AMERICAN UNIVERSITY OF BEIRUT

TASK FORCE ON UNDERGRADUATE TEACHING EXCELLENCE

TEACHING PRACTICES AT AUB: A TEACHER-STUDENT PERSPECTIVE

Report Prepared by Iman Nuwayhid

ACKNOWLEDGEMENT

TABLE OF CONTENTS

Acknowledgement

Table of contents

List of Tables

List of Abbreviations

Executive summary

List of tables

List of Abbreviations

AUB: American University of Beirut

FAFS: Faculty of Agricultural and Food Sciences

FAS: Faculty of Arts and Sciences

FEA: Faculty of Engineering and Architecture

FHS: Faculty of Health Sciences

FM: Faculty of Medical Sciences

TF: Task Force on Undergraduate Teaching Excellence

EXECUTIVE SUMMARY

Background and Objectives

In 1999, the AUB received a grant from the Andrew W. Mellon Foundation to support its efforts to enhance teaching and learning at the university. A University Task Force on Undergraduate Teaching Excellence (TF) was established to recommend steps in this direction. The TF was charged with the mission "to review current teaching and learning practices and to make recommendations to improve undergraduate teaching university wide". To achieve this, the TF assessed the teaching practices from the perspective of the providers (AUB faculty) and consumers (AUB students).

The objectives of the teacher survey were:

- To map current teaching practices at AUB in relation to contemporary theories and practices

- To identify needs and expectations among AUB faculty

The objectives of the student survey were:

- To assess current teaching practices at AUB

- To assess students' educational experience at AUB

- To evaluate programs' outcomes

Methodology

1- Faculty survey:

A subcommittee was charged with the preparation of the survey questionnaires. It was agreed that the survey should focus on outcomes, development of objectives and student learning skills, rather than simply surveying current teaching practices. The final design of the questionnaire was driven by the different phases involved in the preparation for a course: its design, its delivery (teaching the course), and the assessment of students. Two open-ended sections were introduced for comments on the main obstacles to effective teaching at AUB and faculty needs for improvement.

The survey targeted both full-time and part-time faculty members involved in undergraduate teaching in all 4 eligible Faculties (Agriculture & Food Sciences (FAFS); Arts & Sciences (FAS); Engineering & Architecture (FEA); Health Sciences (FHS)) and the School of Nursing. Teaching practices in large classes, small classes, and laboratories were assessed. Responses were anonymous.   The survey was conducted in April 2000.

2- Student survey:

A subcommittee was charged with the preparation of the questionnaire. It was decided only senior graduating students (Graduates of June 2000 only) will be surveyed and questions will be limited to class instruction (labs excluded). Respondents will be anonymous, but will be asked to identify their Faculty and program. The questionnaire consisted of 39 close-ended questions with a 4-point Likert scale response (strongly agree; agree; disagree; strongly disagree). The questions inquired about the clarity of the objectives of their undergraduate program, courses, and course syllabi. Students were also asked about teaching practices, methods of assessment, exposure to recent development in the field, leadership and communication skills acquired, and the level of personal growth. Three open-ended questions were included to allow the student to recommend changes in teaching practices and content of program, and to comment on the best or worst learning experiences at AUB. The survey was conducted in June and July 2000.

Findings

1- Faculty survey:

The overall response rate was 59% (range 43% to 80%).

Assessment of teaching of courses

More than 90% of faculty members at AUB teaching <u>large classes</u> reported that they distribute a course syllabus to registered students and clearly state course objectives. More than two-thirds benefited from student evaluation and correlated between course and program objectives and included life-long learning and communication skills in their courses. However, a smaller proportion confirmed using educational taxonomies (27%), reported correlating course objectives with course outcomes (52%), or emphasized student-centered instruction (48%). Only 25% introduced skills related to leadership in their courses. The responses of faculty members at AUB teaching <u>small classes</u> were not much different than those teaching large classes. The most striking difference is a higher proportion of faculty using more student-centered instructions (69%) and including communication skills (81%) in small classes.

More than three-quarters of faculty members teaching <u>large classes</u> taught updated material relevant to course objectives, stimulated discussions and problem-solving in class, presented controversies, encouraged students to voice their concerns, related outside events to course subject, encouraged students to have high expectations, and were available to students during office hours. A lower proportion of faculty teaching large classes were sensitive to students' goals or learning styles, or facilitated student presentations or student cooperation in class or out of class (hands-on or group project). Only 53% provided an outline at the beginning of each lecture. When compared to faculty in professional schools, more of FAS faculty viewed themselves as co-learners in class (68% vs. 44%), were willing to modify teaching strategies based on student performance (81% vs. 59%), and were available to students during office hours (96% vs. 84%). More faculty members at professional schools used single textbooks (41% vs. 15%) and required out-of-class activities (38% vs. 13%). Faculty members teaching <u>small classes</u> used more interactive, student-centered, and out-of-class activities than those teaching large classes, regardless of the type of Faculty. Still less than 50% provided an outline for each lecture.

Ninety percent of respondents reported explaining the assessment criteria to students in <u>large classes</u>. However, assessment was limited in 74% of the cases to written examinations. A small proportion of faculty members in large classes (12-56%) used other assessment techniques (open book/ open resource tests; papers and group projects; oral examinations; take-home examinations). Only 12% of faculty encouraged students to keep a portfolio of their work. Less than 50% of the faculty performed periodic evaluation of the students or discussed papers and projects in class. Failing to abide by time deadlines were penalized by one-third of the faculty.   Less than 70% of faculty members reported assessing analytical skills in addition to comprehension.   The differences between assessing students in <u>small classes</u> and students in large classes were not striking except for more papers and group projects (72% vs. 43%) and more periodic student evaluations (69% vs. 50%) in small classes.

The following obstacles and needs were reported by 177 who completed the questionnaire: inadequate facilities (55%), lack of resources (53%), class size (37%), bureaucracy (36%), communication between faculty members (28%), communication with administration (27%), classroom management (17%), and types of majors available (16%).

When asked to comment on obstacles to teaching and needs for more effective teaching at AUB, the following main ideas were reported:

- Faculty requested less involvement in distracting activities (e.g. committee meetings) and a lower teaching load

- Faculty asked for training workshops in teaching effectiveness paralleled with an increased awareness among students of what is learning and what is expected of them

- Faculty expected stronger support and appreciation of their teaching activities

- Faculty needed better equipped and designed classrooms

Assessment of teaching in laboratories

A total of 45 faculty members filled the lab survey. In this section, responses regarding the large labs were combined with those for small labs making the total lab responses 55.

The majority of faculty teaching laboratory courses (> 90%) stated the objectives of the course, correlated objectives with outcomes, prepared a lab syllabus, and explained experiments in class. A lower proportion correlated objectives with outcomes.

Close to 90% reported linking lab experiments to theory in class and to course objectives (89%). Overall, course outcomes were explained to students (87%), safety was emphasized (80%), and new technologies were discussed even if not available in the lab (64%), in addition to availability during office hours and explanations in class. However, one fourth of the respondents were often not present in the lab and in 30-50% of the cases lab assistants did not receive enough instructions on how to

conduct the lab or deal with students. The last finding should be assessed cautiously because 22 persons did not fill the question or assumed it not applicable.

The majority of faculty teaching laboratory courses (93%) reported clearly explaining their assessment criteria to the students. However, only 50% coordinated their grading policy with the lab assistant. More strikingly, student-student and student-faculty interactions were minimal. On-going or periodic evaluation of student performance in the lab was low and the use of oral tests, drop quizzes, and student portfolios were limited.

A total of 37 (out of 45) pointed to the following obstacles/ needs: lack of resources (68%), inadequate facilities (65%), bureaucracy (32%), communication with administration (24%), classroom management (14%), communication between faculty members (14%), class size (11%), and types of majors available (8%). A few expressed their worry about safety and waste disposal issues. Financial, physical, and human resources were also demanded. Continuing training and education were recommended for all lab assistants.

2- Student survey:

A total of 385 out of 659 (58%) graduating students, at the bachelor level, completed the survey.

Eighty percent or more of the respondents agreed that the objectives of the programs they were enrolled in were clear to them, course objectives were clearly stated, and course syllabi were distributed early in the semester. In only 55% of the cases, syllabi included course outcomes (skills to be acquired).

The majority of students concurred that the material covered in class was relevant to course objectives. A total of 83% reported that teachers were usually available during office hours. Close to 50% of the students reported that recent developments are not being discussed in class. Two-thirds of students were satisfied with classroom environment but around 50% reported low involvement in problem-solving or group work in class. Close to 70% felt that term papers encouraged independent research. Only 60% were motivated enough to perform and less than 50% were invited to relate outside events to course subject. More than three-quarters of students accessed Internet for information.

Less than 70% of students felt that teachers clearly explained their grading policy. The majority reported the use of objective or subjective tests to evaluate students and a much lower use of oral tests, drop quizzes, take home tests, and the like. Drop quizzes were more used in FAS while homework assignments and group projects were more used in professional and business schools.

Overall, one third of students thought that the quality of instruction in their program is not good and the content of the required major courses not adequate. However, 73% felt that their classes contributed to their personal growth. Two-thirds were not satisfied with large classes and 60% not satisfied with advising. Three-quarters of students had access to computers. A small proportion of students worked on faculty members' research projects and 50% heard faculty referring to their research. Half the students discussed their career plans with faculty and 77% felt prepared to apply their knowledge in the field. An alarming proportion reported cheating among students (79%) or handing someone else's work (70%).

More than 80% of students agreed that they have acquired leadership skills allowing them to express their ideas clearly, both verbally and in written reports, adhering to ethical principles.

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.

3- Student vs. faculty perspectives

The attached table (Table S-1) compares the responses of students and teachers (teaching large and small classes) to the same or similar questions.

Conclusion

Teachers perceived themselves as co-learners (facilitators) but rarely attempted to evaluate students periodically. They demanded a physical, social, and administrative environment that promoted teaching as an honorable and well rewarded profession within AUB. Teachers' open comments reflected a serious frustration with a system that demands of them to do it all (serve on committees, teach many courses, be available to students, be up to date in their topics, and publish) but be assessed on their publication records only.

Teachers of large classes were generally hand-tied and did not have the opportunity of interacting closely with students or introducing innovative and experimental teaching modalities. Laboratory courses suffered from lack of human and material resources, which hindered proper skill development and periodic updating of lab experiments.

The number of missing responses to some item questions by teachers most probably reflected a lack of understanding of the concept presented by the question. This should serve as an indicator for specific workshops to address such concept and secure a minimum understanding of the educational concepts.

On the other hand, a reasonable size of students expressed their dismay in their programs, although the majority felt that they were ready and well prepared to work. This might reflect a real deficiency in some programs and/ or a higher expectation from students. In any case, it is enough warning that some things need to change. A majority of students also yearned for teachers who guide them in their future career plans. Whether they approached their teachers and got minimal advice or they simply elected not to approach them cannot be known. Students also missed midterm evaluations. In fact, there was a clear outcry against the grading and evaluation system. Students demanded new methods of teaching, learning, and assessment.

Teachers and students both agreed that there is a need for a new way of thinking. Teachers felt that a good number of students are not ready for change and are grade-driven, while students felt that some teachers are old fashioned and rigid. The reality both groups are calling for change. The majority of teachers and students called for student-centered instructions and interactive teaching-learning that build knowledge and skills. An alarmingly high proportion of students reported witnessing different forms of cheating among other students. Ethical conduct and principles are part and parcel of proper education and learning and should not be compromised.

Recommendations

The following workshops addressed to teachers are recommended:

- Applying of the taxonomies of educational objectives.
- Identifying how program objectives, course objectives, and educational outcome assessment correlate with each other and with the University's mission, philosophy, and goals. *[This is needed in preparation for the accreditation of AUB]*
- Promoting "student-centered instruction" and "student-driven curricula" to become part of AUB's philosophy reflected in the mission of all its educational programs.
- Integrating leadership and communication skills into courses.
- Identifying and adapting to the different learning styles of students
- Evaluation of students' performance

Other workshops should also be organized for students alone and with faculty to address the following concepts of education:

- Students' responsibility in student-centered education
- Partnership in learning between students and faculty
- Ethical principles and conduct

Urgent action should be taken to achieve the following:

- Improving the classroom environment to promote student-centered education
- Reducing cheating and unethical conduct among students
- Recognizing teaching excellence
- Rewarding successful student group activities
- Establishing a Center for Teaching and Learning at AUB that works closely with faculty and students

Chapter 1

Background and significance

The American University of Beirut has always been known for excellence in teaching and for the high quality of education it has consistently offered its students throughout its long history. What contributed significantly to the uniqueness of AUB, as an institution of higher education serving Lebanon and the region, has been its commitment to the ideal of liberal arts education and its willingness to self-appraise and improve.

In 1999 the AUB received a grant from the Andrew W. Mellon Foundation to support its efforts to enhance teaching and learning at the university. A University Task Force on Undergraduate Teaching Excellence (TF) was established to recommend steps in this direction.

The TF was charged with the mission "to review current teaching and learning practices and to make recommendations to improve undergraduate teaching university wide". The TF is doing its best to benefit from the impressive and growing body of literature and scholarship on teaching and learning. In addition, there is much to be learned by looking at how we teach and considering how we may become better teachers.

To achieve this, the TF assessed the teaching practices from the perspective of the providers (AUB faculty) and consumers (AUB students). The whole exercise was based on a profound belief in that university education is a learning experience in which teachers and students participate to meet minimum preset objectives. A fast growing and available technology that provides access to resources, data, and information is gradually replacing the prototype of the teacher as the gatekeeper of knowledge and the student as an empty vessel. Teachers, today, have the challenging responsibility of transforming their students into lifelong learners and preparing them to meet the needs of their future jobs.

Chapter 2

Objectives

The objectives of the teacher survey were:

- To map current teaching practices at AUB in relation to contemporary theories and practices

- To identify needs and expectations among AUB faculty

The objectives of the student survey were:

- To assess current teaching practices at AUB

- To assess students' educational experience at AUB

- To evaluate programs' outcomes

Chapter 3

Methodology

This chapter reviews the methodology for the faculty and student surveys.

3.1   Faculty Survey

Development of questionnaire

A subcommittee of the following members of the TF- Jamal Abed, Kevin Butcher (Chair), Said El-Fakhani, Iman Nuwayhid- was charged with the preparation of the questionnaire. This followed the discussion of a draft survey composed by Dr. Karma El-Hassan on January 21, 2000.

The members of the subcommittee felt that the survey should focus on outcomes, development of objectives and student learning skills, rather than simply surveying current teaching practices. By filling in the survey, faculty would become more aware of the variety of contemporary educational approaches, if they were not already aware of them.

The subcommittee reviewed a set of questionnaires posted on the web by several American universities. However, the final design of the questionnaire was driven by the different phases involved in the preparation for a course: its design, its delivery (teaching the course), and the assessment of students. Two open-ended sections were introduced for comments on the main obstacles to effective teaching at AUB and faculty needs for improvement.

Draft questionnaires were discussed with the Task Force and the following suggestions sculpted the final format:

-    Both full-time and part-time faculty members should be targeted.

- Only undergraduate teaching will be assessed.

- Small classes' problems are different from large classes'.

- Small classes are defined as those of 30-35 students.

- Assessment of teaching in laboratories is different than classes.

- Anonymity will improve participation and frank comments at the expense of not analyzing data by department

- Faculty and years of experiences will be the only identifiers of respondents.

- A concise short questionnaire will improve participation.

In conclusion, teaching practices in large classes, small classes, and laboratories were assessed. A draft questionnaire was piloted on more than 20 faculty members. Most recommendations were incorporated into a new draft that was cleared by the Board of Deans.

Content of the questionnaire

Rather than asking questions, the main part of the survey was designed as a series of statements about teaching practices to which faculty could respond that they either employed this practice or they did not. A copy of the questionnaire is provided in Appendix A.

The cover page introduced the survey and its purpose and provided a definition of class size. Faculty members were asked to identify their Faculty, status (full-time or part-time), and total number of years in teaching (including time outside AUB).

The content of the questionnaire consisted of three major parts:

Part1: Knowledge of contemporary educational theories and practices.

This part was divided into three sections:

a)   11 questions related to designing a course (i.e., setting course objectives and designing and distributing a syllabus)

b)   29 questions related to techniques used in the classroom or laboratory

c)   14 questions related to evaluation (i.e. tailoring the evaluations to give feedback about whether the course meets its objectives)

The main purpose of this structure was to see to what degree faculty members are organizing courses with clearly stated objectives and how they measure whether the courses meet those objectives.

Part 2: Obstacles to effective teaching.

This part listed some types of obstacles, but also left room for open-ended responses.

Part 3: Faculty needs.

This part enabled faculty to express an opinion about what they needed to make their teaching more effective. The feedback from this part could prove very useful in determining the type of workshops AUB requires.

Faculty members were asked to answer the questions under part 1 for their experiences with large and small classes. For each question, the respondent had to choose between "yes", "no", or "not applicable". The questionnaire was then adapted to laboratory teaching, keeping a similar design and format.

Distribution of survey questionnaire

The Associate Provost Waddah Nasr, Chairperson of the Task Force, visited all 4 eligible Faculties (Agriculture & Food Sciences (FAFS); Arts & Sciences (FAS); Engineering & Architecture (FEA); Health Sciences (FHS)) and the School of Nursing and explained to faculty members in faculty or departmental meetings the activities of the task force and the purpose of the survey.

A list of the chairpersons of all departments in the four Faculties and the School of Nursing was updated at the time of the survey. The number of full-time and part-time faculty members was estimated from the latest university catalogue. A set of questionnaires was sent to the chairperson for distribution to all faculty members within the department. Faculty members were asked to mail the completed questionnaire directly to the Associate Provost's office. The Associate provost sent e-mail reminders to all faculty members.

The survey questionnaires were distributed in April 2000.

3.2   Student Survey

Development of questionnaire

A subcommittee of the following members of the TF- Jamal Abed, Fouad Mrad (Chair), Nisreen Ghaddar, Nuhad Yazbek-Dumit, Rami Zurayk- was charged with the preparation of the questionnaire.

The subcommittee reviewed a set of questionnaires posted on the web by several American universities.

Draft questionnaires were discussed with the Task Force and the following suggestions sculpted the final format:

-        Only senior graduating students will be surveyed.

- Questions will be limited to class instruction (labs excluded).

- Respondents will be anonymous, but will be asked to identify their Faculty and program.

- Open-ended questions will be added to invite comments and suggestions.

- Students will be asked about their best and worst experiences at AUB.

A final draft questionnaire was piloted on less than 10 students. Most recommendations were incorporated.

Content of the questionnaire

A copy of the questionnaire is provided in Appendix B. The cover page introduced the purpose of the survey and asked the student to identify his/her Faculty and program.

The questionnaire consisted of 39 close-ended questions with a 4-point Likert scale response (strongly agree; agree; disagree; strongly disagree). The questions inquired about the clarity of the objectives of their undergraduate program, courses, and course syllabi. Students were also asked about teaching practices, methods of assessment, exposure to recent development in the field, leadership and communication skills acquired, and the level of personal growth. Three open-ended questions were included to allow the student to recommend changes in teaching practices and content of program, and to comment on the best or worst learning experiences at AUB.

Distribution of survey questionnaire

The Associate Provost Waddah Nasr, Chairperson of the Task Force, sent an e-mail to all students at AUB addressing graduating students and introducing the survey. Copies of the questionnaire were sent to the directors of all programs at AUB to be distributed to the graduating students (graduates of June 2000 only). Distribution to students differed by program and Faculty. Students filled the questionnaire in one of their final examinations, in the Faculty's student affairs office, or during the

rehearsals for the commencement. In some cases, graduate students were invited through an open announcement to meet on a specified time and place.

The survey questionnaires were distributed in the months of June and July 2000.

3.3   Data analysis

SPSS for Windows was used for data entry and analysis.

Faculty survey

Data analysis was straightforward. The distribution of answers (yes; no; missing) to all survey items was compared across Faculty. "Missing" included "Not applicable". Answers were also compared between full-time and part-time faculty members and between those with less than 10 years of teaching experience and those with 10 years or more. Chi-square analysis was used to test if differences were statistically significant, set at a p-value of 0.05. Results were shown for large classes, small classes, and laboratories.

Due to the small sample size in some Faculties, all professional schools (FAFS; FEA; FHS; Nursing) were grouped together and compared to the FAS. Respondents who did not state their Faculty were grouped together as "unidentified". The responses of the particular Faculties are shown in the appendix.

The answers to open-ended questions were listed and distributed among the members of the subcommittee. Common ideas, suggestions, and recommendations were identified and grouped under the following themes: teacher-related; student-related; program-related; and resources/environment/equipment-related.

Student survey

Question items in the student survey were re-arranged to reflect the following concepts: course design; teaching; student assessment; program; leadership. The answers to each question were collapsed into (strongly agree + agree) versus (disagree + strongly disagree) and compared among graduates of different Faculties. Again, FAS was compared to all professional Faculties combined. FAS was also split into Business and FAS. The appendix presents the detailed answer to all questions for each Faculty. Chi-square analysis was used to test if differences were statistically significant, set at a p-value of 0.05.

The answers to the open-ended questions were listed and grouped under the following themes: teaching practices and format; outside classroom advising and accessibility; course assessment and design; general.

Faculty vs. Student perceptions

Responses to same or similar questions in both surveys were compared.

General issues

- In both surveys, the number of people who reported an idea or a theme was not counted. Instead, all ideas were treated equally. The assumption was that answers to open-ended questions were more like the tip of an iceberg and consequently even infrequently reported ones might still be worth looking into.

- In evaluating the results (*what do the percentages mean?*), the sub-committee and the TF elected to minimize "value judgments". In general, no strict benchmarks or "passing

criteria" were adopted. Responses to questions were assessed, individually and in groups, and contrasted with what is currently recommended in the field of education (teaching and learning).

- The current study findings should serve as a baseline performance record against which future surveys should be compared. Only then, efforts to improve the teaching-learning environment at AUB could be properly evaluated.

3.4   The Faculty of Medicine

The Faculty of Medicine was considered a graduate school and consequently was not addressed in the survey questionnaires. However, a set of the faculty survey questionnaires was sent to the Faculty of Medicine by mistake. The 33 returned questionnaires were analyzed separately as a token of appreciation for those who took the time to fill it. Results are presented in a table format in Appendix C.

Chapter 4

The faculty perspective

4.1   Respondents

Table 4.1 presents the number of returned questionnaires and the estimated response rates for each of the different Faculties/ Schools. The overall response rate was close to 60%. The true response rate cannot be computed since the number of faculty members who actually received the survey questionnaire was not known. Table 4.1 also presents the distribution of the respondents by status (full-time vs. part-time) and years of teaching experience.

4.2   Assessment of teaching of courses

4.2.1   Designing courses

Tables 4.2 and 4.3 present the reported practices of faculty members regarding designing courses for large and small classes, respectively, and compare FAS faculty to all professional schools (FAFS, FEA, FHS, Nursing) combined.

The vast majority (> 90%) of faculty members at AUB teaching <u>large classes</u> reported that they distribute a course syllabus to registered students and clearly state course objectives (Table 4.2). More than two-thirds benefited from student evaluation and correlated between course and program objectives and included life-long learning and communication skills in their courses. However, a smaller proportion confirmed using educational taxonomies (27%), reported correlating course objectives with course outcomes (52%), or emphasized student-centered instruction (48%). Only 25% introduced skills related to leadership in their courses. Faculty members in professional schools were less likely to inquire about the profile of students registering in their courses and less likely to use student-centered instruction.

The responses of faculty members at AUB teaching <u>small classes</u> (Table 4.3) were not much different than those teaching large classes. The most striking difference is a higher proportion of faculty using more student-centered instructions (69%) and including communication skills (81%) in small classes.

Appendix D presents a more detailed version of tables 4.2 and 4.3 where individual Faculties are represented (Tables D-1 and D-2).

4.2.2 Teaching practices

Tables 4.4 and 4.5 present the reported teaching practices of faculty members in large and small classes, respectively, and compare FAS faculty to all professional schools (FAFS, FEA, FHS, Nursing) combined.

More than three-quarters of faculty members teaching large classes (Table 4.4) taught updated material relevant to course objectives, stimulated discussions and problem-solving in class, presented controversies, encouraged students to voice their concerns, related outside events to course subject, encouraged students to have high expectations, and were available to students during office hours. A lower proportion of faculty teaching large classes were sensitive to students' goals or learning styles, or facilitated student presentations or student cooperation in class or out of class (hands-on or group project). Only 53% provided an outline at the beginning of each lecture. When compared to faculty in professional schools, more of FAS faculty viewed themselves as co-learners in class (68% vs. 44%), were willing to modify teaching strategies based on student performance (81% vs. 59%), and were available to students during office hours (96% vs. 84%). More faculty members at professional schools used single textbooks (41% vs. 15%) and required out-of-class activities (38% vs. 13%).

Faculty members teaching small classes (Table 4.5) used more interactive, student-centered, and out-of-class activities than those teaching large classes, regardless of the type of Faculty. Still less than 50% provided an outline for each lecture.

Appendix E presents a more detailed version of tables 4.4 and 4.5 where individual Faculties are represented (Tables E-1 and E-2).

4.2.3 Assessing students

Tables 4.6 and 4.7 present the reported responses of faculty members regarding assessing students in large and small classes, respectively, and compare FAS faculty to all professional schools (FAFS, FEA, FHS, Nursing) combined.

Ninety percent of respondents reported explaining the assessment criteria to students in large classes (Table 4.6). However, assessment was limited in 74% of the cases to written examinations. A small proportion of faculty members in large classes (12-56%) used other assessment techniques (open book/ open resource tests; papers and group projects; oral examinations; take-home examinations). Only 12% of faculty encouraged students to keep a portfolio of their work. Less than 50% of the faculty performed periodic evaluation of the students or discussed papers and projects in class. Failing to abide by time deadlines were penalized by one-third of the faculty.   Less than 70% of faculty members reported assessing analytical skills in addition to comprehension.   The differences between FAS faculty and those of professional schools were limited: more of FAS reported measuring student's learning outcomes (65% vs. 59%) while more of professional schools reported using group projects (66% vs. 33%).

Table 4.7 reports the responses of faculty assessing students in small classes. There were no statistically significant differences between faculty of FAS and professional schools. Moreover, the differences between assessing students in small classes and students in large classes were not striking except for more papers and group projects (72% vs. 43%) and more periodic student evaluations (69% vs. 50%) in small classes.

Appendix F presents a more detailed version of tables 4.6 and 4.7 where individual Faculties are represented (Tables F-1 and F-2).

4.2.4   Full-time versus part-time faculty

A total of 150 full-time and 13 part-time faculty members returned a completed questionnaire (14 did not specify). This precluded any useful comparison by Faculty.

No statistically significant differences were noted between all full-timers and all part-timers regarding the design of courses, teaching practices, or assessing of students both in small and large classes.

4.2.5   Responses by years of teaching

A total of 44 faculty members reported an overall teaching experience of less than 10 years while 119 reported at least 10 years.

No statistically significant differences were found between the practices of less experienced and more experienced faculty in <u>small classes</u>, except that the more experienced faculty members used the taxonomies of education objectives (57% vs. 30%) and drop quizzes more frequently (46% vs. 23%).

In <u>large classes</u>, the more experienced faculty members, as compared to the less experienced, reported a higher practice of the following

- Use of taxonomies of educational objectives (55% vs. 33%)

- Student class presentations (47% vs. 24%)

- Student use of library work (86% vs. 67%)

- Open book/resource test (25% vs. 10%)

- Assessment reflecting real-life situation (50% vs. 27%)

- Assessment of analytical skills (84% vs. 67%)

- Periodic evaluations (64% vs. 39%).

4.2.6   Obstacles and needs

Respondents were asked to tick any of 8 listed obstacles to teaching at AUB. The responses came as follows (from a total of 177 who completed the questionnaire):

Inadequate facilities   98 (55%)

Lack of resources   94 (53%)

Class size	65 (37%)
Bureaucracy	64 (36%)
Communication between faculty members	50 (28%)
Communication with administration	48 (27%)
Classroom management	30 (17%)
Types of majors available	28 (16%)

Free comments on obstacles to teaching and needs for more effective teaching at AUB were grouped and listed in Table 4.8. Answers were grouped as teacher-related, student related, program-related, and resources/ environment-related needs. The main ideas can be summarized as follows:

- Faculty requested less involvement in distracting activities (e.g. committee meetings) and a lower teaching load

- Faculty asked for training workshops in teaching effectiveness paralleled with an increased awareness among students of what is learning and what is expected of them

- Faculty expected stronger support and appreciation of their teaching activities

- Faculty needed better equipped and designed classrooms

4.3   Assessment of teaching in laboratories

A total of 45 faculty members filled the lab survey. In this section, responses regarding the large labs were combined with those for small labs making the total lab responses 55.

4.3.1   Designing lab courses

The majority of faculty teaching laboratory courses (> 90%) stated the objectives of the course, correlated objectives with outcomes, prepared a lab syllabus, and explained experiments in class (Table 4.9). A lower proportion correlated objectives with outcomes.

4.3.2 Teaching practices in labs

Close to 90% reported linking lab experiments to theory in class (Table 4.10) and to course objectives (89%). Overall, course outcomes were explained to students (87%), safety was emphasized (80%), and new technologies were discussed even if not available in the lab (64%), in addition to availability during office hours and explanations in class. However, one fourth of the respondents were often not present in the lab and in 30-50% of the cases lab assistants did not receive enough instructions on how to conduct the lab or deal with students. The last finding should be assessed cautiously because 22 persons did not fill the question or assumed it not applicable.

4.3.3 Assessing students in lab courses

The majority of faculty teaching laboratory courses (93%) reported clearly explaining their assessment criteria to the students (Table 4.11). However, only 50% coordinated their grading policy with the lab assistant. More strikingly, student-student and student-faculty interactions were minimal. On-going or periodic evaluation of student performance in the lab was low and the use of oral tests, drop quizzes, and student portfolios were limited.

4.3.4 Obstacles and needs

Respondents were asked to tick any of 8 listed obstacles to teaching laboratory courses at AUB. A total of 37 (out of 45) responded as follows:

Lack of resources   25 (68%)

Inadequate facilities   24 (65%)

Bureaucracy	12 (32%)
Communication with administration	9 (24%)
Classroom management	5 (14%)
Communication between faculty members	5 (14%)
Class size	4 (11%)
Types of majors available	3 (8%)

When asked to freely comment on obstacles and needs, again most of the respondents asked for better, upgraded, and well-maintained equipment. A few expressed their worry about safety and waste disposal issues. Financial, physical, and human resources were also demanded. Continuing training and education were recommended for all lab assistants.

Chapter 5

The students' perspective

5.1   Respondents

A total of 385 out of 659 graduating students, at the bachelor level, completed the survey (Response rate 58%). The response by Faculty was as follows:

Business	(87/132):	66%
FAS-excluding business	(129/ 283):	46%
FAFS	(8/ 31):	26%
FEA	(114/166):	69%
FHS	(29/29):	100%
Nursing	(18/18):	100%

5.2   Teaching and program assessment

5.2.1   Course design

Eighty percent or more of the respondents agreed that the objectives of the programs they were enrolled in were clear to them, course objectives were clearly stated, and course syllabi were distributed early in the semester (Table 5.1). In only 55% of the cases, syllabi included course outcomes (skills to be acquired). No statistically significant differences were noted between the responses of students from FAS, Professional schools, and Business—except that more FAS students reported that course objectives are clearly stated.

5.2.2   Teaching practices

The majority of students concurred that the material covered in class was relevant to course objectives, but more so among FAS students (91%) (Table 5.2). A total of 83% reported that teachers were usually available during office hours, but less so among business students (65%). Close to 50% of the students reported that recent developments are not being discussed in class. Two-thirds of students were satisfied with classroom environment but around 50% reported low involvement in problem-solving or group work in class (least in FAS). Close to 70% felt that term papers encouraged independent research. Only 60% were motivated enough to perform (highest in FAS with 70%) and less than 50% were invited to relate outside events to course subject. More than three-quarters of students accessed Internet for information.

5.2.3   Student assessment

Less than 70% of students felt that teachers clearly explained their grading policy (Table 5.3). This was lowest among business students (57%). The majority reported the use of objective or subjective tests to evaluate students and a much lower use of oral tests, drop quizzes, take home tests, and the like. Drop quizzes were more used in FAS while homework assignments and group projects were more used in professional and business schools.

5.2.4   Program evaluation

Overall, one third of students thought that the quality of instruction in their program is not good (50% in business) and the content of the required major courses not adequate (Table 5.4). However, 73% felt that their classes contributed to their personal growth (highest in FAS, lowest in business). Two-thirds were not satisfied with large classes and 60% not satisfied with advising. Three-quarters of students had access to computers (highest in business, 84%).   A small proportion of students worked on faculty members' research projects and 50% heard faculty referring to their research (lowest in business). Half the students discussed their career plans with faculty and 77% felt prepared to apply their knowledge in the field (lowest in business). An alarming proportion reported cheating among students (79%) or handing someone else's work (70%).

5.2.5   Leadership skills

More than 80% of students agreed that they have acquired leadership skills allowing them to express their ideas clearly, both verbally and in written reports, adhering to ethical principles (Table 5.5). Graduates of business scored statistically significantly lower on two items (effective presentations and ethical decisions) as compared to other graduates.

Appendix G reports students' responses in detail and by individual Faculties.

5.3   Recommended changes

Students recommended many changes (Table 5.6). 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

One of the main reasons for the lack of interest of people in surveys and questionnaires is their poor confidence in the benefit of such methods, the absence of a feedback process, and the limited changes installed based on survey findings.

The Task Force on Undergraduate Teaching Effectiveness has realized this limitation early on and has recommended in its report an array of approaches to assess and improve the teaching-learning environment at AUB. Peer review, course evaluations, program evaluation, round-table discussions, and outcome assessment are but some.

The current report presents a bird's eye view of teaching practices at AUB from the faculty and student perspectives. It is hard to judge what these findings mean, in the absence of a universal yardstick. However, the survey questionnaires were constructed with the following assumptions based on current trends in university education:

- Course objectives should satisfy and reflect program objectives.

- Teachers should know the program objectives and what their courses are feeding into the overall program.

- Courses should be planned with a good knowledge of the quality and background of registering students.

- Course syllabi should be detailed and serve almost like a contract between teachers and students.

- Teachers are facilitators working with students to enable them to look for information and help transform them into lifelong learners.

- Classroom instruction should be supplemented by other means of learning (e.g., projects; classroom discussions; debates; papers).

- Group work and interaction helps learning.

- Course contents should address all mental faculties (from memorization to critical thinking).

- Skills and attitudes should be developed hand-in-hand with knowledge.

- Assessment criteria should be transparent and reflective of the content and teaching modalities.

- Multiple assessment methods should be used.

- Assessment is formative (a learning technique) as much as it is summative (an evaluation technique)

- Students should be prepared to meet the outside world realities.

- Periodic evaluation of student performance and course objectives is needed.

- Teaching aids and technology have a role in the instructional-learning process.

6.1   Main findings

Table 6.1 compares the responses of students and faculty to the same or similar questions in the respective questionnaires.

Students and faculty (both in small and large classes) agreed that the majority of AUB teachers clearly stated the objectives of their courses, handed their students course syllabi at the beginning of the semester, taught material that was relevant to course objectives, were usually available during office hours, used papers and take-home work to encourage independent research, encouraged students to access the Internet for information, and used multiple methods of assessment, with objective and

subjective examinations topping the list. A high proportion of students reported an ability to present effectively and convince others, which was in concurrence with teachers of small classes.

Students and faculty also agreed that the following practices were not common:

- Course syllabi did not include course outcomes (50%).

- Group projects in and out of class were not widely used.

However, students strikingly disagreed with teachers on other issues- mostly related to lack of enough student-centered instruction. Students reported that recent developments in the field were not discussed in class (46% vs. 76% (large) vs. 92% (small)). Students were also less satisfied than teachers with the amount of student involvement and problem-solving exercises in class. Only 46% of the students responded that teachers invited them to relate outside events to covered subjects (as compared to 71% and 83% among teachers of large and small classes, respectively). Students expected more from teachers regarding motivating them to do better. A striking discrepancy was noted regarding clarity of assessment/ grading criteria between students and teachers. Finally, both students and teachers reported a lower-than-expected involvement in midterm or periodic evaluations of courses and individual student performances. Students, however, reported lower numbers.

To put findings in perspective, it is safe to say that teachers perceived themselves as co-learners (facilitators) but rarely attempted to evaluate students periodically. They demanded a physical, social, and administrative environment that promoted teaching as an honorable and well rewarded profession within AUB. Teachers' open comments reflected a serious frustration with a system that demands of them to do it all (serve on committees, teach many courses, be available to students, be up to date in their topics, and publish) but be assessed on their publication records only.

Teachers of large classes were generally hand-tied and did not have the opportunity of interacting closely with students or introducing innovative and experimental teaching modalities. Laboratory courses suffered from lack of human and material resources, which hindered proper skill development and periodic updating of lab experiments.

The number of missing responses to some item questions by teachers most probably reflected a lack of understanding of the concept presented by the question. This should serve as an indicator for specific

workshops to address such concept and secure a minimum understanding of the educational concepts. The following presents such as list of concepts:

- Correlation between course objective and program objectives

- Profile of students

- Course outcomes

- Taxonomies of educational objectives

- Student-centered instruction

- Leadership skills as part of course outcomes

- Students' learning styles

- Periodic evaluations

- Progress or work portfolio

On the other hand, a reasonable size of students expressed their dismay in their programs, although the majority felt that they were ready and well prepared to work. This might reflect a real deficiency in some programs and/ or a higher expectation from students. In any case, it is enough warning that some things need to change. A majority of students also yearned for teachers who guide them in their future career plans. Whether they approached their teachers and got minimal advice or they simply elected not to approach them cannot be known. Students also missed midterm evaluations. In fact, there was a clear outcry against the grading and evaluation system. Students demanded new methods of teaching., learning, and assessment.

Teachers and students both agreed that there is a need for a new way of thinking. Teachers felt that a good number of students are not ready for change and are grade-driven, while students felt that some teachers are old fashioned and rigid. The reality both groups are calling for change. The majority of teachers and students called for student-centered instructions and interactive teaching-learning that build knowledge and skills. An alarmingly high proportion of students reported witnessing different forms of cheating among other students. Ethical conduct and principles are part and parcel of proper education and learning and should not be compromised.

## 6.2	Limitations

The study limitations were not unexpected. The response rate of 60% in both surveys is not surprising in this type of studies. Response can increase in future surveys if the distribution of the questionnaires is improved and if teachers and students realize that their responses count. Furthermore, the response rate varied among Faculties and was extremely low among part-timers. Most probably, most part-timers did not receive the questionnaire in the first place. Another limitation stems from the difficulty of dissociating programs and departments. This might never be addressed in such a survey because anonymity is conditional and some of the programs or even Faculties is too small to provide a reasonable sample size for analysis. Efforts at the level of individual Faculties and programs should be encouraged.

## 6.3	Recommendations

Sections 4.2.6, 4.3.4, and 5.3 nicely listed recommended changes by teachers and students. Most of those have been addressed in the Task Force's report too. These will not be repeated here.

Instead, the TF recommends the following workshops addressed to teachers:

- Applying of the taxonomies of educational objectives.
- Identifying how program objectives, course objectives, and educational outcome assessment correlate with each other and with the University's mission, philosophy, and goals. *[This is needed in preparation for the accreditation of AUB]*
- Promoting "student-centered instruction" and "student-driven curricula" to become part of AUB's philosophy reflected in the mission of all its educational programs.
- Integrating leadership and communication skills into courses.
- Identifying and adapting to the different learning styles of students
- Evaluation of students' performance

Other workshops should also be organized for students alone and with faculty to address the following concepts of education:

- Students' responsibility in student-centered education
- Partnership in learning between students and faculty
- Ethical principles and conduct

Urgent action should be taken to achieve the following:

- Improving the classroom environment to promote student-centered education
- Reducing cheating and unethical conduct among students
- Recognizing teaching excellence
- Rewarding successful student group activities
- Establishing a Center for Teaching and Learning at AUB that works closely with faculty and students

Future surveys of teaching practices at AUB are encouraged with the following recommendations:

- Teachers should be surveyed once every three (3) years. Surveys could focus on specific issues or concepts rather than inquiring about everything. Future surveys should measure change and satisfaction with change.

- Graduating students should be surveyed every single year. There is no need to wait for the commencement or last month of their last semester. Instead, they should be surveyed at leisure at the beginning of their last semester.

- The survey questionnaires should be friendlier and a bit shorter.

- A better distribution system should be adopted to ensure that all full-time and part-time teachers and all graduating students receive a copy of the questionnaire.

Most importantly, however, is what to do with the current survey. Meetings among faculty members in their own departments, Faculties, and across Faculties should be conducted with and without students to better understand the survey findings and recommend action where needed. Students are encouraged to do the same. Such exercises will improve the quality of future surveys and will ensure a strong commitment from top administration. External reviewers and future employers of AUB graduates should also be invited to comment. Discussions and recommendations, however, should translate into visible and useful change. Only then is the loop closed.