

AMERICAN UNIVERSITY OF BEIRUT
TASK FORCE ON UNDERGRADUATE TEACHING EXCELLENCE

RESULTS OF STUDENT SURVEY 2001/2002

RESULTS OF STUDENT SURVEY 2001/2002

Description of the Student Survey

The objectives of the student survey were to assess teaching practices and students' educational experiences at AUB and evaluate program outcomes. The survey, administered at the end of the academic year 2001/2002, consisted of two parts and was the same one administered at the end of the academic year 2000/2001. 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 to 1083 graduating students from all the Faculties of the University during June 2002. Eight hundred forty eight (848) students returned filled-out surveys resulting in a response rate of 78.30 %.

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. Members of the Task Force on Teaching Excellence were assigned particular academic units to coordinate with chairpersons, colleagues, and secretaries to insure high rates of participation. Some departments were slow in responding; consequently, Dr. Nasr and Miss Husseiny launched a phone call campaign to encourage departments to increase the response rate. Departments that produced low participation rates were called almost daily. Departments were told to continue accepting filled-in surveys up till July 4, 2002, the last day of clearance. Students 'getting clearance' at the Office of Student Affairs who had not filled in a questionnaire at their departments had an opportunity to fill in a survey and hand it in at 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 5 categories: Course design (4 items: Items, 1, 2, 3, and 4), Teaching courses (11 items: Items 5, 6, 7, 8, 9, 10,11, 12, 13, 14, and 15), Student assessment (4 items: Items 16, 17, 18, and 19), Program (13 items: Items 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, and 32) and Leadership characteristics (4 items: Items 33, 34, 35, and 36). 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". This process resulted in three major categories of respondents: Faculty of Arts and Sciences (FAS), the School of Business (Business), and Professional Schools (Prof.). 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 the responses to each of the questions. These questions addressed the following themes: Changes in teaching practices at AUB, topics, skills, and concepts that need to be 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 same open-ended questions were used during the academic years 2000/2001 and 2001/2002 questions, results of these two years were compared. Additionally, when new categories emerged from analysis of the 2001/2002 data, they were noted and discussed.

Results

The following sections present the results of data analysis of the 2001/2002 survey. This is followed by the results of comparing students' responses to the 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), the School of Business (Business), and Professional Schools (Prof.) the results provide a description of the responses of all students followed by a comparison of the responses across the three categories of respondents. Analysis of students' responses to the open-ended questions follows the comparison between the 2000/2001 and 2001/2002 academic years.

Responses of all graduating students

The percentages of students who agreed with each of the items of the survey are presented in Table 1. These results are detailed 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: Most of the students were satisfied with the design of courses. More than 85% of the students agreed that program and course objectives were clear and that course syllabi were distributed early in the semester. However, only 74% of the students agreed that the course syllabi included skills that the students ought to acquire by the end of the course.

Teaching courses: Agreement of students with items in this category ranged from a high of 88% of the students who agreed that material covered in class was relevant to course objectives, to a low of 53% who agreed that teachers usually invited students to relate outside events and/or activities to course content. Moreover, a high percentage of students agreed that they did independent research (87%), accessed the Internet for information (85%), and had access to teachers during office hours (86%). Between 63% and 71% of the students said that recent developments in the field were discussed in class, class sessions were structured to increase student involvement, course activities included group work, and that they were motivated to do their best in class. Finally, 56% of the students said that teachers encouraged problem solving and that there was no time to cover all course topics.

Student assessment: A sizeable majority of students agreed that they were evaluated periodically (83%) and that teachers explained their grading policies (73%). However, only 48% said that teachers discussed performance and progress with students. Most of the students agreed that objective tests and group project reports were the assessments of choice for faculty members (90% and 85% respectively). This was followed by subjective tests (82%), homework assignments (78%), and individual reports (77%). Finally, a small percentage of students agreed that oral tests, take-home tests, and drop quizzes were used to assess performance (24%, 27%, and 41% respectively).

Program: Eighty two percent of the students agreed that their programs prepared them to apply knowledge to solve relevant problems and 80% that the quality of instruction in their program was good. Between 73% and 79% agreed that content of required courses in their majors was adequate, classes in which they were enrolled contributed to their personal growth, and they had access to computers in their department. Alarming, 78% said that they had seen students cheat on a test and 66% had seen students handing in somebody else's work. Finally, less than 60% of the students said that they attended special talks, had access to quality academic and career advising, found large classes beneficial, and were aware of faculty research or worked with faculty on their research.

Leadership characteristics: A majority of students agreed with all the items in this category. Thus, more than 77% agreed that they learned to work constructively with team members, plan work, set goals, work towards accomplishing goals, communicating effectively orally and in writing, and make ethical decisions in their fields.

Table 1.

Percentage of students across the University who agreed with the items of the survey.

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

Table 1. (Continued)

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

* These two items were negative items in the 2000 survey, "not" was used in both questions.

In summary, the results of the 2001/2002 student survey indicated that students were generally satisfied with the way courses were designed and with the leadership characteristics they acquired at AUB. However, a lower percentage were satisfied with the way the courses were taught, which was evident from the relatively low percentage who agreed that recent developments in their field were discussed in class and even a lower percentage who agreed that teachers encourage problem solving, covered all course topics, and motivated them to do their best. In addition, many students indicated that teachers did not discuss performance and progress with them and used rarely oral tests, drop quizzes, and take-home exams. Finally, a relatively low percentage of students found large classes beneficial, knew about faculty research or worked with them on this research, had access to good quality academic and career guidance and a high percentage of students agreed that cheating was still a problem at AUB.

Responses by category of respondents (FAS, Professional, Business)

The number and percentage of students for each of the categories of respondents: Faculty of Arts and Sciences (FAS), the School of Business (Business), and Professional Schools (Prof.) are presented in Tables 2 – 6. 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: A large majority of students in all faculties agreed that the program objectives were clear to them. The highest agreement was in the School of Business (91%) while the lowest was in the Faculty of Arts and Sciences (81%). Similarly, a large majority of students in all faculties agreed that course objectives were clear (86% up to 92%) and course

syllabi were distributed early in the semester (95% up to 98%). However, there were differences between students in different faculties regarding the inclusion of skills that the students ought to acquire by the end of courses, with the highest agreement coming from students in Professional Schools (79%), followed by School of Business (74%) then the Faculty of Arts and Sciences (67%) (Table 2).

Table 2.

Numbers and percentages of graduating students who agreed with the listed items regarding Course Design.

Course Design	FAS 01/02 (n=292)	Prof* 01/02 (n=329)	Business 01/02 (n= 227)	χ^2
	Agree (%)	Agree (%)	Agree (%)	
1. The objectives of the program I am enrolled in were clear to me.	236 (81)	283 (87)	214 (94)	19.9**
2. The objectives of the courses that I have taken were clearly stated.	256 (88)	282 (86)	209 (92)	
3. Course syllabi are usually distributed early on in the semester.	285 (98)	312 (95)	214 (95)	
4. The syllabi usually included skills that the students ought to acquire by the end of the course.	196 (67)	257 (79)	169 (74)	12.8**

* Professional includes FAFS, FHS, FEA, and school of Nursing

** Significant ($p \leq 0.05$)

Teaching courses: More than 82% of the students in all faculties agreed that they did independent research for specific assignments, that material covered in class was relevant to stated course objectives, and that they used the Internet to access information. Similarly, the percentage of students who agreed that teachers were available during office hours ranged from 79% in the School of Business to 91% in the Faculty of Arts and Sciences.

The percentage of students who agreed that recent developments in the field were discussed in class ranged from 52% in Professional Schools to 74% in the School of Business while the percentage of students who indicated that classroom sessions facilitated student involvement ranged from a low of 58% in Professional Schools to a high of 75% in the School of Business. Students who agreed that problem-solving was encouraged ranged from a low of 51% in Professional Schools to a high of 66% in the School of Business and the percentage of students who agreed that group work was encouraged in and out of class ranged from a low of 57% in the Faculty of Arts and Sciences to a high of 84% in the School of Business.

The lowest percentage of students who agreed that they were invited to relate outside events to course materials was in Professional Schools (44%), followed by the Faculty of Arts and Sciences (55%), then the School of Business (62%). The percentage of students who agreed that they were motivated to do their best ranged from a low of 60% in Professional Schools to a high of 74% for both the Faculty of Arts and Sciences and the School of Business. Finally, a high percentage of students indicated that there was no time to cover all course topics ranging from 50% of students in Professional Schools to 63% in the School of Business (Table 3).

Table 3.

Numbers and percentages of graduating students who agreed with the listed items regarding Teaching Courses.

Teaching Courses	FAS 01/02 (n=292)	Prof* 01/02 (n= 329)	Business 01/02 (n=227)	χ^2
	Agree (%)	Agree (%)	Agree (%)	
5. The material covered in class was relevant to stated course objectives	262 (91)	277 (85)	204 (90)	6.6**
6. Recent developments in the field were discussed in class.	190 (65)	169 (52)	168 (74)	29.1**
7. Classroom sessions were often structured to enable student involvement.	201 (70)	191 (58)	171 (75)	18.8**
8. Teachers often encouraged problem solving in class.	156 (53)	165 (51)	148 (66)	12.8**
9. Course activities often included group work both in and out of class.	166 (57)	237 (73)	189 (84)	48.1**
10. Teachers usually invited students to relate outside relevant events/activities to subjects covered in the courses.	160 (55)	143 (44)	141 (62)	19.1**
11. I did independent research for term papers and other take-homework.	247 (85)	277 (85)	210 (93)	9.2**
12. There was <u>no</u> time to cover all of the course topics.	167 (58)	164 (50)	143 (63)	9.6**
13. I was motivated to do as well as I could in my classes.	214 (74)	194 (60)	167 (74)	18.8**
14. I have taken a course that required accessing information through the Internet.	246 (84)	268 (82)	202 (89)	9.8**
15. Teachers were usually available to students during office hours.	265 (91)	281 (86)	180 (79)	15.5**

* Professional includes FAFS, FHS, FEA, and school of Nursing

** Significant ($p \leq 0.05$)

Student assessment: Seventy seven percent, 75%, and 67% of students in Faculty of Arts and Sciences, Professional Schools, and School of Business respectively agreed that teachers explained their grading policies at the beginning of the courses. Moreover, more than 80% of the students in all faculties agreed that their performance is evaluated periodically. However a relatively low percentage of students in all faculties indicated that teachers discussed their performance with them, with the lowest agreement coming from students in Professional Schools (44%), followed by Faculty of Arts and Sciences (50%) and School of Business (51%). Students' in all faculties agreed that performance was evaluated by using objective tests, subjective tests, homework assignments, individual and group reports, ranging from a low of 67% for homework assignments in the Faculty of Arts and Sciences, to a high of 97% for group project reports in the School of Business. Finally, relatively low percentages of students, ranging from a low of 22% to a high of 54%, indicated that oral tests, drop quizzes, and take home tests were used by teachers (Table 4).

Table 4.

Numbers and percentages of graduating students who agreed with the listed items regarding Student Assessment.

Student Assessment	FAS 01/02 (n=292)	Prof* 01/02 (n=329)	Business 01/02 (n= 227)	χ^2
	Agree (%)	Agree (%)	Agree (%)	
16. Teachers clearly explained their grading policy to students at the beginning of courses.	222 (77)	242 (75)	153 (67)	
17. Teachers usually evaluated student performance periodically (e.g., examinations, quizzes, assignments, etc.)	249 (85)	274 (84)	181 (80)	
18. Teachers usually discussed performance and progress with students.	147 (50)	143 (44)	115 (51)	
19. Teachers often used the following types of performance evaluations:				
Objective test	252 (87)	295 (90)	209 (93)	
Subjective test	235 (81)	259 (79)	195 (87)	
Oral test	62 (22)	72 (22)	64 (29)	
Drop quiz	120 (43)	102 (31)	119 (54)	27.8**
Take-home test	95 (34)	71 (22)	55 (25)	10.6**
Homework assignment	191 (67)	267 (82)	197 (88)	38.0**
Individual report	212 (74)	248 (76)	178 (80)	
Group project report	214 (74)	284 (87)	218 (97)	53.9**

* Professional includes FAFS, FHS, FEA, and school of Nursing

** Significant ($p \leq 0.05$)

Program: The majority of students in all faculties agreed that instruction in their programs was good. However, there were significant differences between faculties with agreement being lowest in Professional Schools (75%) and highest in the School of Business (87%). Similarly, most students agreed that content in required courses in their major was adequate (71% for Faculty of Arts and Sciences and Professional Schools and 80% for School of Business), classes contributed to their personal growth (72%, 77%, and 78% in Professional Schools, School of Business, and Faculty of Arts and Sciences respectively), had access to computers (64% for Faculty of Arts and Sciences, 85% for Professional Schools, and 91% for School of Business), and were prepared to use knowledge to solve problems (77%, 81%, and 91% in the Faculty of Arts and Sciences, professional Schools, and School of Business respectively).

On the other hand, less than 46% of students in all faculties found large classes beneficial, less than 53% were aware of research activities in their programs, less than 40% had access to career guidance, less than 52% agreed that academic advising was adequate, and less than 34% agreed that they had worked with faculty members on their research. In addition, less than 65% of the students in all faculties attended special talks and other academic activities. Finally, approximately three quarters of the students in all faculties agreed that they had seen students cheat and two thirds of these students agreed that they knew students who handed in some else's work as their own.

Leadership characteristics: Students in all faculties seemed to be satisfied with the leadership characteristics they were acquiring at AUB since the lowest percentage agreement with any of the items in this category was 73%. In general, students in the School of Business had the highest agreements, followed by Professional Schools then the Faculty of Arts and Sciences.

Table 5.

Numbers and percentages of graduating students who agreed with the listed items regarding Program.

	FAS 01/02 (n=292)	Prof* 01/02 (n=329)	Business 01/02 (n=227)	χ^2
Program	Agree (%)	Agree (%)	Agree (%)	
20. The overall quality of instruction in my program was good	232 (80)	246 (75)	198 (87)	12.1**
21. The content of required courses in my major were adequate.	204 (71)	231 (71)	182 (80)	
22. I found large classes beneficial.	128 (44)	147 (46)	92 (41)	
23. The classes I was enrolled in contributed to my personal growth.	228 (78)	233 (72)	175 (77)	
24. I am aware of faculty research activities in my program.	136 (47)	115 (35)	120 (53)	19.6**
25. I have attended special talks, lectures, or panel discussions held on campus.	174 (60)	200 (62)	146 (65)	
26. I had access to career guidance at AUB.	92 (32)	122 (36)	88 (40)	
27. The overall quality of academic advising provided to me was adequate.	150 (52)	168 (52)	111 (49)	
28. I have worked with a faculty member on research projects.	97 (34)	111 (34)	70 (31)	
29. I had access to computers in my department.	183 (64)	277 (85)	206 (91)	69.3**
30. I have seen students cheat on a test at AUB.	228 (79)	253 (78)	172 (78)	
31. I knew AUB students who handed in someone else's work as their own.	198 (67)	214 (66)	150 (67)	
32. The program I am enrolled in prepared me to apply my knowledge in my field to solve relevant problems.	222 (77)	262 (81)	203 (91)	17.4**

* Professional includes FAFS, FHS, FEA, and school of Nursing

** Significant ($p \leq 0.05$)

Table 6.

Numbers and percentages of graduating students who agreed with the items regarding Leadership Characteristics.

	FAS 01/02 (n=292)	Prof* 01/02 (n=329)	Business 01/02 (n=227)	χ^2
Leadership Characteristics	Agree (%)	Agree (%)	Agree (%)	
33. At AUB I learned to:				
a. reinforce and support ideas from team members.	220 (76)	262 (81)	208 (92)	22.6**
b. plan work and set goals.	240 (83)	279 (86)	206 (92)	9.7**
c. stay on task toward a timely completion of goals.	238 (82)	264 (82)	210 (93)	15.3**
d. communicate effectively with persons from other disciplines.	229 (79)	244 (75)	199 (89)	15.8**
34. My educational experience at AUB enhanced my ability to convince others with my ideas and solutions by effective presentations.	240 (82)	282 (87)	211 (93)	13.0**
35. My educational experience at AUB enhanced my ability to convince others with my ideas or solutions to problems by effective written reports.	227 (78)	271 (84)	214 (94)	26.9**
36. My educational experience at AUB prepared me to make ethical decisions in my field.	213 (73)	247 (76)	185 (82)	

* Professional includes FAFS, FHS, FEA, and school of Nursing

** Significant ($p \leq 0.05$)

Comparison of the responses of all graduating students between the academic years 2000/2001, and 2001/2002.

The following sections present the results of comparing the results of the surveys conducted during academic years 2000/2001 and 2001/2002. Moreover, 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, the results are presented in terms of these categories.

Course design: In general the responses of graduating students to the items of this category at the end of the academic year 2001/2002 produced a higher rating than those at the end of the academic year 2000/2001. Agreements with three of the items in this category (clarity of program objectives, clarity of course objectives, and distribution of syllabi) were above 87% during the academic year 2001/2002 with increases of 3 or 4 percentage points over the academic year 2000/2001. While the percentage agreement on the question that asked about the inclusion of skills in the syllabi was 74% during 2001/2002, it was 10 percentage points higher than the academic year 2000/2001

Teaching courses: Students' agreements with items in this category during the academic year 2001/2002 were equal or higher than their agreements during the academic 2000/2001. Therefore, agreements increased for the items that asked about discussion of recent developments in the field, structuring classes to enable student involvement, encouraging problem-solving in class, including group work in course activities, doing independent research for term papers and other take-home work, taking courses that required the use of the Internet, and being motivated to do well in class. However, agreement was almost the same for the items that asked about the relevancy of material covered in class to stated course objectives, inviting students to relate outside relevant events/activities to subjects covered in the courses, lack of time to cover all of the course topics, and availability of teachers during office hours. It is worth noting that although agreement with many of the items increased or stayed the same, it was still relatively low for the items that asked about covering recent developments in the field (63% for the academic year 2001/2002), enabling student involvement (67% during the academic year 2001/2002), encouraging problem-solving (56% during the academic year 2001/2002), inclusion of group work (71% during the academic year 2001/2002), relating course materials to outside events (53% during the academic year 2001/2002), lack of time to cover all course content (56% during the academic year 2001/2002), and being motivated to do well in class (69% during the academic year 2001/2002).

Student assessment: Similar to the response on the previous category, students' agreement with the statements in this category increased or stayed the same between the academic years 2000/2001 and 2001/2002. The increases were relatively small, however. What is worth noting here is that students' agreement with the item that asked about discussing performance with students was still low (48% during the academic year 2001/2002). In addition, students indicated that using oral tests, drop quizzes, and take home tests was still minimal with agreement being less than 41% for all three uses during the academic year 2001/2002.

Program: Students' agreement in this category increased for 9 out of 13 items between 2000/2001 and 2001/2002. The most significant increase (10 percentage points) was on the item that asked about large classes being beneficial. This was followed by the item that asked about the overall adequacy of academic advising where the increase was 7 percentage points. Increase in agreement on the rest of the items ranged between 1 and 3 percentage points. Agreement decreased slightly, between 2 and 6 percentage points, for the rest of the items. However, the decrease indicated a positive trend in the two items that asked about cheating where the decrease was 4% on the items that asked about cheating and 6% for the item that asked about knowing students who handed in someone else's work, even though agreement was still high in both situations (78% and 66% respectively). Important to mention at this point is the fact that, even though there was increased agreement on many of the items in this category, the agreement was still relatively low for the items that asked about finding large classes beneficial (44% during the academic year 2001/2002), being aware of faculty research (44% during the academic year 2001/2002), attending special talks and lectures

(62% during the academic year 2001/2002), having access to career guidance (36% during the academic year 2001/2002), having access to adequate academic advising (51% during the academic year 2001/2002), and working with faculty on research projects (33% during the academic year 2001/2002).

Leadership characteristics: Students' agreement with the items that asked about leadership skills acquired at AUB was consistently high for all three years (ranging from a low of 77% to a high of 92%). The change between 2000/2001 and 2001/2002 either stayed the same, decreased a few percentage points, or increased a few percentage points.

Table 7.

Percentage of students across the University who agreed with the items of the survey during the academic years 2000/2001 and 2001-2002¹.

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

¹ The items listed in Table 7 were the ones used in the 2000/2001 and 2001/2002 surveys.

Table 7 (Continued)

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

* Those two items were mentioned as negative items in the 1999/2000 survey, "not" was used in both questions.

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

The following sections present the results of comparing the results of the surveys conducted during academic years 2000/2001 and 2001/2002 by category of respondents (FAS, Professional, Business). Moreover, 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 relatively high. Moreover, there was a consistent increase in agreement during the two years in all faculties. The most significant increase was in the School of Business, followed by the Faculty of Arts and Sciences, then Professional Schools. 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. In addition, agreement with this item increased significantly for Professional Schools and the School in business but not in the Faculty of Arts and Sciences (Table 8).

Table 8

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

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

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

** Significant ($p \leq 0.05$).

Teaching courses: Results of comparing students' agreement with the items in this category are presented in Table 9. Responses of students of Faculty of Arts and Sciences to the survey were not consistent across the academic years 2000/2001 and 2001/2002.

Agreement on a number of the items was consistently high (3 items) while agreement was moderate or low for all the other items (8 items). The most significant positive changes occurred in the items that asked about structuring classes to increase student involvement (10% increase), being involved in group work (10% increase), being motivated to do well (9% increase), relating outside events to classroom activities (7%), and availability of teachers during office hours (7%). The most significant decrease in agreement was on the item that asked about not having time to cover all course topics (14% decrease). However, even though there was an increase on many items, agreement on some of the items was still under 70% for a number of items such as the ones that asked about inclusion of recent developments in the field, enabling student involvement, encouraging problem solving, including group work in course activities, relating outside events to course materials, and having 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. The items on which agreement decreased significantly during the academic year 2001/2002 included the ones that asked about relating outside events to course material (6% decrease), alignment of material covered in class with course objectives (6% decrease), encouraging student involvement (7% decrease), requiring access to the Internet (8% decrease), and availability of teachers during office hours (10% decrease). The items on which agreement was relatively low (below 70%) included the ones that asked about inclusion of recent developments in the field, enabling student involvement, encouraging problem solving, including group work in course activities, relating outside events to course materials, and having time to cover all course topics, being motivated to do well in class.

Business School students' agreement with the items during 2001/2003 in this category increased on all but one of the items, which stayed the same. The most significant increase was on the items that asked about enabling student involvement (6% increases), including group work in class activities (9% increase), accessing information through the Internet (10% increase), availability of teachers during office hours (11% increase), and including recent developments in the field in class discussions (18% increase). Even though there were items in this category on which agreement was still low, the number of these items was less in the

School of Business that in other faculties and were limited to the ones that asked about encouraging problem solving, relating outside events to class activities, and having no time to cover all course topics. Finally, Table 9 shows that agreement with a number of items across schools and years was low. These included the items that asked about encouraging problems solving, relating outside activities to course content, and having no time to cover all course topics.

Table 9.

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

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

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

** Significant ($p \leq 0.05$)

Student assessment: Faculty of Arts and Sciences students' agreements improved for most of the items and sub-items in this category during the academic year 2001/2002. Decreased agreement happened for only two sub-items that asked about the types of performance evaluations used. Specifically, there was a decrease in the use of subjective tests (11% decrease) and drop quizzes (5% decrease). The most significant increase in agreement happened on the items that asked about discussing performance and progress with students (13% increase), use of take home tests (17% increase), use of homework assignments (16% increase), and use of group projects (13% increase).

Agreement of students in Professional Schools with the items in this category decreased for most of the items. The only increase happened on the two sub-items that asked about using take-home tests and homework assignments where the increases were 7% and 2% increase respectively. The most significant decrease was on the sub-items that asked about using drop quizzes (10% decrease), subjective tests (7% decrease), and group project reports (6% decrease). In addition, decrease in agreement happened on the items that asked

about discussing performance and progress with students (9% decrease) and explaining grading policy to students (7% decrease).

Agreement of students in the School of Business increased for most of the items in this category. The most significant increase was on the items that asked about discussing performance and progress with students (14% increase) and evaluating student performance periodically (9% increase). There were also increases in using oral test (9% increase), using drop quizzes (7% increase), and using subjective tests (6% increase). The decrease in agreement was minimal, ranging from 3% to 4%.

The pattern of change across faculties was not the same. While there were increases in agreement on most of the items for the Faculty of Arts and Science and the School of Business, agreement decreased for Professional Schools during the 2001/2002 academic year. In addition, it is worth noting that agreement on a number of items and sub-items was relatively low across the faculties and years. For example, students' agreement with the items that asked about discussing performance with students was less than 53% for all faculties during the academic years 2000/2001 and 2001/2002. Moreover, use of oral tests, drop quizzes, take-home tests, and homework assignments was relatively low.

Table 10.

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

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

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

** Significant ($p \leq 0.05$)

Program: Results of comparing students' agreement with the items in this category are presented in Table 11. Faculty of Arts and Sciences students' agreement increased on 10 out of 13 items in the "Program" category during the academic year 2001/2002. Moreover, the decrease on two of the items indicated a decrease in knowing students who cheated (13% decrease) and knowing students who handed in someone else's work (10% decrease), which are positive changes. The most significant increases in agreement in this category were on the items that asked about finding large classes beneficial (14% increase), contribution of courses to personal growth (12% increase), adequacy of academic advising (12% increase), attending special talks and lectures (9% increase), being aware of faculty research (8% increase), and working with faculty on research projects (8% increase),

The changes in agreement of students in Professional Schools were minimal during the academic year 2001/2002. The only appreciable increase was on the items that asked about finding large classes beneficial (11% increase). The change in agreement on the other items ranged from a decrease of 5% to an increase of 4%. It is worth noting that the change in agreement with the two items that asked about cheating decreased by 1%.

The pattern of change for students in the School of Business was similar to that of the Faculty of Arts and Sciences. There was an increase in agreement with most of the items and a decrease in agreement with the items that had to do with cheating. The most significant increase in agreement was on the items that asked about the quality of academic advising (11% increase), awareness of faculty research (8% increase), applying knowledge in the field to solve relevant problems (7% increase), attending special talks and lectures (7% increase), and finding large classes beneficial (6% increase). The most significant increase in agreement was on the items that asked about knowing students who handed in someone else's work (8% decrease), indicating of a positive change.

The pattern of change across the two years was not the same for all faculties. While there were increases in agreement on most of the items for the Faculty of Arts and Science and the School of Business, agreement decreased for Professional Schools during the 2001/2002 academic year. Nevertheless, there were items across faculties and years on which agreement was still relatively low. These include the items that asked about finding large classes beneficial (maximum agreement of 46%), being aware of faculty research (maximum agreement of 53%), attending special talks and lectures (maximum agreement of 65%), having access to career guidance (maximum agreement of 40), having access to quality academic advising (maximum agreement of 53%), working with a faculty member on research (maximum agreement of 34%), and having access to computers in Faculty of Arts and Sciences (agreement hovers around 65% for all three academic year). Moreover, even though perceptions of cheating have decreased in Faculty of Arts and Sciences and the School of Business, agreement with items on this topic is still relatively high for all faculties.

Leadership characteristics

Results of comparing students' agreement with the items in this category are presented in Table 12. Table 12 shows that there was a consistent increase in agreement with most of the items in this category for Faculty of Arts and Sciences students during the academic year 2001/2002. This increase however, was 5% or less. Different from Faculty of Arts and Sciences students, there was a decrease in agreement with most of the items of this category for students in Professional Schools. This decrease however did not go beyond 5%. Agreement of School of Business students increased for all items in this category. This increase however did not go beyond 6%. An observation worth noting here was that students agreement with the items in the category of "leadership characteristics" was consistently high across the academic years 2000/2001 and 2001/2002, ranging from a low of 65% to a high of 94%.

Table 11.

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

	FAS 00/01 (n= 112)	FAS 01/02 (n=292)	Prof* 00/01 (n= 190)	Prof * 01/02 (n=329)	Business 00/01 (n=183)	Business 01/02 (n=227)	χ^2
Item	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	Agree (%)	
20. The overall quality of instruction in my program was good.*	91 (81)	232 (80)	152 (80)	246 (75)	154 (85)	198 (87)	12.1**
21. The content of required courses in my major were adequate.	75(67)	204 (71)	126 (68)	231 (71)	136 (75)	182 (80)	
22. I found large classes beneficial.	33 (30)	128 (44)	64 (35)	147 (46)	63 (35)	92 (41)	
23. The classes I was enrolled in contributed to my personal growth.	73 (66)	228 (78)	136 (72)	233 (72)	143 (81)	175 (77)	
24. I am aware of faculty research activities in my program.	43 (39)	136 (47)	72 (39)	115 (35)	81 (45)	120 (53)	19.6**
25. I have attended special talks, lectures, or panel discussions held on campus.	56 (51)	174 (60)	119 (64)	200 (62)	105 (58)	146 (65)	
26. I had access to career guidance at AUB.	31 (28)	92 (32)	60 (33)	122 (36)	66 (37)	88 (40)	
27. The overall quality of academic advising provided to me was adequate. *	45 (40)	150 (52)	100 (53)	168 (52)	68 (38)	111 (49)	
28. I have worked with a faculty member on research projects.	29 (26)	97 (34)	61 (33)	111 (34)	52 (29)	70 (31)	
29. I had access to computers in my department.	66 (61)	183 (64)	158 (85)	277 (85)	164 (93)	206 (91)	69.3**
30. I have seen students cheat on a test at AUB.	101 (92)	228 (79)	147 (79)	253 (78)	142 (80)	172 (78)	
31. I knew AUB students who handed in someone else's work as their own.	85 (77)	198 (67)	125 (67)	214 (66)	135 (75)	150 (67)	
32. The program I am enrolled in prepared me to apply my knowledge in my field to solve relevant problems.	83 (75)	222 (77)	151 (81)	262 (81)	149 (84)	203 (91)	17.4**

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

** Significant ($p \leq 0.05$)

Table 12.

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

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

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

** Significant ($p \leq 0.05$)

Students' responses to the open-ended questions

Six hundred and ninety five out of the 848 students (82%) who responded to the survey responded to one or more of the open-ended questions. Tables 13 to 17 provide the results of analyzing students' responses to the open-ended questions in the 2001/2002 survey. The results show that students were concerned about the nature of assessment practices, lack of relating information covered in class to real life situations, excessive use of passive teaching methods and lack of variety in teaching methodologies, up-to datedness of information in courses, and the nature of communication between students and faculty members.

More specifically, when students were asked to suggest important changes to teaching practices at AUB, 184 out of the 695 who wrote comments (26%) suggested using different assessment methods, 102 (15%) suggested more emphasis on relating course material to everyday life, and 93 (13%) suggested using more interactive learning and critical thinking. Moreover, a significant number of students (between 6% and 9%) suggested more interactions between students and faculty members, more respect for students, inclusion of up-to-date information in courses, increasing course offerings, keeping class size small, replacing the CS lecture with smaller classes, and emphasizing group and team work (Table 13).

Table 13.

Students' responses to the open-ended question that asked about important changes to be introduced.

Teacher Student Relationship	Frequency
• More interaction and communication between students and professors.	66
• More objective, friendly, supportive and respectful relations towards students.	47
• More direct continuous feedback concerning performance.	2
Program: Course, grading and classroom practices	
• More practical and real life situations and less theory.	102
• Stress interactive learning by using less memorization and more critical thinking and discussion.	93
• Introduce up-to-date information in courses.	62
• Cancel CS lectures and replace them with small class discussions.	47
• Increase number of available courses both major and elective.	50
• Keep low number of students in classes.	45
• Use different ways for assessment by rewarding attendance and class participation and using quizzes, drop quizzes, homework, assignments, projects, and research papers.	184
• Use technological devices such as audiovisuals, computers, and Internet.	24
• Emphasize group work and teamwork.	40
• Invite more international visiting professors.	3
• Stop using previous quizzes repeatedly every semester.	16
• Introduce a minor-major system.	2
Quality of Faculty	
• Promote faculty who are specialized, updated, and qualified.	42
• Hire full time faculty members who can provide enough time for their students.	12

Additionally, when students were asked to recommend topics, skills, or concepts that were not covered during their study at AUB that they felt strongly should have been covered, 102 (15%) suggested using more presentations, tutorials, research activities, projects, class discussions, case studies, group and teamwork, workshops, and seminars. A significant number (7%) suggested more emphasis on using computers and the Internet (Table 14).

Table 14.

Students' responses to the open-ended question that asked about topics, skills, or concepts recommended to be added.

Teaching practices	Frequency
• More variety of major and elective courses: languages, music, art, sports, first aid, human rights, and ethics.	17
• Use more presentations, tutorials, research activities, projects, class discussions, case studies, group work/team work, workshops, and seminars /Emphasize practical skills.	102
• Emphasize better Internet and computer skills.	52
• Give credit to training courses.	11
• More adequate career counseling.	10
• Have a unified grading system across courses and departments.	2

When asked about their best teaching experiences at AUB, 6% of the students who wrote comments mentioned courses with qualified and understanding teachers, and 7% mentioned fieldwork, training courses, doing projects, and working in groups or teams (Table 15). Furthermore, when asked about their worst teaching experiences, a sizeable number of students (12%) pointed out that courses that were given by faculty members who were perceived to be non-motivating, unqualified, unprepared, disrespectful, out-dated, or biased were their worst experiences at AUB (Table 16).

Table 15.

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

Teaching practices	Frequency
• Courses with qualified, and understanding professional teachers	43
• Field work, training, final year project, and AREC	47
• Emphasize skills for problem solving and achieving goals.	4
Social Experiences	
• Coordination and communication with colleagues and professors	13
• Team/group work	37
• Self reliance and tolerance	10
• Involvement in extra curricular activities	4

Table 16.

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

Teaching Practices	Frequency
• Courses that are given by non-motivating, unqualified, unprepared, disrespectful, out-dated, or biased professors.	81
• Unfair evaluation, and unfair jury for final year projects	14
• Not punishing cheating.	14
• Courses with repetitive information.	16
• Lack of accessibility to adequate technology such as computers and audiovisual equipments.	11
• Registration and relationship with administration.	6

Finally, in response to the question that asked for suggestions to enhance the grading system to better assess student performance, acquisition of knowledge and skills and intellectual development, 26% of the students suggested using more diversified evaluation methods such as quizzes, research papers, oral presentations, and projects (Table 17).

Table 17.

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

	Frequency
• More diversified evaluation methods: Quizzes, research papers, oral presentations, assignments, projects, and attendance.	184
• Use GPA System	27
• Use a unified grading system, explain it clearly, and follow it	2
• Stop controlled class average and grade push down system	29
• Give grades for internships and training courses.	11

One category related to laboratories emerged in the responses of students to the open-ended questions during the academic year 2001/2001. Specifically, 89 students (13%) indicated that labs should be better equipped, safer and better scheduled to allow students to take the lab at the same time they take a course.

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

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 18).

Table 18.

Students' responses to the open-ended question that asked about important changes to be introduced.

	2000/2001	2001/2002
Teacher Student Relationship	Frequency and (%)	Frequency and %
• 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 19) and smaller percentages suggesting that their best experiences were with qualified and understanding teachers (Table 20) and their worst experiences were course given by non-motivating, unqualified, unprepared and disrespectful professors (Table 21). Finally, a slightly smaller percentage, but a larger number, of students recommended using more diversified evaluation methods (Table 22).

Table 19.

Students' responses to the open-ended question that asked about topics, skills, or concepts recommended to be added.

	2000/2001	2001/2002
Teaching practices	Frequency and %	Frequency and %
• 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 20.

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 21.

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 22.

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%)