

CAAP Spring 2006-7 Report On Juniors

Introduction

The Collegiate Assessment of Academic Proficiency (CAAP) Test was given early spring term 2006-7 to a representative sample of junior students from all AUB faculties. With the help of the Registrar's Office and the Banner system, suitable times for administration were scheduled for the sample. Despite continuous reminders and urging, only 235 of the selected 397 (59%) junior students took it though we rescheduled some extra sessions. We also tried to motivate them by providing cafeteria lunch vouchers for LL 5,000 each. Faculties, in turn, contacted selected sample and urged them to take it as a faculty requirement. Unfortunately, we could not get full response rate. Examining the sample representativeness (Table 1), reveals that it is quite proportional to original sample with slight over representation of FEA and OSB and slight under representation of FAFS and FAS. Each student who took the test was given the Critical Thinking (CT) component of the test and was allowed a test of his/her choice from Mathematics Reasoning (MR), Science Reasoning (SCR), Reading (R), and Writing Skills (W).

The tests were administered following CAAP standardized administration procedures. Completed forms were sent to ACT for scoring and a month later reports were received. There was an institutional report, in addition to individual student reports. Each student received a report detailing his/her performance on tests that were taken, giving score and percentile rank compared to AUB students and also compared to American national norms of comparable 4-year institutions. In addition, students who got $\geq 50^{\text{th}}$ percentile received a Certificate of Achievement.

Table 1. Representativeness of CAAP Sample Spring 2007

CAAP Sample			TOOK CAAP		
College	%	#	College	%	#
AG	13	53	AG	11	25
AS	35	140	AS	33	77
EA	21	82	EA	24	56
HS	4	17	HS	3.4	8
NU	2	7	NU	2	5
SB	24	95	SB	27	64
FM		2			
TOTAL		396		59	235

Results

Results of the various CAAP tests for the whole sample are reported in Table 2. Comparison with 2003-6, and with American national norms is also provided. AUB students' best performance is still on MR and SCR followed by Writing, though sample is small, while their lowest performance is on R. Compared to national norms; AUB performance is significantly higher on MR and SCR only, while there are no significant differences on other subjects. With respect to previous performance on CAAP, this year performance is highest in all subjects. Figure 1 also provides a figural representation of

the results. This finding needs to be checked against candidates' GPA to check if this group is academically similar or weaker than that of previous years. Examining GPA data reveals that this year's sample has a higher GPA than last year as 51% of them reported a GPA of ≥ 3.01 vs. 44% in 2006, though slightly lower than 2004/5 (55%). However, 2007 performance is still higher than 2004/5. On examining their actual GPA, we find that average of whole sample required to take CAAP is 78, while average of those who took it is 80 and those who did not take it is 75, so, sample is slightly biased in terms of good students.

Table2. Comparison of CAAP Results with National Norms and with 2003-5

Year	N	CT	SCR	R	MR	W
2006/7	235	63.1 N=235	65.0 N=63	62.4 N=35	65.7 N=123	65.6 N=13
2005/6	245	61.9	60.5	59.9	64.9	63.4
2004/5	403	62.7	62.9	62.5	64.6	63.0
2003/4	736	62.3	61.2	59.7	64.2	60.0
Norms	39,463	62.7	61.4	62.6	58.1	64.2

Results were further examined by comparing CAAP scores for students with similar GPA in both years. Table 3 reports breakdown of scores by GPA for both years. Most noticeable increases were in all groups in SC and in 2.5-3.0 group in R, in the 2.0-2.5 in MR, ≥ 3.0 group in CT (highlighted in blue). So, in general the higher means in 2007 in most areas represent higher competence.

Table 3. Breakdown of CAAP Results by GPA

GPA	N	%	CT		SC			R		MR	
			06	07	06	07	06	07	06	07	06
< 2.00	3										
2.0-2.50	37	16	61	62	61	66	58	59	62	65	62
2.51-3.00	53	23	61	61	58	64	58	63	64	64	62
3.01-3.50	85	36	62	64	61	65	62	64	65	67	
≥ 3.51	34	15	64	66		67	64	63	69	68	
No response	23	10	60	63		64			66	66	

Performance on CAAP tests was also compared by gender, GPA, major and whether English was a first language or not. With respect to gender, examining Table 4 reveals that performance was quite similar on all tests, and where there were differences (W and R) they could not be significant because of small sample size. Gender results are reported graphically in Figure 2.

Figure 1. CAAP Test Results for 2004-6 and in Comparison with Norms

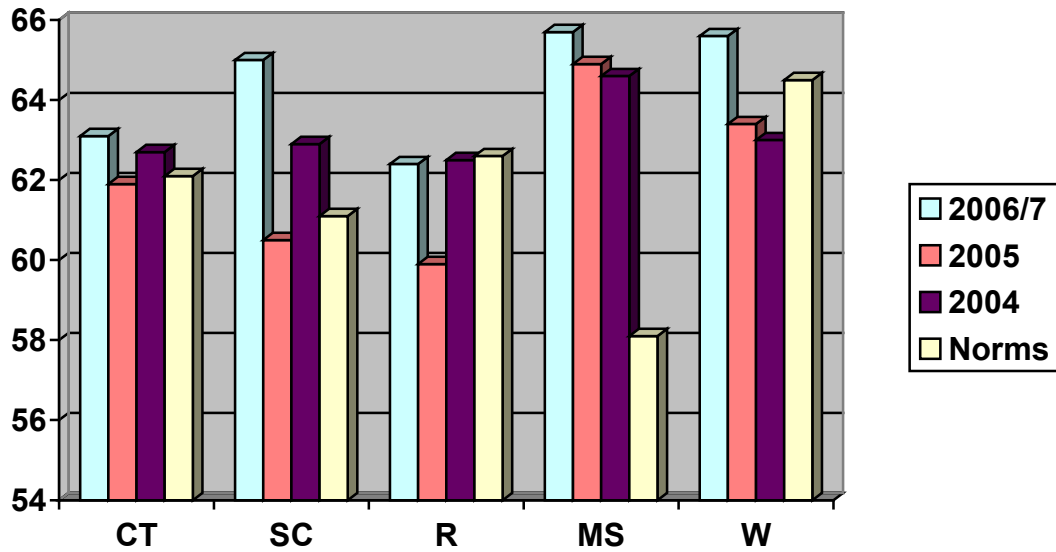
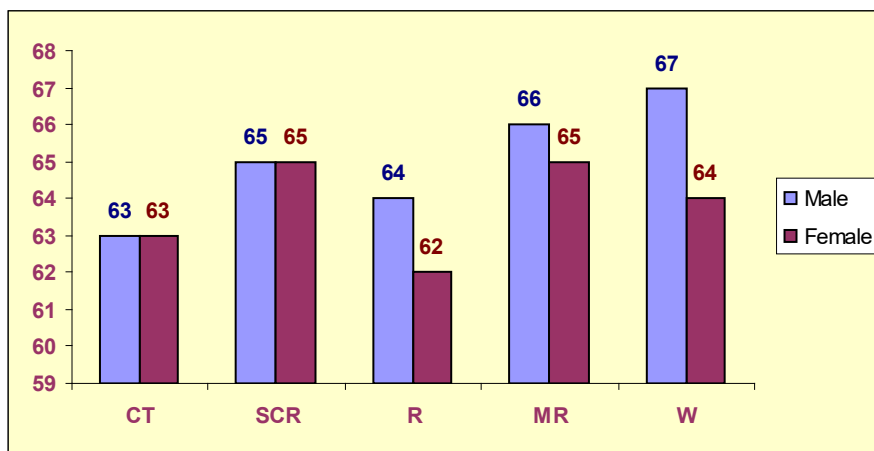


Table 4. CAAP Results by Gender

Gender	N	CT	SCR	R	MR	W
Male	110	63	65	64	66	67
		(n=110)	(n=20)	(n=8)	(n=75)	(n=7)
Female	124	63	65	62	65	64
		(n=124)	(n=42)	(n=27)	(n=48)	(n=6)

Figure 2. CAAP Results by Gender



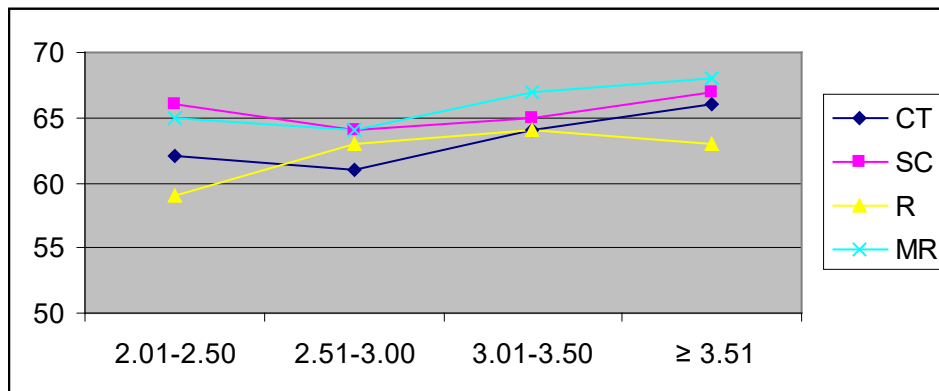
As to age differences on the CAAP tests, all who took the test were juniors and there should not have been large differences in age level nor in results due to age.

With respect to differences resulting from English being a first language or not, there were differences as noted in Table 5 mainly on MR with group whose native language is not English scoring higher. The difference in Writing performance is not significant due to small sample size. Differences were noted, however, on CAAP test scores by GPA. In general the higher the GPA the higher the CAAP test score. Table 3 provides summary results by GPA, while figure 2 highlights differences graphically.

Table 5. CAAP Results by Native Language

English	N	CT	SCR	R	MR	W
First Language	68	63	66	62	64	67
		(n=68)	(n=17)	(n=18)	(n=25)	(n=7)
Not First Language	166	63	65	63	66	64
		(n=166)	(n=46)	(n=17)	(n=97)	(n=6)

Figure 3. CAAP Score Differences by GPA



Differences by major were also noted, students from biological sciences got highest scores on all tests, and except MR and Engineering and Social Sciences got highest in MR and second highest in CT. Business was second highest in MR. Table 6 presents CAAP test results by major, while figures 4-5 present differences in CT and MR by major and in comparison with 2006 (in blue). In CT, all majors improved with exception of business and nutrition who maintained previous year's scores. Improvement is noted in biology, engineering and physical science majors. As for MR, social sciences and business revealed noticeable improvement.

Table 6. Results by Major

Major	N	CT	SCR	R	MR	W
Agriculture	5	60				
Architecture	1					
Biol. Sc.	35	66	67	64		
Business	58	62		61	64	
Marketing	3					
Communications	3					
Community Service	1					
Comp. Sc.	7	63			64	
Education	4					
Engineering	55	64			68	
Health Sc.	10	61	61			
Nutrition	17	61	64			
Letters	2					
Math	5	63				
Philosophy	1					
Physical sc.	10	62	65			
Social sc.	10	64			68	
No response	8	60				

Figure 4 CT Scores by Major, Comparison with 2006 (blue)

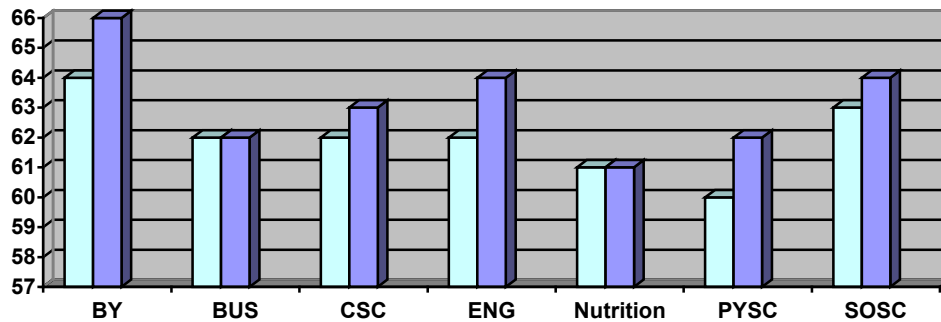
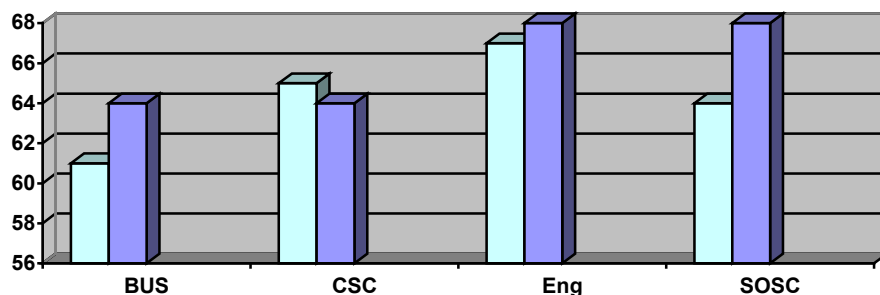


Figure 5 Math Reasoning by Major, Comparison with 2006 (blue)



Results also revealed important information for Writing, Mathematics, and Reading in terms of sub scores. Table 7 provides sub scores for each of these tests, in addition to a comparison with national norms and with 2003-6. In Writing, AUB students consistently do better on usage/mechanics than on rhetorical writing, though they have improved this year in later. With respect to Reading, they performed quite same on social science readings and on arts/literature, though usually they perform better on social science. Improvement in Writing is noticeable over the years and we are approaching the American norms. With respect to math, they do very well on both sections and much higher than the norms.

Table 7. Writing, Reading, and Math Sub score Results, 2003-7

Test	N	2007	2006	2005	2004	2003	Norms
Writing: Usage/Mechanics	13	18.1	16.8	17.2	15.6	15.9	17.2
Writing: Rhetorical	13	17.6	16.6	16.0	14.7	14.9	17.3
Reading: Arts/literature	35	16.2	14.3	15.5	14.5	14.3	15.7
Reading: Social sciences	35	15.9	15.5	16.5	15.2	15.0	16.5
Essay			3.4	3.0	3.2	3.4	3.3
Math: Basic algebra	123	18.3	18.0	17.6	17.8	16.6	15.3
Math: College algebra	123	19.2	20.2	20.4	20.0	18.2	15.2

Certificates of Achievement

A good number of students obtained Certificates of Achievements indicating that they achieved $\geq 50^{\text{th}}$ %ile of the normative sample. Table 8 provides the number and percentage of certificates obtained in different subjects and in comparison with 2004-6. Percentages in 2007 are higher than previous years and are closer to 2005 figures. Increase in nearly all subjects though to a lesser extent in CT. Figure 6 provides the figures graphically by subject. Some students obtained certificates in one subject, others in two. Table 9 details this information in comparison with 2005. The highest percentage of certificates was obtained in Math Reasoning followed by Science Reasoning.

Table 8 Distribution of Certificates of Achievement by Subject

Subject	N	Certificates 07	%Certificates 07	%Certificate 06	%Certificate 05	%Certificate 04
Critical Thinking	235	123	52	49	55	51
Math Reasoning	124	124	100	94	81	88
Science Reasoning	63	49	78	45	72	50
Writing Skills	13	9	69	55	41	14
Reading	35	20	57	33	52	31

Figure 5. Number of Certificates by Test

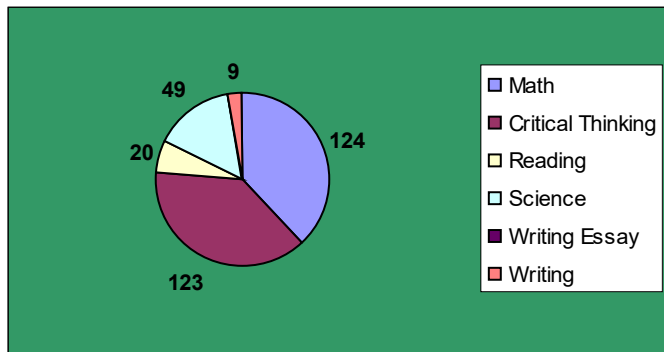
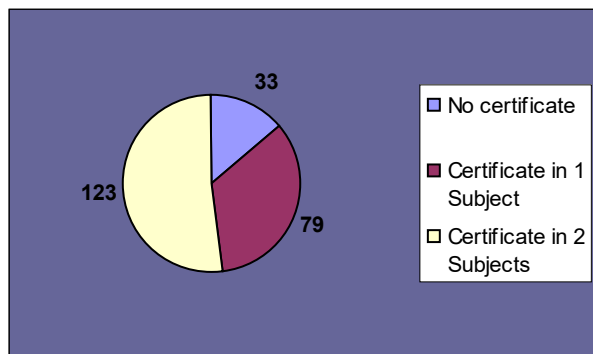


Table 9. Frequency of Number of Distributions, Comparison with 2005-6

	N (06)	%Certificates 07	%Certificates 06	%Certificates 05	% Total 07	% Total 06	% Total 05
# who got certificates in 1 subject	79	39	54	45	34	44	39
# who got certificates in 2 subjects	123	61	46	55	52	38	47
Total	202	100	100	100	86	82	86

The percentage of students who took certificates is similar to that of 2005. Similarly, the percentage of students who were awarded two certificates went up to 52%. Figure 6 provides graphic distribution of certificates.

Figure 6. Distribution of Certificates



Results by Demographic Variables

It was interesting to study performance on CAAP with student other information like actual GPA, schools they came from, in addition to their entry level scores like SAT and Composite score. Appendix provides scores on different tests by school and schools with highest averages on different tests. Of interest is that students with highest average in CT were coming from schools outside Lebanon.

Conclusion

Administering the CAAP is very useful as it provides AUB with an indicator of the level of its students in basic general education skills and competencies that include thinking critically, reasoning and written communication. The information provides us with information regarding skills needing improvement and the changes over time. It is a very important and serious outcome that needs to be maintained and even encouraged.

We still have problems with students taking the CAAP. Despite urging and promises and threats, we had 59% participation rate. We need to work more on this side by finding ways to motivate all juniors to take the tests and to put their best effort while doing so. This year's results showed improvement across all subjects but the sample, as usual, was slightly biased towards more competent students, as revealed in the report. This, however, has been the case for years but we hope that improvement noted this year will be maintained.

Appendix

School Averages on Various Tests

HIGH SCHOOL	W		MR		R		CT		SCR	
	Count	Avg	Count	Avg	Count	Avg	Count	Avg	Count	Avg
	0		0		0		1	63	1	65
A.U.B.	1	68	0		1	65	2	60	0	
A/Dhabi Int'l School,UAE	0		0		1	66	1	69	0	
Abdul Aziz M. Al-Khalifah Sec.	0		1	64	0		1	61	0	
Ahliah Sch,Wadi Abu Jmil	0		0		0		1	62	1	64
Al Ghazali H Sch, Hay Sillum	0		1	69	0		1	60	0	
Al -Jamil Al-Ahliya School	0		0		0		1	59	1	65
Al Kawthar School, Beirut	1	62	0		0		1	58	0	
Al-Hussan National Sch.Dammam	0		0		0		1	61	1	63
Al-Mustafa High Sch.,Nabatieh	0		0		0		1	60	1	65
Amer.Comm.School, Beirut	0		1	65	2	60.5	4	63.8	1	71
American School of Kuwait	1	64	0		0		1	69	0	
Antonins Col/Frers,Baabda	0		1	69	0		1	63	0	
Arizona State University	1	71	0		0		1	71	0	
Arndt-Oberschule(Gymnasium)	0		0		1	67	1	66	0	
Ashbal Al Sahel,H/Hureik	0		0		0		1	61	1	65
Athenee de Beyrouth.	0		2	68.5	0		2	61.5	0	
Bahrain Bayan Sch.	0		0		1	69	1	71	0	
Balamand University	0		1	65	0		1	66	0	
Baptist Sch,Amman	0		1	70	0		1	66	0	
Beirut Arab University	0		0		2	63.5	2	66	0	
Beirut Babtist Sch/Mazraa	0		0		0		1	61	1	65
Beirut Comm.Sch/Hadath	0		0		0		1	49	1	54
Beirut Evang.Sch.for girls&boy	0		2	60.5	0		2	61	0	
British Int'l Sch.of Jeddah,KS	0		0		1	67	1	71	0	
Brummana High Sch.	2	63	0		0		4	61	2	62.5
Cairo Amer.Col,Egypt	0		0		0		1	58	1	65
Christian Teach.Institute,Hors	0		1	68	1	50	2	66.5	0	
City International School,Beir	1	65	0		0		1	63	0	
Col.de La Sagesse,Achrafieh	0		1	67	0		2	66	1	63
Col.des Freres,Deddeh	0		2	69	0		3	64.3	1	66
Col.Melkart,Hazmieh	0		1	66	0		1	68	0	
Col.Prot.Francais, Beirut	1	67	5	64.4	0		7	63.7	1	66
Col.St.Coeur,Hadath	0		1	59	0		1	50	0	
Col.St.Coeurs,Sioufi	0		1	68	0		1	60	0	
Coll.AI-Mostapha Al-Hoch,Tyr	0		1	67	0		3	65	2	66
Coll.Notre Dame Du Balamand	0		0		0		1	54	1	61
College du Sacre Coeur, Beirut	0		0		1	69	2	60	1	61
College Louise Wegmann, Beirut	0		2	66	0		2	65	0	
College MARISTE Champville	0		6	64	0		6	63.7	0	
College Saint Georges, Hadath	0		1	61	0		1	56	0	
College St. Joseph,Antoura	0		0		0		1	61	1	65

Convent Sch.Jesus & Mary,Rabwe	0		1	67	1	72	3	68.7	1	63
Damascus Comm.Sch.	0		0		0		1	68	1	68
David Karam Educ.Cent,Koura	0		2	70.5	0		2	70	0	
DePaul University,Chicago,IL	0		1	57	0		1	56	0	
Doha College, Qatar	0		0		0		1	60	1	64
Ecole Elite, Msaytbeh	0		1	60	0		1	49	0	
Ecole Francaise de Damas	0		1	64	0		1	62	0	
Evange.Sec.Sch,Tripoli	0		1	66	0		1	68	0	
Friends Sc,Ramallah	0		1	61	0		1	62	0	
GrandLyceeFrancolibanais,bey	0		6	66.2	2	66.5	9	64.6	1	62
Greater Beirut Evangelical Sch	1	70	0		0		1	72	0	
Greenfield Coll,Beirut	0		0		0		1	61	1	61
Hariri High School II, Beirut	0		0		2	65	2	66	0	
Hillcrest Sc,Nijeria	0		0		1	67	1	72	0	
ICARDA Int'l Sch.Of Aleppo	1	65	0		0		1	67	0	
Imane Pilot Sc,Zarif	0		2	69	0		2	63.5	0	
Int'l College, Ras Beirut	0		12	64.5	5	60.4	23	64.6	6	68.2
Int'l Sch,Koura	0		0		0		1	68	1	68
Int'l Sch.of Choueifat, Al Ain	0		1	68	0		1	66	0	
Int'l Sch.of Choueifat,Choueif	0		7	64.9	1	64	10	62.7	2	63.5
K.A.I.S.King AbdulAziz Int'l S	0		1	57	0		1	62	0	
King Saud Int'l. School, Riyad	0		1	70	0		1	63	0	
Leb Evan Sch for B&G,Louaizeh	0		1	68	0		3	64.3	2	67.5
Leb. Am. University,Ras Beirut	0		1	62	3	58.7	4	59.3	0	
Leb.Int'l Sc,Beirut	0		1	70	0		1	62	0	
Leb.Prepar.School, Beirut	0		1	66	0		1	68	0	
Leb.Rawdah High School	0		0		1	57	1	56	0	
Lycee Abdul-Kader, Beirut	0		2	68.5	0		3	59.3	1	61
Lycee Francais Int'l Jeddah	0		1	67	0		1	71	0	
Lycee Francee,Doha, Qatar	0		1	59	0		1	63	0	
Lycee Franco Libanais, N.Ibr	0		1	61	0		1	57	0	
Lycee Franco Libanais,Verdun	0		3	65.7	0		5	66.4	2	69
Lycee Nat,Shweifaf	0		1	68	0		1	66	0	
Manar Modern Sc,R.Matn	0		1	58	0		1	58	0	
N.D.de Jamhour College	0		5	67.4	1	65	6	63.3	0	
N.D.Nazareth Col., Beirut	0		1	70	1	57	2	64	0	
N.D.Nazareth Col.,Beirut	0		0		0		1	64	1	68
N.D.University, Louaize	0		1	66	0		1	49	0	
Najd National School, Riyadh	0		1	67	0		1	61	0	
Nat.Evangl.Sch,Nabatiyeh	0		0		0		1	65	1	66
Nat.Prot.Col,Kfarshima	0		1	64	0		2	60.5	1	64
National Orthodox Sch.,Jordan	0		1	57	0		1	49	0	
New English Sc,Jordan	0		0		1	56	1	59	0	
Notre Dames des Apotres,KabEli	0		0		0		1	59	1	60
Off Sec Sch Majdel Baana	0		1	65	0		1	62	0	
Off. Manara Sec.Sc,Bekaa	0		0		1	61	1	63	0	
Off.Sec.Sch,Rayak	0		1	71	0		1	63	0	
Off.Sec.Sch./Girls,Sidon	0		0		0		1	58	1	65
Official Sec.Sch.,Bchamoun	0		0		0		1	54	1	60

Omar Farroukh Sec.Sch.	0		0		0		1	60	1	60
Omar Mukh.Edu.Cen.Bekaa	0		0		0		2	64	2	67.5
Our Lady of Grace School, Kfar	0		0		0		1	59	1	68
Qalaa Sec.School, Sidon	0		2	66	0		2	62	0	
Rafic Hariri High School, Sidon	0		0		0		3	63.7	3	66
Ras Beirut Int'l Sch., AirPort	0		1	70	0		1	65	0	
Rawafed Priv.School	0		1	63	0		2	58.5	1	63
Rawdah H.Sch., Beirut	1	59	7	67.7	1	59	10	61.9	1	64
Sagesse High School, Ain Saade	1	68	3	68.7	1	58	6	64.3	0	
Sagesse St.Jean Brazila, Baabda	0		1	71	0		1	68	0	
Shouf National College, Baakli	0		0		1	61	1	63	0	
Srs. Ste. Famille, Hoche-Hala,	0		1	71	0		1	61	0	
St.Coeur, Kfarhabab	0		0		0		1	63	1	66
St.Famille Maronite, Tripoli	0		1	61	0		1	62	0	
St.Famille, Fanar	0		0		0		1	65	1	63
St.Francois Cappucins, Beirut	0		1	55	0		1	56	0	
St.Joseph l'Apparition, Z.Blatt	0		1	64	0		1	56	0	
St.Joseph, Jbeil	0		1	65	0		1	65	0	
St.Joseph, K/Shahwan	0		1	62	0		4	62.3	3	66.3
St.Louis Univ./Madrid Campus	1	68	0		0		1	69	0	
St.Mary Orthodox Col, Beirut	0		3	69.3	0		5	65.4	2	64
Sultan's School, Oman	0		0		0		1	63	1	65
Tannokh.Nat.Sch, Aley	0		1	70	0		1	54	0	
Thanawiyat Tarbieh, Sidon	0		1	63	0		1	57	0	
The Int'l Sch of Choueifat, Sh	0		1	67	1	65	2	67.5	0	
Walther-Rathenau-Oberschule, Be	0		0		0		1	67	1	66

Highest Ten Schools in Subjects

HIGH SCHOOL	Avg. WRITING SKILLS
Arizona State University	71
Greater Beirut Evangelical Sch	70
A.U.B.	68
Sagesse High School, Ain Saade	68
St.Louis Univ./Madrid Campus	68
Col.Prot.Francais, Beirut	67
City International School,Beir	65
ICARDA Int'l Sch.Of Aleppo	65
American School of Kuwait	64
Brummana High Sch.	63
HIGH SCHOOL	Avg. MATH REASONING
Off.Sec.Sch,Rayak	71
Sagesse St.Jean Brazila,Baabda	71
Srs. Ste. Famille, Hoche-Hala,	71
David Karam Educ.Cent,Koura	70.5
Tannokh.Nat.Sch,Aley	70
Baptist Sch,Amman	70
King Saud Int'l. School, Riyad	70
Leb.Int'l Sc,Beirut	70
N.D.Nazareth Col., Beirut	70
Ras Beirut Int'l Sch.,AirPort	70
HIGH SCHOOL	Avg. SCIENCE
Amer.Comm.School, Beirut	71
Lycee Franco Libanais,Verdun	69
Int'l College, Ras Beirut	68.2
Damascus Comm.Sch.	68
Int'l Sch,Koura	68
N.D.Nazareth Col.,Beirut	68
Our Lady of Grace School, Kfar	68
Leb Evan Sch for B&G,Louaizeh	67.5
Omar Mukh.Edu.Cen.Bekaa	67.5
St.Joseph,K/Shahwan	66.3
HIGH SCHOOL	Avg. CRITICAL THINKING
Greater Beirut Evangelical Sch	72
Hillcrest Sc,Nijeria	72
Arizona State University	71
Bahrain Bayan Sch.	71
British Int'l Sch.of Jeddah,KS	71
Lycee Francais Int'l Jeddah	71
David Karam Educ.Cent,Koura	70
A/Dhabi Int'l School,UAE	69
American School of Kuwait	69
St.Louis Univ./Madrid Campus	69