AMERICAN UNIVERSITY OF BEIRUT

THREE-YEAR SUMMARY OF THE RESULTS OF STUDENT SURVEYS
1999/2000 - 2001/2002

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Description of the Survey
    The objectives of the student survey that was administered to graduating students at the end of the academic years 1999/2000, 2000/2001, and 2001/2002 were to assess teaching practices and students' educational experiences at AUB and evaluate program outcomes. Following the first administration of the survey in 1999/2000, it was reviewed and administered the following two years. Therefore, the first year the survey was administered it was slightly different from the subsequent two years. The survey consisted of two parts. The first part contained 36 questions to which students responded using a 4-point Likert type scale (1: Strongly Disagree [SD]; 2: Disagree [D]; 3: Agree [A]; 4: Strongly Agree [SA]). This part of the survey inquired about the clarity of objectives of students' undergraduate programs, courses, and course syllabi. In addition, students were asked about teaching practices, assessment methods, exposure to recent developments in their field of specialization, acquisition of leadership and communication skills, and level of personal growth. The second part of the survey contained five open-ended questions that asked students to suggest changes in teaching practices, recommend topics, skills, and concepts that need to be added to the programs, and propose ways to improve the grading system at AUB. In addition, students were asked to describe their best and their worst learning experiences at AUB.

Sample
    The survey was administered in June 2000, 2001, and 2002 to all graduating students from all the Faculties of the University. Table 1 presents the numbers of students who received the survey, those who responded, and the response rate for the academic years 1999/2000, 2000/2001, and 2001/2002.

Table 1
Numbers of students who received the survey, those who responded, and the response rate for the academic years 1999/2000, 2000/2001, and 2001/2002.

Year	Number of Students receiving survey	Number of Students responding	Response rate
1999/2000	659	385	58.4%
2000/2001	962	485	50.4%
2001/2002	1083	848	78.3 %
Totals	2704	1718	63.5%

Distribution
    Copies of the survey were distributed to all academic departments with a covering letter from the Associate Provost, Dr. W. Nasr. Departments were requested to distribute the survey to all the graduating students, collect the completed surveys, and send them to Dr. Nasr's office. Several methods were used to insure high rates of participation such as calling and sending emails to department chairs and asking for help from the Office of Student Affairs.

Data analysis
    Data from the first part of the survey were coded and analyzed using SPSS for windows. The items in the first part were grouped into five categories: Course design, Teaching courses Student assessment, Program and leadership characteristics. Responses to each of the items were collapsed into two categories by adding strongly agree with agree and

strongly disagree with disagree. Moreover, because of the small number of respondents from the faculties of Agriculture and Food Sciences, Health Sciences, and Medicine, responses from these faculties were added to those of the faculty of engineering and grouped under a category labeled "Professional schools". This process resulted in three major categories of respondents: Faculty of Arts and Sciences (FAS), Professional schools, and the School of Business (Business). The frequencies and percentages of responses were computed and compared across these three categories.

      Responses to the second part of the survey, which contained five open-ended questions, were analyzed to identify categories in responses to each of the questions which addressed the following themes: Changes in teaching practices at AUB, topics, skills, and concepts that need to b e added to the programs at AUB, ways to improve the grading system at AUB, and descriptions of students' best and worst learning experiences at AUB**.** Since the 1999/2000 survey did not contain a detailed analysis of responses to the open-ended questions, comparisons will be made between 2000/2001 and 2001/2002. However, a summary of the 1999/2000 responses to the open ended questions will be presented for comparison purposes.

Results

      The following sections present the results of comparing students' responses to the 1999/2000, 2000/2001, and 2001/2002 surveys. Since the survey questions were grouped into five categories: course design, teaching courses, student assessment, program, and leadership characteristics, the results are presented using these categories. Moreover, since the respondents were grouped into three major categories: Faculty of Arts and Sciences (FAS), Professional Schools (Professional), and the School of Business (Business), the results provide a description of the responses of all students followed by a comparison of the responses across the three categories of respondents. Comparison of students' responses to the open ended questions in 2000/2001 and 2001/2002 is follows that of the quantitative data comparisons.

Responses of all graduating students
      Table 2 presents the percentages of students who agreed with the items of the survey during the academic years 1999/2000, 2000/2001, and 2001/2002. These results are presented in the following paragraphs. Since the survey questions were grouped into five categories: course design, teaching courses, student assessment, program, and leadership characteristics, the results are presented using these categories.

      Course design: Students' responses to the items in the course design component of the survey administered during the three academic years 1999/2000, 2000/2001, and 2001/2002 indicated that there was a steady increase in their agreement with the items that asked about clarity of program objectives and clarity of the statements of the objectives. Moreover, a large majority of students agreed that syllabi were distributed early in the semester. The most significant increase in agreement however, was on the item that asked about the inclusion of skills required by the courses, where the agreement increased from 55% in 1999/2000 to 74% in 2001/2002.

      Teaching courses: There was a steady increase in students' agreement with seven out of the 11 items in this category over the three academic years 1999/2000, 2000/2001, and 2001/2002. These increases were in the items that asked about discussing recent developments in the field, enabling student involvement, encouraging problem solving in class, including group work both in and out of class, relating outside relevant events/activities to subjects covered in the courses, being motivated to do well, and taking a course that required accessing information through the Internet. The most significant increases in

agreement were on the items that asked doing independent research (increase of 18 percentage points), including group work in courses (increase of 13 percentage points), and being motivated to do well in class (increase of 10 percentage points). Agreement with other items, however, stayed almost the same across the three years. These items asked about doing independent research for term papers and other take-homework, having no time to cover all of the course topics, availability if teachers during office hours, and relevance of material covered in class to stated course objectives.

While agreement with the items either increased or stayed the same, it is worth noting that the percentages of students' agreement ranged between 54% and 71% on 8 out of the 11 items in this category. The items one which agreement was relatively low in the three years included those items that asked about encouraging problem solving in class, enabling student involvement, relating outside events to class activities, and covering all course topics.

Student assessment: There were consistent increases in students' agreement with most of the items or sub-items in this category. These increases included items that asked about explaining grading policies, evaluating students' performance periodically, and using a variety of types of performance evaluations. The most significant increases were on the sub-item that asked about periodic evaluation of students performance (an increase of 37 percentage points between 1999/2000 and 2000/2001[1]), homework assignments (increase of 17 percentage points and the items that asked about discussing student performance (increase of 13 percentage points). However, the percentages of students was relatively low across the three years in the item that asked about discussing students' performance, and the sub-items that inquired about the use of oral tests, drop quizzes, and take home tests. In contrast, a large majority of students agreed that performance was evaluated periodically and objective test, subjective tests, individual reports, and group reports were used often.

Program: Students' agreement with the items in this category over the three years varied. There was a steady increase, although very small at times, in agreement with many of the items such as the ones that asked about overall quality of instruction, adequacy of required courses in major, contribution of course material to personal growth, overall quality of academic advising, and having access to computers. On the contrary, there was a decrease in agreement with a number of the items such as the ones that asked about awareness of faculty research, attending special talks, lectures, and panel discussions, and having access to career guidance. Moreover, a decrease that indicated a positive development was on the items that asked about cheating: there was a decrease in agreement, although small, on both items that asked about seeing students cheat and knowing students who handed in some else's work as their own. However, percentage agreement of students with these two items in the Academic year 2001/2002 was still relatively high ranging from 66% to 78%. Finally, it is observed that students' agreement was relatively low across the three years on items that asked about finding large classes beneficial, being aware of faculty research, attending special talks, having access to career guidance, quality of academic advising, and working with faculty on research projects.

Leadership characteristics: The majority of students, ranging from 77% to 87% of the students, agreed with all the items in this category across the three years. These items covered such issues as working with team members, planning work and setting goals, staying on task toward a timely completion of goals, communicating effectively with persons from other disciplines, convincing others through effective presentations and written reports, and making ethical decisions. Moreover, students' agreement either increased or stayed almost the same on all the items in this category.

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[1] We were not able to identify the reason or reasons for this relative large increase in students' agreement with this item.

Table 2.
Percentage of students across the University who agreed with the items of the survey during the academic years 1999/2000, 2000/2001, and 2001-2002[2].

	99/00 %	00/01 %	01/02 %
Course Design	**Agree**	**Agree**	**Agree**
1. The objectives of the program I am enrolled in were clear to me.	79	84	87
2. The objectives of the courses that I have taken were clearly stated.	84	84	88
3. Course syllabi are usually distributed early on in the semester.	91	93	96
4. The syllabi usually included skills that the students ought to acquire by the end of the course.	55	65	74
Teaching the course			
5. The material covered in class was relevant to stated course objectives	86	90	88
6. Recent developments in the field were discussed in class.	54	56	63
7. Classroom sessions were often structured to enable student involvement.	64	65	67
8. Teachers often encouraged problem-solving in class.	50	55	56
9. Course activities often included group work both in and out of class.	58	67	71
10. Teachers usually invited students to relate outside relevant events/activities to subjects covered in the courses.	46	54	53
11. I did independent research for term papers and other take-homework.	69	88	87
12. There was no time to cover all of the course topics.	57	59	56
13. I was motivated to do as well as I could in my classes.	59	67	69
14. 14. I have taken a course that required accessing information through the Internet.	78	83	85
15. Teachers were usually available to students during office hours.	83	87	86
Student Assessment			
16. Teachers clearly explained their grading policy to students at the beginning of courses.	**68**	75	73
17. Teachers usually evaluated student performance periodically (e.g., examinations, quizzes, assignments, etc.)	43	80	83
18. Teachers usually discussed performance and progress with students.	35	43	48
19. Teachers often used the following types of performance evaluations:			
Objective test	**81**	91	90
Subjective test	**75**	85	82
Oral test	**22**	22	24
Drop quiz	32	45	41
Take-home test	20	21	27
Homework assignment	61	76	78
Individual report	71	78	77
Group project report	78	86	85

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[2] The items listed in Table 7 were the ones used in the 2000/2001 and 2001/2002 surveys. Items in the 1999/2000 survey that had different number were compared with similar items in the 2000/2001 surveys. Also, Question 33 with its 4 parts in the 2000/2001 survey was four different questions in the 1999/2000 survey

Table 2 (Cont'd)

Program	99/00 % Agree	00/01 % Agree	01/02 % Agree
20. The overall quality of instruction in my program was good. *	64	82	80
21. The content of required courses in my major were adequate.	66	70	73
22. I found large classes beneficial.	35	34	44
23. The classes I was enrolled in contributed to my personal growth.	73	74	76
24. I am aware of faculty research activities in my program.	48	41	44
25. I have attended special talks, lectures, or panel discussions held on campus.	68	59	62
26. I had access to career guidance at AUB.	53	34	36
27. The overall quality of academic advising provided to me was adequate. *	43	44	51
28. I have worked with a faculty member on research projects.	27	30	33
29. I had access to computers in my department.	77	82	79
30. I have seen students cheat on a test at AUB.	79	82	78
31. I knew AUB students who handed in someone else's work as their own.	70	72	66
32. The program I am enrolled in prepared me to apply my knowledge in my field to solve relevant problems.	77	81	82
Leadership Characteristics			
33. At AUB I learned to:			
a. reinforce and support ideas from team members.	84	82	82
b. plan work and set goals.	90	87	86
c. stay on task toward a timely completion of goals.	86	85	85
d. communicate effectively with persons from other disciplines.	92	80	80
34. My educational experience at AUB enhanced my ability to convince others with my ideas and solutions by **effective presentations**.	84	84	87
35. My educational experience at AUB enhanced my ability to convince others with my ideas or solutions to problems by **effective written reports**.	83	85	85
36. My educational experience at AUB prepared me to make ethical decisions in my field.	78	77	77

* Those two items were mentioned as negative items in the 2000 survey. "not" was used in both questions

Comparison among the responses of all graduating students by category of respondents (FAS, Professional, Business) between the academic year 1999/2000, 2000/2001, and 2001/2002.

Tables 3-7 present the percentages of students who agreed with the items of the survey during the academic years 1999/2000, 2000/2001, and 2001/2002 for each of the categories of respondents: Faculty of Arts and Sciences (FAS), Professional Schools (Professional), and the School of Business (Business). Since the survey questions were grouped into five categories: course design, teaching courses, student assessment, program, and leadership characteristics, the results are presented using these categories.

Course design: In general students' agreements with the items in this category in all faculties were moderate to high, ranging from 52% to 94%), across the three years. Moreover, there was a consistent increase in agreement on almost all items in all faculties during the three years. The most significant increases were on the items that asked about clarity of objectives, statement of objectives, and including skills in the syllabi in the school of Business (15%, 13%, and 12% increase respectively), the item that asked about including skills in the syllabi in Professional Schools (increase of 25%), and the item that asked about including skills in the Syllabi in the Faculty of Arts and Sciences (increase of 15%). However, agreement with the item that asked about the inclusion of skill in the course syllabi

was lower than agreement with the other items across faculties and years, ranging from 52% to 79%.

Table 3.
Comparison of the number and (%) of graduating students who agreed with the listed items regarding Course design in 1999/2000, 2000/2001, and 2001/2002.

	FAS 99/00 (n= 129)	FAS 00/01 (n= 112)	FAS 01/02 (n=292)	Prof * 99/00 (n= 169)	Prof * 00/01 (n= 190)	Prof * 01/02 (n=329)	Business 99/00 (n= 87)	Business 00/01 (n=183)	Business 01/02 (n= 227)	χ^2
Item	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	
1. The objectives of the program I am enrolled in were clear to me.	102 (80)	85 (77)	236 (81)	133 (79)	160 (85)	283 (87)	69 (79)	162 (89)	214 (94)	19.9**
2. The objectives of the courses that I have taken were clearly stated.	118 (92)	95 (86)	256 (88)	136 (81)	162 (88)	282 (86)	69 (79)	149 (82)	209 (92)	
3. Course syllabi are usually distributed early on in the semester.	118 (92)	102 (92)	285 (98)	154 (92)	182 (97)	312 (95)	76 (88)	163 (91)	214 (95)	
4. The syllabi usually included skills that the students ought to acquire by the end of the course.	66 (52)	65 (58)	196 (67)	91 (54)	137 (73)	257 (79)	54 (62)	113 (62)	169 (74)	12.8**

* Professional (Prof) includes FAFS, FHS, FEA, and school of Nursing
** Significant (p ≤ 0.05).

Teaching courses: Results of comparing students' agreement with the items in this category are presented in Table 4. Responses of students of the Faculty of Arts and Sciences to the survey varied across the academic years 1999/2000, 2000/2001, and 2001/2002. Agreement on a number of the items was consistently high (80% and above -- 3 items), moderate or low for the other items (less than 80% - 8 items). Moreover, agreement increased on most of the items. The most significant increase was on the items that asked about doing independent research (increase of 14%), accessing information by using the Internet (increase of 14%), and including group work in courses (increase of 12%). Conversely, there was decrease on one item. This decrease, however, indicated a positive change in that student agreed less with the item that asked about the lack of time to cover all course topics. Even though agreement increased on most of the items, there were items on which agreement was still low (equal to or less than 65%). These items included the ones that asked about discussing recent developments in the field, encouraging problem solving, including group work in class activities, and encouraging students to relate outside events to class work. It is worth noting that a significant percentage of students thought that there was no time to cover all course topics.

Similar to responses of students in the Faculty of Arts and Sciences, agreement of students in Professional Schools with items in this category were varied. Agreement on four items was consistently high while agreement with the rest of the items was moderate to low. Changes in agreement with the items ranged from a decrease of 2% to an increase of 23%. The most significant increase was on the item that asked about doing independent research (increase of 23%). However, even though there were increases in agreement on some items, agreement was still low (equal to or less that 65%) on the items that asked about discussing recent developments in the field, enabling student involvement, encouraging problem solving, encouraging students to relate outside events to class work, and motivating students to

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perform their best. It is worth noting that a significant number of students in Professional Schools thought that there was no time to cover all course topics

Business School students' agreement across the three years in this category increased on most of the items. The most significant increases were on the items that asked about discussing recent developments in the field (increase of 28%), including group work in course activities (increase of 22%), being motivated to do well (increase of 22%), encouraging problem solving (increase of 15%), availability of faculty members during office hours (increase of 14%), and relevance of course material to stated course objectives (increase of 10%). However, similar to Professional Schools and the Faculty of Arts and Sciences there were a number of items on which agreement was still relatively low (equal to or less than 66%). These items were the ones that asked about encouraging problem solving and relating outside events to course content. However, a significant percentage of students suggested (approximately 60%) that there was no time to cover all course topics.

To summarize, it can be said that there were significant increases in percentage agreement with many items in this category and agreement was high on a number of items. However, it is evident that students' agreement with a number of items is consistently low for all faculties across the three years. These items included the ones that asked about discussing recent developments in the field, encouraging problem solving, including group work in class activities, and encouraging students to relate outside events to class work. It is important to note that a significant percentage of students in all faculties across the three years thought that there was no time to cover all course topics.

Student assessment: Faculty of Arts and Sciences students' agreements improved for most of the items and sub-items in this category across the three years. The most significant increases were on the items that inquired about discussing performance with students (increase of 16%) and the use of objective tests, take home tests, homework assignments, and group project reports (increase of 10%, 10%, 25%, and 10% respectively). Although there were increases in agreement across the year, students' percentage agreement was relatively low (less than 67%) on the items that asked about discussing performance with students, and using oral tests, drop quizzes, take home tests, and homework assignments.

Agreement of students in Professional Schools with the most of the items in this category improved between 1999/2000 and 2000/2001 and decreased between 2000/2001 and 2001/2002. However, in general there were consistent increases, although small between 1999/2000 and 2000/2001. However, there were a number of items on which students' percentage agreement was consistently low (less than 53%) across the three years. Those were the items that asked about discussing performance with students, and using oral tests, drop quizzes, and take-home tests.

Agreement of students in the School of Business increased for all the items in this category. The most significant increases were on the items that asked about using drop quizzes (increase of 27%), discussing performance and progress with students (increase of 18%), using homework assignments (increase of 17%), using individual reports (increase of 15%), using subjective tests (increase of 14%), and teachers explaining grading policy at the beginning of the course (increase of 10%). Even with these increases, there were items on which students' percentage agreement was relatively low such as the ones that asked about discussing performance with students and using oral tests, drop quizzes, and take-home tests.

Table 4.

Comparison of the number and (%) of graduating students who agreed with the items about Teaching courses in 1999/2000, 2000/00/2001, and 2001/2002.

	FAS 99/00 (n= 129)	FAS 00/01 (n= 112)	FAS 01/02 (n=292)	Prof * 99/00 (n= 169)	Prof * 00/01 (n= 190)	Prof * 01/02 (n= 329)	BUSINESS 99/00 (n= 87)	BUSINESS 00/01 (n=183)	BUSINESS 01/02 (n=227)	χ^2
Item	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	
5. The material covered in class was relevant to stated course objectives	117 (91)	101(92)	262 (91)	143 (85)	171 (91)	277 (85)	68 (80)	160 (90)	204 (90)	6.6**
6. Recent developments in the field were discussed in class.	77 (60)	66 (60)	190 (65)	92 (54)	102 (54)	169 (52)	41 (46)	102 (56)	168 (74)	29.0**
7. Classroom sessions were often structured to enable student involvement.	86 (68)	67 (60)	201 (70)	99 (59)	123 (65)	191 (58)	57 (66)	126 (69)	171 (75)	18.8**
8. Teachers often encouraged problem solving in class.	60 (47)	55(50)	156 (53)	87 (53)	98 (52)	165 (51)	44 (51)	110 (61)	148 (66)	12.8**
9. Course activities often included group work both in and out of class.	58 (45)	50 (47)	166 (57)	110 (66)	135 (72)	237 (73)	53 (62)	135 (75)	189 (84)	48.1**
10. Teachers usually invited students to relate outside relevant events/activities to subjects covered in the courses.	60 (48)	53 (48)	160 (55)	72 (43)	93 (50)	143 (44)	44 (51)	112 (61)	141 (62)	19.1**
11. I did independent research for term papers and other take-homework.	91 (71)	95 (86)	247 (85)	104 (62)	167 (89)	277 (85)	69 (79)	162 (89)	210 (93)	9.2**
12. There was no time to cover all of the course topics.	84 (66)	80 (72)	167 (58)	78 (46)	91 (48)	164 (50)	54 (63)	112 (62)	143 (63)	9.6**
13. I was motivated to do as well as I could in my classes.	90 (70)	73 (65)	214 (74)	91 (55)	114 (61)	194 (60)	45 (52)	132 (73)	167 (74)	18.848**
14. I have taken a course that required accessing information through the Internet.	90 (70)	89 (80)	246 (84)	130 (77)	169 (90)	268 (82)	73 (94)	141 (79)	202 (89)	9.8**
15. Teachers were usually available to students during office hours.	114 (89)	93 (84)	265 (91)	146 (87)	181 (96)	281 (86)	56 (65)	141 (78)	180 (79)	15.5**

* Professional (Prof.) includes FAFS, FHS, FEA, and school of Nursing

** Significant ($p \leq 0.05$)

In summary, percentage agreement of all students with the items in this category increased in different degrees. Moreover, percentage agreement was high for many of the items. The items on which percentage agreement was relatively low across the three years and in all faculties were the ones that asked about discussing student s' performance and using oral test, drop quizzes, and take-home tests. One observation for which no explanation was available was the big increase in agreement with the item that asked about periodic evaluation of students' performance in all the faculties between 1999/2000 and 2000/2001.

Table 5.
Comparison of the number and (%) of graduating students who agreed with the items about **Student Assessment** in 1999/2000, 2000/2001, and 2001/2002.

	FAS 99/00 (n= 129)	FAS 00/01 (n= 112)	FAS 01/02 (n=292)	Prof * 99/00 (n= 169)	Prof * 00/01 (n= 190)	Prof* 01/02 (n=329)	BUSINE SS 99/00 (n= 87)	BUSINE SS 00/01 (n=183)	BUSINE SS 01/02 (n= 227)	χ^2
Item	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	
16. Teachers clearly explained their grading policy to students at the beginning of courses.	95 (74)	82 (73)	222 (77)	117 (69)	153 (82)	242 (75)	48 (57)	126 (70)	153 (67)	
17. Teachers usually evaluated student performance periodically (e.g., examinations, quizzes, assignments, etc.)	59 (46)	93 (83)	249 (85)	74 (44)	161 (86)	274 (84)	33 (38)	130 (71)	181 (80)	
18. Teachers usually discussed performance and progress with students.	43 (34)	41 (37)	147 (50)	61 (37)	99 (53)	143 (44)	28 (33)	67 (37)	115 (51)	
19. Teachers often used the following types of performance evaluations:										
- Objective test	94 (75)	94 (85)	252 (87)	135 (82)	171 (93)	295 (90)	74 (86)	167 (93)	209 (93)	
- Subjective test	97 (76)	103 (92)	235 (81)	120 (75)	161 (86)	259 (79)	62 (73)	145 (81)	195 (87)	
- Oral test	18 (14)	19 (18)	62 (22)	45 (29)	45 (25)	72 (22)	19 (22)	34 (20)	64 (29)	
- Drop quiz	53 (42)	51 (48)	120 (43)	41 (27)	74 (41)	102 (31)	22 (27)	83 (47)	119 (54)	27.8**
- Take-home test	30 (24)	18 (17)	95 (34)	24 (16)	26 (15)	71 (22)	17 (20)	52 (29)	55 (25)	10.6**
- Homework assignment	53 (42)	56 (51)	191 (67)	112 (71)	148 (80)	267 (82)	60 (71)	156 (88)	197 (88)	38.0**
- Individual report	94 (74)	75 (69)	212 (74)	115 (72)	144 (79)	248 (76)	55 (65)	147 (83)	178 (80)	
- Group project report	81 (64)	67 (61)	214 (74)	135 (84)	172 (93)	284 (87)	74 (88)	167 (95)	218 (97)	53.9**

* Professional (Prof.) includes FAFS, FHS, FEA, and school of Nursing
** Significant (p ≤ 0.05)

Program: Results of comparing students' agreement with the items in this category are presented in Table 6. <u>Faculty of Arts and Sciences</u> students' agreement decreased for eight items and increased for five items in this category between 1999/2000 and 2001/2002. However, the decrease on two of the items indicated a decrease in knowing students who cheated (9% decrease) and knowing students who handed in someone else's work (9% decrease), which are positive changes. Other than the latter two items, students' percentage agreement decreased significantly on the item that asked about having access to career guidance (decrease of 29%). The most significant percentage increases in agreement in this category was on the item that asked about the overall quality of instruction (increase of 11%). Even with the increases on a number of the items, percentage agreement was still relatively low (less that 66%) across the three years on the items that asked about finding large classes

beneficial, being aware of faculty research, attending special talks, having access to career guidance, experiencing quality academic advising, working with faculty on their research, and having access to computer in their department. Moreover, percentage agreement with the two items that asked about cheating was still relatively high in 2001/2002 (79% and 67% agreement).

Professional Schools students' agreement increased for eight items and decreased for five items in this category between 1999/2000 and 2001/2002. The most significant increase was on the item that asked about finding large classes beneficial (increase of 12%). The most significant decreases in agreement were on items that asked about having access to career guidance (decrease of 19%), attending special talks (decrease of 13%), and being aware of faculty research (decrease of 12%). Like students in the Faculty of Arts and Sciences, percentage agreement of students in Professional Schools was relatively low (less than 55%) across the three years on the items that asked about finding large classes beneficial, being aware of faculty research, having access to career guidance, experiencing quality academic advising, and working with faculty on their research. Also similar to the students in the Faculty of Arts and sciences, students' agreement with the items that asked about cheating was still relatively high in 2001/2002 (78% and 66%). It is important to note that agreement with the two items that asked about cheating was still relatively high in 2001/2002 (78% and 66% agreement) and that this agreement increased slightly between 1999/2000 and 2001/2002.

The pattern of change for students in the School of Business indicted that there was an increase in agreement with most of the items across the three years. This increase included one of the items that had to do with cheating. Percentage agreement with the second item related to cheating decreased between 1999/2000 and 2001/2002. The most significant increases in percentage agreement were on the items that asked about applying knowledge to solve relevant problems in the field (increase of 21%), the overall quality of academic advising (increase of 21%), adequacy of content of required courses (increase of 19%), being aware of faculty research (increase of 19%), and contribution of courses to personal growth (increase of 14%). While the percentage agreement increased and was relatively high for many items, there were items on which percentage agreement was relative low across the three years. These items included those that asked students about benefiting from large classes, awareness of faculty research, attending special talks, having access to career advising, overall quality of academic advising, and working with faculty on their research. It is worth noting that agreement with the two items that asked about cheating was still relatively high in 2001/2002 (78% and 67% agreement).

The pattern of change across faculties and across the three years showed significant increases in agreement with many items in this category such as the one that asked about the overall quality of instruction (This increase happened for the most part between 1999/2000 and 2000/2001) and applying knowledge to solve relevant problems. However, there were many items on which percentage agreement was relatively low (less than 65%). These items included the ones that asked students about benefiting from large classes, awareness about faculty research, attending special talks, having access to career advising, overall quality of academic advising, and working with faculty on their research. It is worth noting that the percentage agreement with the items that asked about cheating was relatively high across the years in all faculties.

Table 6.
Comparison of the number and (%) of graduating students who agreed with the items about Program in 1999/2000, 2000/2001, and 2001/2002.

	FAS	FAS	FAS	Prof*	Prof*	Prof *	Business	Business	Business	χ^2

	99/00 (n= 129)	00/01 (n= 112)	01/02 (n=292)	99/00 (n= 169)	00/01 (n= 190)	01/02 (n=329)	99/00 (n=87)	00/01 (n=183)	01/02 (n=227)	
Item	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	
20. The overall quality of instruction in my program was good.*	90 (69)	91 (81)	232 (80)	114 (67)	152 (80)	246 (75)	44 (50)	154 (85)	198 (87)	12.1**
21. The content of required courses in my major were adequate.	91 (72)	75 (67)	204 (71)	109 (65)	126 (68)	231 (71)	51 (61)	136 (75)	182 (80)	
22. I found large classes beneficial.	47 (38)	33 (30)	128 (44)	56 (34)	64 (35)	147 (46)	30 (35)	63 (35)	92 (41)	
23. The classes I was enrolled in contributed to my personal growth.	102 (80)	73 (66)	228 (78)	124 (73)	136 (72)	233 (72)	54 (63)	143 (81)	175 (77)	
24. I am aware of faculty research activities in my program.	56 (41)	43 (39)	136 (47)	80 (47)	72 (39)	115 (35)	29 (34)	81 (45)	120 (53)	19.6**
25. I have attended special talks, lectures, or panel discussions held on campus.	84 (65)	56 (51)	174 (60)	126 (75)	119 (64)	200 (62)	51 (59)	105 (58)	146 (65)	
26. I had access to career guidance at AUB.	78 (61)	31 (28)	92 (32)	92 (55)	60 (33)	122 (36)	31 (36)	66 (37)	88 (40)	
27. The overall quality of academic advising provided to me was adequate. *	62 (48)	45 (40)	150 (52)	80 (46)	100 (53)	168 (52)	25 (28)	68 (38)	111 (49)	
28. I have worked with a faculty member on research projects.	33 (26)	29 (26)	97 (34)	48 (29)	61 (33)	111 (34)	22 (26)	52 (29)	70 (31)	
29. I had access to computers in my department.	85 (66)	66 (61)	183 (64)	139 (82)	158 (85)	277 (85)	73 (84)	164 (93)	206 (91)	69.3**
30. I have seen students cheat on a test at AUB.	112 (88)	101 (92)	228 (79)	123 (75)	147 (79)	253 (78)	63 (72)	142 (80)	172 (78)	
31. I knew AUB students who handed in someone else's work as their own.	98 (76)	85 (77)	198 (67)	107 (65)	125 (67)	214 (66)	62 (71)	135 (75)	150 (67)	
32. The program I am enrolled in prepared me to apply my knowledge in my field to solve relevant problems.	101 (78)	83 (75)	222 (77)	137 (82)	151 (81)	262 (81)	58 (67)	149 (84)	203 (91)	17.4**

* Professional (Prof.) includes FAFS, FHS, FEA, and school of Nursing
** Significant (p ≤ 0.05)

Leadership characteristics

Results of comparing students' agreement with the items in this category are presented in Table 7. Table 7 shows that percentage agreement with most of the items was relatively high and that there was a consistent decrease in agreement with most of the items in this category for Faculty of Arts and Sciences students between 1999/2000 and 2001/2002. The most significant decrease was on the sub-item that asked about communicating effectively with persons in other disciplines and the item that inquired about ability to convince others by using written reports (decrease of 15% and 16% respectively). The results of the Professional Schools showed the same pattern as that of the Faculty of Arts and Sciences in that percentage agreement was relatively high but decreasing across the three years. The most

significant percentage decrease was on the sub-item that asked about communicating effectively with persons in other disciplines (decease of 18%).

The <u>School of Business</u> showed a different pattern from those of the Faculty of Arts and Science and the Professional Schools. While percentage agreement was also relatively high in most of the items, agreement increased for all these items between 1999/2000 and 2001/2002. The most significant increases were on the items that asked about convincing others by effective presentations (increase of 23%), convincing others by using written reports (increase of 17%), and the sub-items that asked about learning to support and reinforce ideas from team members (increase of 16%), and leaning to stay on task to reach goals (increase of 13%).

In summary, percentage agreement with most of the items in this category was relatively high for most of the items. However, the pattern of change was almost the same for the Faculty of Arts and Sciences and the Professional Schools: A relatively high agreement that decreased across the three years. The pattern for the School of Business was different from both the Faculty of Arts and Science and the Professional Schools in that percentage agreement was relatively high and increasing across the three years.

Comparison between the responses to the open ended questionnaires administered at the end of the academic years, 1999/2000, 2000/2001 and 2001/2002.

Since the results of the 1999/2000 survey did not contain a detailed analysis of responses to the open-ended questions, detailed comparisons were made between 2000/2001 and 2001/2002. However, a summary of the results of the open-ended questions in the 1999/2000 survey are presented for comparison purposes.

Summary of students' responses to the open-ended question in the 1999/2000 survey

Students recommended many changes. Most importantly, they demanded interactive teaching and better student-teacher communication. They advocated student-centered instruction and promoting faculty who practice such techniques. Students looked up for a better advising system and a grading policy that assesses learning and cooperation instead of memorization.

When asked to record topics, skills, and concepts not sufficiently covered in their studies, students reported the following:
- Electives (e.g., history, fine arts, public speech, tourism, basic health, advertising and marketing, conflict resolution, e-commerce, banking and finance, human resource management, ethics)
- Independent research and quantitative research tools
- Computer skills, Internet, Web design
- Communication skills (writing proper CV, scientific articles, and portfolios/ interviewing for a job/ applying to international organizations)
- Out-of-classroom and extra-curricular learning activities (field work, field trips, technical skills, debates)
- Exchange programs

Table 7.
Comparison of the number and (%) of graduating students who agreed with the items about
Leadership Characteristics in 1999/2000, 2000/2001, and 2001/2002.

Item	FAS 99/00 (n= 129) Agree (%)	FAS 00/01 (n= 112) Agree (%)	FAS 01/02 (n=292) Agree (%)	Prof* 99/00 (n= 169) Agree (%)	Prof * 00/01 (n= 190) Agree (%)	Prof * 01/02 (n=329) Agree (%)	Business 99/00 (n=183) Agree (%)	Business 00/01 (n=183) Agree (%)	Business 01/02 (n=227) Agree (%)	χ^2
33. At AUB I learned to:										
a. reinforce and support ideas from team members.	106 (82)	71 (65)	220 (76)	150 (89)	157 (84)	262 (81)	66 (76)	165 (91)	208 (92)	22.550**
b. plan work and set goals.	115 (90)	90 (83)	240 (83)	156 (93)	163 (87)	279 (86)	74 (86)	161 (89)	206 (92)	9.749**
c. stay on task toward a timely completion of goals.	111 (87)	85 (77)	238 (82)	146 (87)	162 (87)	264 (82)	69 (80)	157 (88)	210 (93)	15.334**
d. communicate effectively with persons from other disciplines.	118 (94)	82 (75)	229 (79)	157 (93)	147 (79)	244 (75)	77 (89)	149 (83)	199 (89)	15.757**
34. My educational experience at AUB enhanced my ability to convince others with my ideas and solutions by effective presentations.	105 (83)	84 (76)	240 (82)	155 (92)	157 (84)	282 (87)	61 (70)	164 (90)	211 (93)	13.035**
35. My educational experience at AUB enhanced my ability to convince others with my ideas or solutions to problems by effective written reports.	106 (94)	90 (80)	227 (78)	145 (86)	155 (83)	271 (84)	66 (77)	161 (90)	214 (94)	26.868**
36. My educational experience at AUB prepared me to make ethical decisions in my field.	94 (75)	76 (69)	213 (73)	144 (85)	147 (78)	247 (76)	60 (70)	143 (79)	185 (82)	

* Professional (Prof.) includes FAFS, FHS, FEA, and school of Nursing
** Significant (p $\leq$ 0.05)

Comparisons between students' responses in the 2000/2001 and 2001/2002 surveys

There were few changes between students' responses to the open-ended question that asked them to suggest important changes to teaching practices at AUB between 2000/2001 and 2001/2002. These changes focused on interaction and communication between students and professors, using different assessment methods, and promoting updated and qualified faculty. Specifically, smaller percentages of students suggested more interaction between students and professors and promotion of updated and qualified faculty while a larger percentage of students suggested using different assessment methods (Table 8).

Table 8.
Students' responses to the question that asked about important changes to be introduced.

	2000/2001 Frequency and (%)	2001/2002 Frequency and %
Teacher Student Relationship		
• More interaction and communication between students and professors.	95 (21%)	66 (9%)
• More objective, friendly, supportive and respectful relations towards students.	29 (6%)	47 (7%)
• More direct continuous feedback concerning performance.	9 (2%)	2 (0.2%)
Program: Course, grading and classroom practices		
• More practical and real life situations and less theory.	65 (14%)	102 (15%)
• Stress interactive learning by using less memorization and more critical thinking and discussion.	54 (12%)	93 (13%)
• Introduce up-to-date information in courses.	49 (11%)	62 (9%)
• Cancel CS lectures and replace them with small class discussions.	48 (11%)	47 (7%)
• Increase number of available courses both major and elective.	41 (9%)	50 (7%)
• Keep low number of students in classes.	40 (9%)	45 (6%)
• Use different ways for assessment by rewarding attendance and class participation and using quizzes, drop quizzes, homework, assignments, projects, and research papers.	36 (8%)	184 (26%)
• Use technological devices such as audiovisuals, computers, and Internet.	18 (4%)	24 (3%)
• Emphasize group work and teamwork.	15 (3%)	40 (6%)
• Invite more international visiting professors.	0 (0%)	3 (0.4%)
• Stop using previous quizzes repeatedly every semester.	5 (1%)	16 (2%)
• Introduce a minor-major system.	3 (1%)	2 (0.2%)
• Extend some programs to 4 years to be able to cover all the needed topics.	3 (1%)	0 (0%)
Quality of Faculty		
• Promote faculty who are specialized, updated, and qualified.	76 (17%)	42 (6%)
• Hire full time faculty members who can provide enough time for their students.	17 (4%)	12 (2%)

Other differences between students responses to the open ended questions between 2000/2001 and 2001/2002 involved a smaller percentage of them recommending more variety of major and elective courses (Table 9) and smaller percentages suggesting that their best experiences were with qualified and understanding teachers (Table 10) and their worst experiences were course given by non-motivating, unqualified, unprepared and disrespectful professors (Table 11). Finally, a slightly smaller percentage, but a larger number, of students recommended using more diversified evaluation methods (Table 12).

Table 9.
Students' responses to the questions that asked about topics, skills, or concepts to be added.

	2000/2001 Frequency and %	2001/2002 Frequency and %
Teaching practices		
• More variety of major and elective courses: languages, music, art, sports, first aid, human rights, and ethics.	115 (25%)	17 (2%)
• Use more presentations, tutorials, research activities, projects, class discussions, case studies, group work/team work, workshops, seminars and practical skills.	71 (16%)	102 (15%)
• Emphasize better Internet and computer skills.	50 (11%)	52 (7%)
• Training courses should be given credit.	5 (1%)	11 (2%)
• More adequate career counseling.	3 (1%)	10 (1%)
• Have a unified grading system across courses and departments.	1 (0.2%)	2 (0.3%)

Table 10.
Students' responses to the open-ended question that asked about best learning experience at AUB.

	2000/2001	2001/2002
Teaching practices	**Frequency and %**	**Frequency and %**
• Courses with qualified, and understanding professional teachers	200 (44%)	43 (6%)
• Field work, training, final year project, and AREC	57 (13%)	47 (7%)
• Technical skills for problem solving and achieving goals.	12 (3%)	4 (0.5%)
Social Experiences		
• Coordination and communication with colleagues and professors	33 (7%)	13 (2%)
• Team/group work	27 (6%)	37 (5%)
• Self reliance and tolerance	22 (5%)	10 (1%)
• Involvement in extra curricular activities	8 (2%)	4 (0.5%)

Table 11.
Students' responses to the open-ended question that asked about worst teaching experience at AUB.

	2000/2001	2001/2002
Teaching Practices	**Frequency and %**	**Frequency and %**
• Courses that are given by non-motivating, unqualified, unprepared, disrespectful, out-dated, or biased professors.	285 (63%)	81 (12%)
• Unfair evaluation, and unfair jury for final year projects	20 (4%)	14 (2%)
• Not punishing cheating.	9 (2%)	14 (2%)
• Unnecessary courses with repetitive information.	5 (1%)	16 (2%)
• Lack of accessibility to adequate technology such as computers and audiovisual equipments.	3 (1%)	11 (2%)
• Registration and relationship with administration.	3 (1%)	6 (1%)
• Student services.	2 (0.4%)	0 (0%)

Table 12.
Students' responses to the open-ended question that asked about recommendations to improve the grading system at AUB.

	2000/2001	2001/2002
	Frequency and %	**Frequency and %**
• More diversified evaluation methods: Quizzes, research papers, oral presentations, assignments, projects, and attendance. Tests acquired skills.	146 (32%)	184 (26%)
• Use GPA System	30 (7%)	27 (4%)
• Use a unified grading system, explain it clearly, and follow it	18 (4%)	2 (0.3%)
• Stop controlled class average and grade push down system	17 (4%)	29 (4%)
• Give grades for internships and training courses.	4 (1%)	11 (2%)
• Use rounding system.	1 (0.2%)	0 (0%)

Summary

Agreement with many of the items increased during the three years in which the survey was administered (1999/2000, 2000/2001, and 2001/2002). Moreover, percentage agreement was relatively high on many of the items. However, there were many items on which percentage agreement was relatively low in all faculties across the three years. These items included the ones which asked about encouraging problem solving in class, enabling student involvement, encouraging students to relate outside events to class activities, covering all course topics, discussing recent developments in the field during course, the use of oral tests, drop quizzes, and take home tests discussing students' performance finding large

classes beneficial, awareness of faculty research, attending special talks, having access to career guidance and quality of academic advising, working with faculty on research projects, and the availability of time to cover all course topics listed in the syllabus.
A disturbing pattern across the three years in all faculties is the consistent agreement of students with the two items that asked about seeing students cheat and known students who handed in someone else's work. Even though agreement with these two items decreased in the Faculty of Arts and Sciences, it increased slightly in Professional Schools and the School of Business. In addition, percentage agreement with these two items was relatively high in 2001/2002, ranging from 66% to 79% in all faculties.

Students responses to the open-ended questions were very similar across the academic years 1999/2000, 2000/2001, and 2001/2002 in all faculties. Suggestions for change in the three years included emphasis on more interaction and communication between students and professors, more practical and real life situations and less theory in courses, more emphasis on interactive learning by using less memorization and more critical thinking and discussion, updating course content, replacing CS lectures with small class discussions, and using different ways for assessment by rewarding attendance and class participation and using quizzes, drop quizzes, homework, assignments, projects, and research papers. Students also suggested more variety in major and elective courses, using more presentations, research activities, projects, class discussions, case studies, group and team work, workshops, seminars and practical skills to improve teaching, and emphasizing better Internet and computer skills. Finally, when asked about their best and worst learning experiences at AUB, students consistently said that their best learning experiences were courses with qualified and understanding professional teachers and field work, training and final year projects, while their worst learning experiences were courses given by non-motivating, unqualified, unprepared, disrespectful, out-dated, or biased professors.