	0	0	0	0	0	0	0	-
0	0	0	0	0	0	0	0	0	0	0	0	-
0	0	0	0	0	0	0	0	0	0	0	0	-
2.78	3	0	0	0	0	2.78	3	0	0	0	0	

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0	0	0	0	0	0	0	0	0	0	0	0	-	..
6.48	7	0	0	6.48	7	0	0	0	0	0	0	-	
0.93	1	0	0	0.93	1	0	0	0	0	0	0	-	
5.56	6	0.93	1	4.63	5	0	0	0	0	0	0	-	
0	0	0	0	0.00	0	0	0	0	0	0	0	-	
10.19	11	0	0	10.19	11	0	0	0	0	0	0	-	
23.15	25	0.93	1	22.22	24	0	0	0	0	0	0		

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1.85	2	0	0	0	0	0	0	0	0	1.85	2	-
3.70	4	0	0	0	0	0	0	0.93	1	2.78	3	-
1.85	2	0	0	0	0	0	0	0	0	1.85	2	-
2.78	3	0	0	0	0	0	0	0	0	2.78	3	-
10.19	11	0	0	0	0	0	0	0.93	1	9.26	10	

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5.56	6	0	0	5.56	6	0	0	0	0	0	0	-
0	0	0	0	0	0	0	0	0	0	0	0	-
0.93	1	0	0	0.93	1	0	0	0	0	0	0	-
0	0	0	0	0	0	0	0	0	0	0	0	-
0	0	0	0	0	0	0	0	0	0	0	0	-
0	0	0	0	0	0	0	0	0	0	0	0	-
6.48	7	0	0	6.48	7	0	0	0	0	0	0	-

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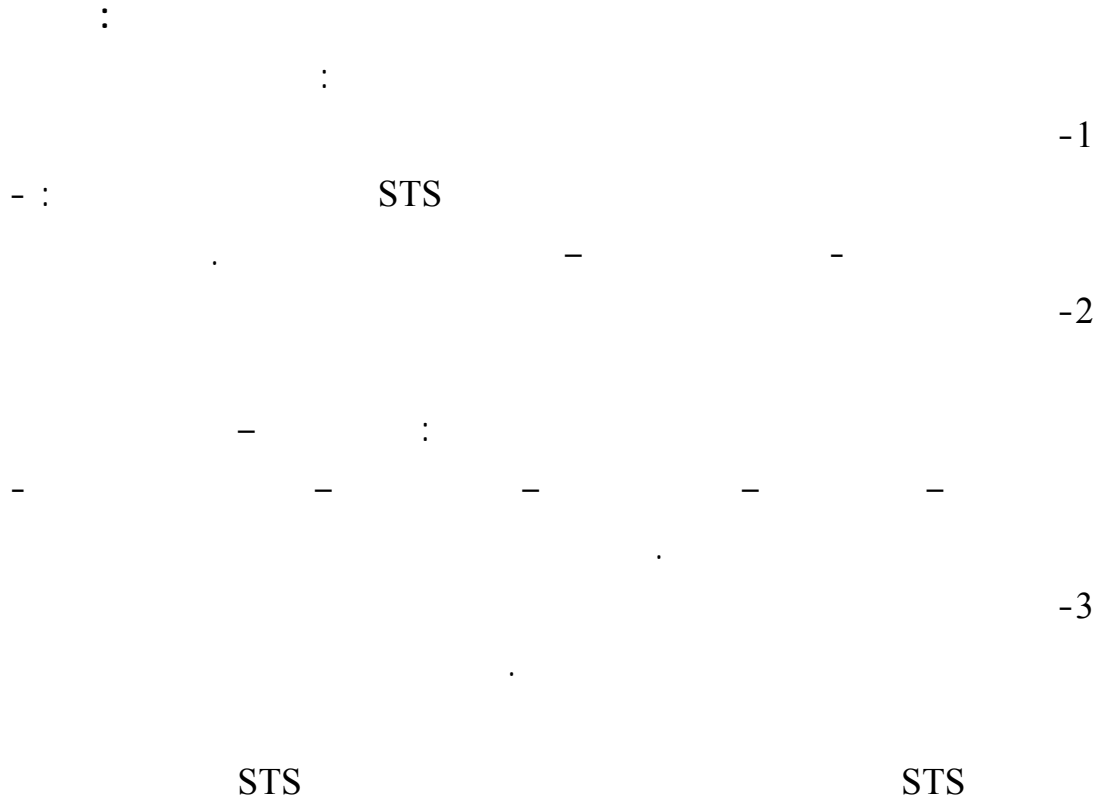
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($0.05 \geq \alpha$)

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$$\begin{aligned}
 & (6) \qquad \qquad \qquad (8) \qquad \qquad (7) \\
 & \qquad \qquad \qquad \cdot (22) \qquad \qquad \qquad : \\
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 & .(5640) \qquad \qquad (5311) \\
 & \qquad \qquad \qquad : \\
 & \qquad \qquad \qquad =
 \end{aligned}$$

t. teste one sample

$$\begin{aligned}
 & \qquad \qquad \qquad : \qquad (21) \\
 & (21)
 \end{aligned}$$

	" "		%					
0.01	24.890	32.900	42.67%	5.487	20.053	47	113	
0.01	16.881	32.900	% 47.36	6.906	22.258	47	120	

$$1.96 = 0.05$$

$$2.58 = 0.01$$

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(113 =)

3	46.02	1.554	3.681	416	904	8	
4	40.62	1.665	4.062	459	1130	10	
1	60.05	1.686	4.204	475	791	7	
2	53.98	0.985	1.619	183	339	3	
5	35.72	1.816	3.929	444	1243	11	
7	30.09	1.019	1.504	170	565	5	
6	35.10	0.811	1.053	119	339	3	
	42.67	5.487	20.053	2266	5311	47	

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(%60.05)

(%53.98)

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.(%42.67)

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3	52.08	1.574	4.167	500	960	8	
2	51.75	1.891	5.175	621	1200	10	
1	61.79	1.778	4.325	519	840	7	
4	48.61	0.897	1.458	175	360	3	
5	38.56	2.021	4.242	509	1320	11	
7	35.83	0.995	1.792	215	600	5	
6	36.67	0.974	1.100	132	360	3	
	47.36	6.906	22.258	2671	5640	47	

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(%61.79)

(%52.08)

(%36.67)

(%35.83)

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3	49.14	1.580	3.931	916	1864	8	
4	46.35	1.866	4.635	1080	2330	10	
1	60.94	1.731	4.266	994	1631	7	
2	51.22	0.942	1.536	358	699	3	
5	37.18	1.927	4.090	953	2563	11	
7	33.05	1.015	1.652	385	1165	5	
6	35.91	0.897	1.077	251	699	3	
	45.08	6.341	21.189	4937	10951	47	

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($0.05 \geq \alpha$)

(25) "T. test"

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0.05	0.019	2.367	1.554	3.681	113		
			1.574	4.167	120		
0.01	0.000	4.757	1.665	4.062	113		
			1.891	5.175	120		
	0.594	0.534	1.686	4.204	113		
			1.778	4.325	120		
	0.193	1.307	0.985	1.619	113		
			0.897	1.458	120		
	0.217	1.239	1.816	3.929	113		
			2.021	4.242	120		
0.05	0.030	2.177	1.019	1.504	113		
			0.995	1.792	120		
	0.691	0.398	0.811	1.053	113		
			0.974	1.100	120		
	0.691	0.398	0.811	1.053	113		
			0.974	1.100	120		

1.96 = (0.05) (231) " "

2.58 = (0.01) (231) " "

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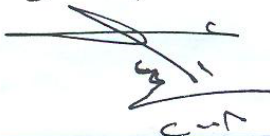
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	X			10
X				11
	X			12
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		X		25

ملحق رقم (4)

كشف توضيحي لأعداد طلبة الصف الثاني عشر " علوم إنسانية " في المدارس الحكومية بمحافظة خانيونس

المجموع	الثاني عشر أدبي		اسم المدرسة	مستل	
	طلاب				
	بنات	بنين			
189		189	5	الفرارة الثانوية بنين	1
248		248	6	خالد الحسن الثانوية بنين	2
369		369	8	كمال ناصر الثانوية أ بنين	3
382		382	10	هارون الرشيد الثانوية أ بنين	4
286		286	7	عبد القادر الثانوية بنين	5
239		239	6	المتنبي الثانوية أ بنين	6
84		84	2	شهداء خزاعة الثانوية بنين	7
102		102	3	بني سهيلا الثانوية بنين	8
106		106	3	رأس الناقورة الثانوية بنين	9
38		38	1	جرار القدوة الثانوية بنين	10
212	212		5	عيلبون الثانوية بنات	11
553	553		14	خان يونس الثانوية أ بنات	12
189	189		5	عبدالرحمن الأغا الثانوية بنات	13
452	452		11	عكا الثانوية أ بنات	14
132	132		3	طبريا الثانوية بنات	15
125	125		3	جنين الثانوية بنات	16
71	71		2	شهداء بني سهيلا ث بنات	17
324	324		8	الخنساء ث بنات	18
82	82		2	شهداء خزاعة الثانوية بنات	19
44	44		1	جرار القدوة ث بنات	20
4227	2184	2043	105	المجموع	

قسم التخطيط

 ٢٠١٢

وزارة التربية والتعليم
 مديرية التربية والتعليم - خانيونس
 قسم التخطيط والتطوير التربوي



الرقم : و ت غ / مذكرة داخلية ٢٥٦
التاريخ : 2008 / 2 / 20

السيد / مدير التربية والتعليم - خان يونس حفظه الله،،
السلام عليكم ورحمة الله وبركاته،،

الموضوع : تسهيل مهمة بحث

يقوم الباحث / ماجد نبيل عبد القدرة ، والمسجل لدرجة الماجستير
بكلية التربية تخصص مناهج وطرق تدريس العلوم بالجامعة الإسلامية ، بعمل
بحث بعنوان " قضايا العلم والتكنولوجيا والمجتمع المتضمنة في محتوى
منهاج الثقافة العلمية لطلبة الصف الثاني الثانوي ومدى فهمهم لها " .
لا مانع من قيام الباحث من تطبيق أداة بحثه وهو اختبار ، وذلك على عينة من
طلبة الصف الثاني عشر - علوم إنسانية بواقع شعبة من المدارس التالية :

هارون الرشيد " أ " بنين	عبد القادر الثانوية بنين	كمال ناصر الثانوية " أ " بنين
عكا الثانوية بنات	طبريا الثانوية بنات	خان يونس الثانوية " أ " بنات

وذلك حسب الأصول .

لسان الله الرحمن الرحيم ، وشكروا بشيركنا ، (الاحترام) ،،

طير ربي

سنة ١٤٣٠ هـ

د. محمد أبو شقير

وكيل وزارة التربية والتعليم العالي



يوسف

نسخة : الملف

(6)

الجنس	الدرجة	م
1	21	101
1	25	102
1	14	103
1	24	104
1	18	105
1	22	106
1	22	107
1	19	108
1	23	109
1	23	110
1	27	111
1	24	112
1	14	113
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1	25	102
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1	22	106
1	22	107
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2	32	14
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2	27	16
2	17	17
2	23	18

الجنس	الدرجة	م
1	16	51
1	14	52
1	28	53
1	10	54
1	10	55
1	21	56
1	27	57
1	19	58
1	20	59
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1	22	94

الجنس	الدرجة	م
1	19	1
1	20	2
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2	17	82
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2	23	77
2	20	78
2	19	79
2	17	80

(7)

النسبة %	التكرار	الفئات
0.88	1	8
0.88	1	9
1.77	2	10
5.31	6	12
4.42	5	13
7.96	9	14
2.65	3	15
4.42	5	16
1.77	2	17
7.08	8	18
7.08	8	19
6.19	7	20
7.08	8	21
10.62	12	22
7.08	8	23
7.08	8	24
3.54	4	25
1.77	2	26
4.42	5	27
1.77	2	28
1.77	2	29
0.88	1	30
0.88	1	32
1.77	2	33
0.88	1	34
100	113	المجموع

(8)

النسبة %	التكرار	الفئات
0.83	1	7
4.17	5	11
1.67	2	12
2.50	3	13
7.50	9	14
6.67	8	15
1.67	2	16
4.17	5	17
4.17	5	18
2.50	3	19
5.00	6	20
4.17	5	21
5.83	7	22
8.33	10	23
4.17	5	24
1.67	2	25
4.17	5	26
5.00	6	27
5.83	7	28
3.33	4	29
2.50	3	30
4.17	5	31
3.33	4	32
2.50	3	33
0.83	1	34
0.83	1	35
0.83	1	36
0.83	1	37
0.83	1	39
100	120	المجموع

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T-Test Group Statistics

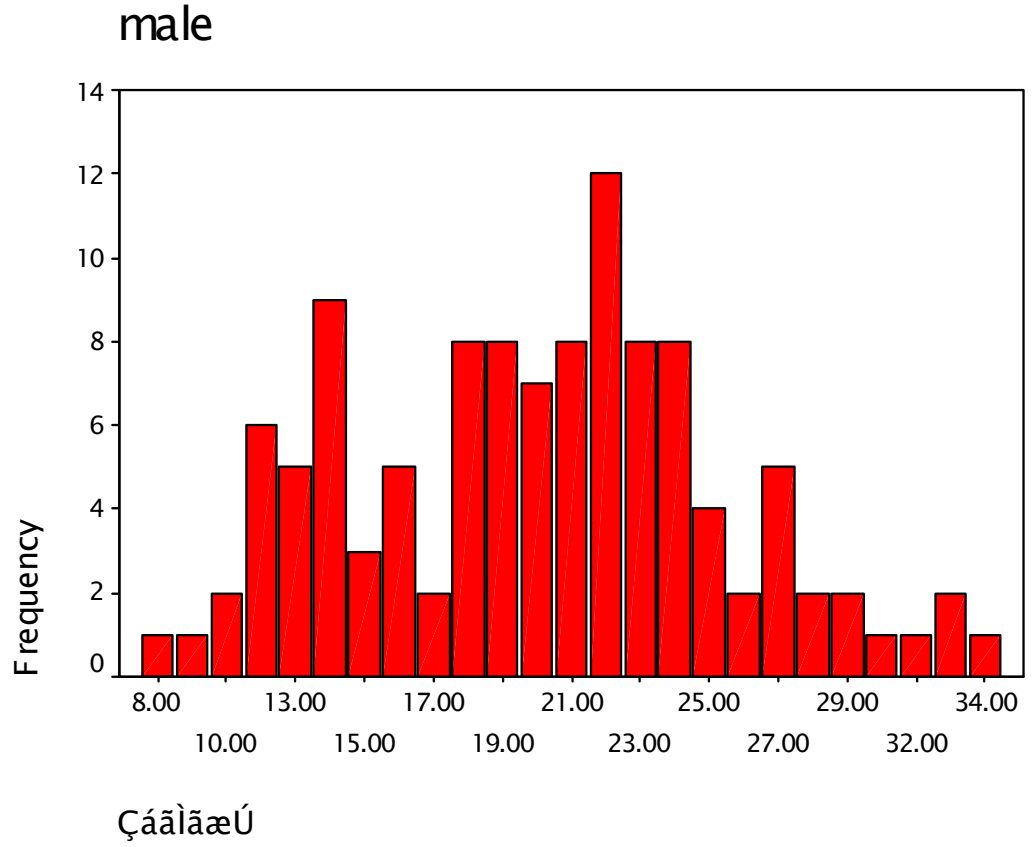
	الجنس	N	Mean	Std. Deviation	Std. Error Mean
الاول	ذكر	113	3.6814	1.55417	.14620
	انثى	120	4.1667	1.57359	.14365
الثاني	ذكر	113	4.0619	1.66521	.15665
	انثى	120	5.1750	1.89054	.17258
الثالث	ذكر	113	4.2035	1.68586	.15859
	انثى	120	4.3250	1.77831	.16234
الرابع	ذكر	113	1.6195	.98487	.09265
	انثى	120	1.4583	.89720	.08190
الخامس	ذكر	113	3.9292	1.81618	.17085
	انثى	120	4.2417	2.02088	.18448
السادس	ذكر	113	1.5044	1.01879	.09584
	انثى	120	1.7917	.99491	.09082
السابع	ذكر	113	1.0531	.81109	.07630
	انثى	120	1.1000	.97360	.08888
المجموع	ذكر	113	20.0531	5.48674	.51615
	انثى	120	22.2583	6.90572	.63040

Independent Samples Test

		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
الاول	Equal variances assumed	.185	.668	-2.367	231	.019	-.4853	.20504	-.88924	-.08126
	Equal variances not assumed			-2.367	230.470	.019	-.4853	.20496	-.88910	-.08141
الثاني	Equal variances assumed	2.974	.086	-4.757	231	.000	-1.1131	.23396	-1.57403	-.65208
	Equal variances not assumed			-4.776	229.989	.000	-1.1131	.23307	-1.57229	-.65382
الثالث	Equal variances assumed	1.002	.318	-.534	231	.594	-.1215	.22731	-.56933	.32641
	Equal variances not assumed			-.535	230.989	.593	-.1215	.22695	-.56861	.32569
الرابع	Equal variances assumed	1.545	.215	1.307	231	.193	.1611	.12331	-.08183	.40410
	Equal variances not assumed			1.303	225.714	.194	.1611	.12366	-.08254	.40481
الخامس	Equal variances assumed	.921	.338	-1.239	231	.217	-.3125	.25225	-.80947	.18454
	Equal variances not assumed			-1.243	230.506	.215	-.3125	.25144	-.80788	.18296
السادس	Equal variances assumed	2.101	.149	-2.177	231	.030	-.2872	.13194	-.54721	-.02728
	Equal variances not assumed			-2.175	229.379	.031	-.2872	.13204	-.54740	-.02708
السابع	Equal variances assumed	3.203	.075	-.398	231	.691	-.0469	.11778	-.27896	.18515
	Equal variances not assumed			-.400	227.659	.689	-.0469	.11714	-.27771	.18391
المجموع	Equal variances assumed	8.232	.004	-2.688	231	.008	-2.2052	.82033	-3.82151	-.58896
	Equal variances not assumed			-2.707	224.724	.007	-2.2052	.81475	-3.81076	-.59971

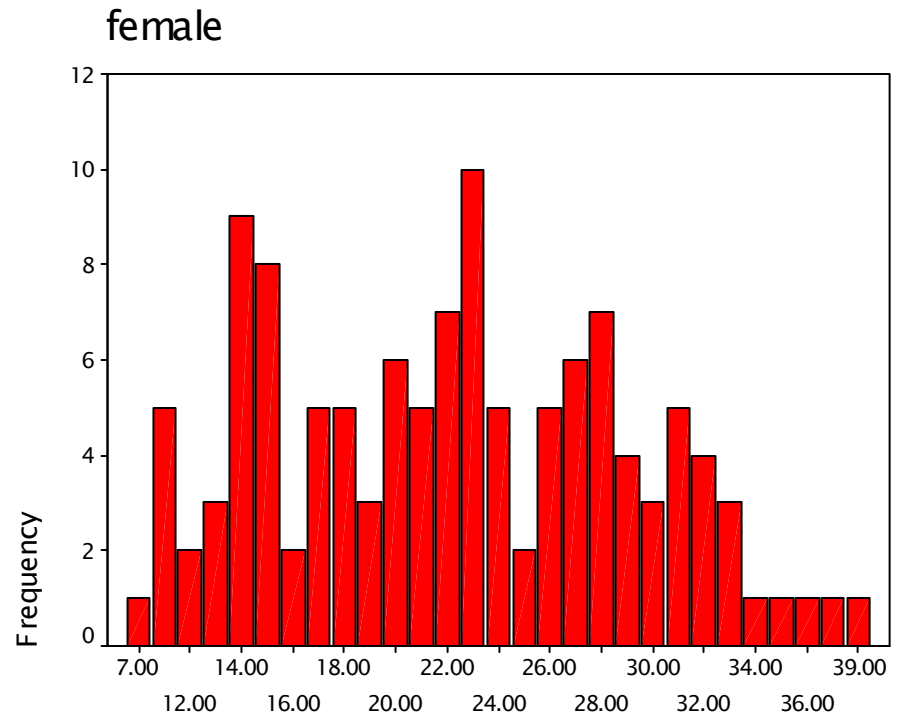
(10)

شكل رقم (1)
توزيع درجات الطلاب في اختبار STS



(2)

STS



To realize the goals of the study the researcher has designed a tools for analyzing the content of the scientific culture book and has designed a test for measuring students understanding of the issues implied in the content of scientific culture curriculum, then he has applied the test of individuals of the study sample after making sure of the reliability and credibility of the test. This study has been performed in the second term of the school year 2007-2008.

The data has been collected and analyzed statistically by using SPSS program so as to test the credibility of the study hypotheses that included : repetitive, percentage, person correction coefficient, Alpha kornpath coefficient Jetman, Arithmetic means, standard deviation test to clarity the understanding difference between males and females for science, technology and society issues.

This study has resulted in:

- 1- The weakness of tackling the issues of science, technology and society in the second secondary class.
- 2- Students have not reached 70% which is the satisfactory limit. This is an evidence of the level of delining of students understanding of science, technology and society issues.
- 3- There are no statistical differences at $0.05 \geq a$ in students understanding due to sex.

In the light of this, the study has recommended that Palestinian curriculums must be revised specially the scientific culture curriculum and developing it according to STS entry and assuring the interactive relation between science, technology and society in the curriculum through combining some local and international issues important in the life of students. They should be taught according to STS entry.

Abstract

This study has aimed at analyzing the content of the scientific culture of the second secondary class according to the issues of science, technology and society measuring students understanding. The main question of the study is:

How far have the issues of science, technology and society been implied in the second secondary class and the extent of students understanding of it?

This main question is subdivided into these questions:

- 1- What are the issues of science, technology and society that the curriculum of scientific culture of the second secondary class must imply?
- 2- What are the issues of science, technology and society that the curriculum of the second secondary class implies ?
- 3- What is the extent of students understanding of the issues of science, technology and society that the curriculum of the scientific culture implies ?
- 4- Are there difference in students understanding owing to sex ?

In the light of these questions of the study the following hypotheses have been put. They are as follows:

- 1- There are no statistical difference between students understanding of science, technology and society issues and standard of accuracy 70%.
- 2- There are no statistical differences at $0.05 \geq \alpha$ in the students understanding of science, technology and society issues owing to sex.

The researculer has adopted the descriptive analytic approach since he has chosen for the process of analysis the content of the scientific culture of the second secondary class. The study included all governmental students of the second secondary class in KhanYunis governorate. More over he has restricted the study sample. It is mode of 6 classes in 6 schools in KhanYunis governorate. These schools have been chosen haphazardly.

They are three boys schools (Haroun El-Rashid, Abdel Kader El-Hasseiny and Kamal Nasir) secondary schools, three girls namely (Akka, Tabaria , KhanYunis) secondary schools.

The Islamic University – Gaza
Faculty of Education – High Studies
Curricula and Teaching Technology Section



**The issues of science, technology and society
been implied in the second secondary class and
the extent of students understanding of it .**

Prepared by :
Majed Nabeel El-Qedra

Supervised by :
Dr. Fathia Subhy Alloolo

This Study is for Acquiring Master Degree in Education - Curriculum
& Science Methodology Department Assignment

2008 / 1429