Educational Effectiveness Review Report

American University of Armenia

Submitted to the
Western Association of Schools and Colleges

June 2006

TABLE OF CONTENT

The American University of Armenia (AUA) began operations on September 21, 1991, with 101 students. During its first fifteen years, the University has produced 1,396 graduates whose impact has been felt throughout the country. AUA has trained over 100 English teachers who have helped to improve the quality of English language instruction in Armenia; over 400 MBA graduates have brought Western management concepts to Armenian businesses. Over 100 public health graduates are leading various programs in health services, primary care and public health. Approximately 70 LL.M. graduates have enriched their knowledge of the law with Western legal concepts. Over 200 engineers have contributed to local business enterprises, and more than 200 graduates of AUA's political science program are working in international organizations, in diplomatic missions, and in educational and research institutes.

In order to demonstrate commitment to excellence in its educational programs, and in its operations in general, AUA initiated the process of achieving accreditation through WASC in 1997. The University has now reached the final step of the process, from which it has emerged as a stronger, improved, and more confident institution than it was ten years ago. AUA has institutionalized assessment with the implementation of a University-wide Assessment and Evaluation Plan that is now in process, insuring ongoing review of academic programs and administrative units. The institution has engaged in deep introspection about its educational outcomes. The University has developed a Fiscal Plan, has aligned it with its strategic and development plans, and has clarified its strategic planning process.

This report follows the approach outlined in AUA's Letter of Intent dated September 3, 2004. Chapter One provides responses to recommendations in the Capacity and Preparatory Review (C&PR) Visiting Team's Report as well as to recommendations in the institutional Capacity and Preparatory Review self-study. Chapter Two details the University's current process for evaluating educational effectiveness, while Chapter Three illustrates how academic departments have utilized direct and indirect evidence to analyze learning outcomes and to implement needed changes. Chapter Four describes AUA's evolving strategic planning process, and alignment of fiscal and development plans with the institutional strategic plan. The impact of AUA's programs and research centers is described in Chapter Five. Chapter Six combines an overview of AUA's accomplishments in its first fifteen years with a look to the future, a future in which the University will become more diverse, will regionalize its programs, and will expand its educational efforts to include adult-rural education-development. We are confident that the University now has in place the experience, planning processes, and assessment systems that will allow it to succeed in a more competitive environment than previously and to continue on the trajectory of growth and improvement that have characterized the first fifteen years of its history.

The American University of Armenia (AUA) expresses its appreciation to the C&PR Visiting Team for its thoughtful work in identifying the institution's strengths as well as those areas in which improvement is needed. During the past year, AUA has striven to make progress both in the areas related to the Visiting Team's recommendations, and in those areas that were the object of the Team's commendation. Thus, faculty governance has been enhanced with the fully operational Faculty Senate (see Chapter Three, below); a Financial Plan has been developed, and a Development Plan is in preparation (see Chapter Four, below); institutional research has been strengthened with implementation of the new Management Information System (see Chapter Two, below); and faculty have been closely engaged in the preparation of this Educational Effectiveness Report (see Chapters Three and Five, below).

This chapter includes the University's response to the five recommendations offered in the Capacity and Preparatory Review Team Report and to recommendations in the University's Capacity and Preparatory Review Self-Study.

Capacity and Preparatory Review Team Report

> _Recommendation 1_: "_Institutional Leadership—Stable full-time leadership resident in Yerevan will be critical to the continued development of the institution…_"

The Provost/Vice President search committee, with the help of a consultant, identified and interviewed several candidates for the post. The leading candidate was recommended to the President, who interviewed him, arranged for him to visit AUA, then recommended his appointment to the Board of Trustees. An offer was extended; however, due to family reasons, that candidate is unable to join AUA at this time. The search committee identified a further list of eight candidates, and is currently checking references for three candidates who are on the "short list."

In addition, the President of AUA will increase his presence in Armenia for the foreseeable future, doubling his time in-residence to two-thirds of the academic year.

> _Recommendation 2_: "_Leadership at the Dean's Level—We recommend that AUA continue to move towards its goal of establishing Dean's level leadership resident in Yerevan. Where school and college leadership continues to be situated partially in the United States, we recommend that, tailored to the circumstances of each program, there be established a clear definition of the roles, responsibilities, and expectations for each dean and associate dean and for the working relationship between them._"

Since the C&PR Team Visit in October 2005, the University has appointed one more on-site Dean, bringing the number to three out of seven. The Acting Vice President has engaged Deans and Associate Deans in a process that will lead to clarification of their respective roles and responsibilities. The process begins with discussion and subsequent agreement between Deans and Associate Deans, which then leads to implementation and monitoring of the terms that have

been agreed upon. At this date, the Department of English Programs (DEP) has defined roles and working relationship between the Dean, Associate Dean, and Assistant Dean. The DEP model was discussed at the June administrative retreat, and other program Deans and Associate Deans are expected to complete their discussions during the next two months. It should be noted that the needs of each program are different—some Deans are in residence, some are not; some programs have Associate Deans, others do not. Thus, the division of responsibilities and the working relationship between Dean and Associate Dean will vary, depending on each program's circumstances and needs. Also, the ease of communication resulting from new technologies is leading AUA to examine the impact of those technologies on management styles and structures. For example, Deans who reside in the U.S. are in continual communication with their Associate Deans in Armenia, by telephone, e-mail, and instant messaging, and are thus fully informed about day-to-day operations of their programs. Thus, the potential value of the Dean's presence in Yerevan (personal contact with faculty) must be weighed against the advantages of the Dean's presence in the U.S. (networking, faculty recruitment, promoting awareness of AUA).

Recommendation 3: "Finances—We recommend that the institution practice continued vigilance regarding its operating budget and fiscal performance, in the face of a multiplicity of major and complex capital projects. We further recommend that the institution reduce its dependence on fundraising to balance the operating budget."

The University's recently appointed Vice President for Development and Government Relations has outlined a series of initiatives aimed at decreasing AUA's dependence on fundraising to balance the operating budget. Those initiatives focus on increasing research cooperation with the University of California—leading to an increase in grant funds— targeting specific projects for fundraising efforts, and increasing AUA's endowments. Also, as of June 2006, AUA has purchased a subscription to the Illinois Researcher Information Service (IRIS) at the University of Illinois at Urbana-Champaign. The IRIS database contains over 8,600 active federal and private funding opportunities in the sciences, social sciences, arts, and humanities. In addition to funding opportunities for faculty, IRIS contains fellowship and scholarship information. In March 2006, the AUAC Board of Trustees accepted a $5 million grant for adult education and rural development ().

Recommendation 4: "Planning—We recommend that strategic planning be accompanied by an operational plan for implementation and that strategic and resource allocation be more closely aligned."

In 2006, AUA sought advice from UC budget planners in aligning its strategic and financial plans. The Director of Budget Administration and Financial Management in the UC Office of the President has provided direction and invaluable assistance in several meetings with AUA officials (President, Controller, Vice President for Development) and with AUAC staff. As a result, AUA's Strategic Plan for 2005-2010 now includes cost estimates and development goals that are both realistic and challenging. Also under consideration is a separate Development Plan—referenced to the Strategic Plan—that links the realities of a short-term operating budget with a medium and long-term perspective. The Development Plan will include a strategy for public relations and outreach, two areas that are critical to AUA's next phase of growth.

It is in the area of assessment that the WASC accreditation process has been most helpful to the University. The University-wide Assessment and Evaluation Plan is now in place, which includes the systematic review of programs, curricula, faculty, and student learning. All academic departments are currently completing assessment projects based on direct examination of student work (see Chapter Three, below). The Acting Vice President is providing leadership for all current assessment activities, e.g., program audits, conference-like papers, impact reports.

AUA Capacity and Preparatory Review Self Study

Recommendations related to Standard 1
From the beginning, it has been AUA's policy to introduce programs that address local needs. Thus, when first established, all AUA programs were unique in Armenia. Programs were started after consultation with the local higher education community, with business leaders, and, occasionally, with government officials. The Political Science program, for example, was initiated at the request of the President of the Republic of Armenia to train personnel for the Armenian diplomatic service. Recently, the University identified a need in Armenia for a national system of Life Long Learning (LLL) including continuing education, adult education and continuing professional development. Currently, access to existing training services is very limited. Distance learning technologies have not yet been applied to adult education. The significance of LLL as a tool for economic growth has been undermined or ignored, and there is no national strategy in this area. With the assistance of a $5 million gift, AUA is launching a Program for Adult Education and Rural Development. The goals of the program are:

- To develop a system of regional research and adult education that aims to lead and sustain economic growth.
- To develop economic opportunities, primarily in rural Armenia, for the largest number of families.
- To create an environment of entrepreneurship in rural Armenia.

The Acting Vice President, Dean of Extension, and President are developing a plan to align the Program for Adult Education and Rural Development with AUA's academic and research offerings.

At the same time, AUA is exploring options for increasing its Internet access to the highest degree possible. Broadband capacity was doubled during May 2006, and the purchase of more broadband is being weighed against the installation of a separate satellite connection.

The Community of Scholars at AUA has begun to coalesce. A series of monthly brown bag lunches was instituted in March 2006, at which a faculty member discusses his/her research with colleagues from other departments. AUA's research centers have collaborated on joint projects involving two centers, and the Academic Program Audits currently in process, which are being

carried out by teams of faculty from different disciplines, have fostered cross-disciplinary contacts at a higher professional level than ever before.

Three AUA research centers were represented at a recent conference of the International Association for the Promotion of Cooperation with Scientists from the New Independent States (INTAS). Currently, the Engineering Research Center is engaged in a project under an INTAS grant on "Seismic Risk Mitigation, for Schools and Hospitals, Exploiting Smart Materials and Intelligent Systems." The project, which will be completed in 2007, is being carried out in cooperation with the University of Pavia (Italy), Ethnikon Metsovion Polytechnion (Greece), Mechanical Engineering Research Institute (Russia), Institute of Mechanics (Armenia), Kyrgyzstan State University of Building, Architecture and Transport (Kyrgyzstan), Saint-Petersburg University (Russia), under the leadership of Prof. Melkumyan. Recently a new project proposal was submitted to INTAS by Prof. Melkumyan on the development of three dimensional seismic isolation devices in cooperation with Italian and UK partners.

The former AUA Faculty Council has now evolved into the Faculty Senate with a functioning Curriculum Committee, which has taken the lead in implementing the Program Audits currently in progress (see Chapter Three, below).

The University has developed a University-wide Assessment and Evaluation Plan (see Chapter Two, below) that will insure a continuous cycle of educational assessment and quality assurance. An Office of Institutional Research and Assessment (OIRA) was established in 2004 and is staffed with a highly competent and effective individual. In collaboration with the MIS working group, OIRA recently circulated AUA's first annual data report, the AUA Factbook.

Recommendations related to Standard 2
In 2005, the Faculty Senate adopted policies on the appointment, promotion, and evaluation of faculty. Those policies were subsequently ratified by the AUAC Board of Trustees.

The University is committed to increasing the proportion of faculty hired on a full-time basis and to offering support for scholarly and professional activities. Funds for faculty professional development will be included in the 2007 budget.

Recommendations related to Standard 3
The "Plan for Regional Recruitment of Students" is being revisited in light of the vacancy in the position of Registrar. The title of that position has been changed to Registrar/ Director of Student Affairs, and will include responsibility for enrollment planning.

Reference was made above to the Curriculum Committee's role in the program review process. The Committee reviews the Program Audit Reports and discusses them with the individual Deans.

Recommendations related to Standard 4
The academic departments have submitted reports explaining how they will use the data in the AUA Factbook. Almost all programs will refer to data related to alumni and to enrollment trends as they review and revise courses and curricula (see Chapter Two, below).

The University is restructuring the collection and analysis of data. The Office of Institutional Research now initiates the University-wide alumni survey and will initiate the new University-wide Exit Survey (see Chapter Two, below).

AUA's strategic planning effort is ongoing (see Chapter Four, below). Course and program goals are aligned with the University-wide goals. In early 2006, AUA sought the assistance of UC planning and budget staff to integrate its financial and strategic planning efforts (see response to C&PR Recommendation 4, above).

Background

All of AUA's programs have at some time sought to evaluate their effectiveness through various means, for example, biennial employer and alumni surveys that measure learning outcomes as perceived by employers and by alumni, respectively; external peer reviews such as that organized by the College of Health Sciences in 2003; and analyses such as that conducted by the Department of English Programs in 1998-2001 (see Chapter Three, below).

During the past three years, the University has acted to institutionalize assessment of educational effectiveness, utilizing direct as well as indirect evidence of student learning. The overarching goal of that process has been to insure that AUA's programs and activities are aligned with the institutional mission to "…prepare students to address the needs of Armenia and the surrounding region for sustainable development." Assessment activities were intensified in 2003 with the introduction of a four-phase plan of program review and revision. Phase 1 entailed a needs assessment, Phase 2 called for curricular revision based on Phase 1 findings. Phase 3 and Phase 4, respectively, involved implementation and assessment of the revised curricula (see Chapter Three, below). Perhaps the most significant outcome of this process was that learning outcomes/competencies have been defined for all AUA courses.

Current Assessment Systems

Currently, the University is in a transitional period between Phase 4 of the 2003 plan and the new University-wide Assessment and Evaluation Plan adopted in 2006. In order to minimize disruption during this transition, Phase 4 of the 2003 plan is being merged with Year 2 of the new Assessment and Evaluation Plan. The Program Audits currently in progress are the result of that merger. Future Program Reviews will differ from the current Program Audits in two ways: the Program Review committees will include an external peer reviewer, and academic units will be required to undertake a comprehensive self-study and to produce a report that is fully integrated with the academic review process. For the Program Audits, academic units have been asked to provide an update on their Phase 1 and Phase 2 reports and to address a number of specific questions (see Program Audit Guidelines). All of AUA's academic programs will be audited in 2006. Two programs were audited in the spring (English and Public Health); two will be audited during the summer (Political Science and Engineering) and two during the fall (MBA and Law). Audit reports have been submitted for the English and Public Health reviews by the Curriculum Committee of the Faculty Senate (see Chapter Three, below).

Assessment activities regarding AUA's educational effectiveness occur at several levels (student, course, faculty, program, institution), involve all constituencies (students, faculty, administration, trustees), and are based on various types of data, e.g., surveys, focus groups, reports, analysis of student work. A new faculty evaluation policy is being implemented during Spring Quarter 2006. Student learning is evaluated through use of both direct and indirect evidence, e.g., grades and performance in the capstone experience required by each program, in-depth analyses of student work conducted by faculty at the program level (see Chapter Three, below). Course evaluations by students are submitted to Deans and are a factor in the review of faculty and curriculum. A University-wide exit survey will be instituted in 2006 and will examine graduating students'

opinions about education at AUA for the purpose of program improvement. The survey will provide students' perceptions on such program characteristics as environment for learning, scholarly excellence, resource accessibility and overall program satisfaction. Currently, exit surveys are administrated by some of the academic programs. Data generated through departmental self-studies, program review reports, faculty evaluations, alumni surveys and impact studies (see Chapter Five, below) provide a basis for assessment of academic programs. Application, retention, and graduation rates, and employer satisfaction surveys provide data to measure progress at both the departmental and the institutional level. Some examples of curricular or other changes that have been made as a result of the data collection and analysis are: (1) development by the Department of English Programs of a special writing course for engineering students as a response to employers' wish for improved language skills of engineering graduates, (2) dropping and adding of courses in the political science curriculum based on feedback from student, alumni, and faculty focus groups for the self-study process, (3) introduction of experimental English classes for staff children to replace the CTEFL practicum in local schools.

In addition to collection of the data mentioned above, AUA conducts periodic student satisfaction surveys of administrative services, which have resulted in changes addressing student needs, e.g., extended working hours of the Cashier's Office, a special menu in the cafeteria and addition of vending machines.

The WASC Steering Committee, which included faculty, administrators, and staff, coordinated preparation for the Educational Effectiveness Review by dividing itself into four sub-groups, each focusing on one dimension of the University's educational effectiveness: learning assessment, data management, strategic planning, and impact on Armenia. Each of those sub-groups built on the work of previous AUA groups. The Learning Assessment sub-group continued and refined the work carried out under the program review and revision plan of 2003 by calling on each academic unit to prepare a conference-like paper that reflected an in-depth analysis of one of the program's learning objectives (see Chapter Three, below). Faculty were provided with guidelines for the conference-like paper along with information on resources available via the Internet. Each program took a slightly different approach to this task. The College of Engineering, for example, examined the effectiveness of the master's thesis requirement, while the Public Health and Political Science programs assessed student achievement of competencies by examining master's theses. The Law program made use of direct evidence to examine the value of case analysis and IRAC (Issue, Rule, Analysis, Conclusion) skills. The MBA program plans to utilize both direct and indirect evidence to assess the internship program. The English program conducted an error analysis of the IEP placement and exit essays of low proficiency English learners.

The Management Information System
The Management Information System (MIS) sub-group continued the work of the MIS working group created in April 2005. That group was charged with developing an internal management information system with research capability that supports the University's ongoing needs for data collection, analysis, and assessment. Building on the work of the MIS working group, the MIS sub-group developed a design for data reporting through the Management Information System and oversaw production of the first annual data report, the AUA Factbook, in February 2006,

which contains 2005 data related to students, faculty, alumni, research centers, libraries, staff, and the extension program. The plan is to update the data reports electronically three times a year, at the end of each academic term, and to publish an annual report.

The Factbook places a great deal of previously scattered information on one readily accessible site. It will become a resource for documentation in writing grant proposals, reporting on departmental achievements and course planning, and the data will be used as benchmarks to measure the attainment of the University's strategic goals. The immediate impact of the MIS is evident in two ways: first, academic units drew on the Factbook while completing their impact studies and updates to their self-study reports, and second, academic units prepared reports detailing various uses for the data in the Factbook. For example, use of

- Alumni statistics to better track graduate career paths, gauge the effectiveness of the curriculum, improve continuing education offerings, and determine the Department's impact, not only in Yerevan but also in the regions.

- Profiles of academic programs to compare how a program compares to other programs in areas such as admissions, graduation, and attrition rates.

- College/Department/School Profile and Student-Faculty Ratios to make projections about class sizes and faculty needs.

- Statistics on Institute of Origin of Admitted Students to guide and correct recruitment efforts and help identify potential new pools of applicants as well as institutions and regions to which more attention should be directed.

- Student Academic Performance statistics to assure that grading and assessment practices are in line with the other programs at the University.

- Student Support Statistics to assess the financial needs of AUA students and estimate department revenue-generation.

- Grade statistics to discuss trends and grading policy.

- Statistics on International applicants to develop targeting and advertising efforts.

Strategic Planning
The strategic planning sub-group included the AUA President, AUA Vice-President for Development, AUA Controller, AUAC Operations Manager, and two members of the WASC Steering Committee. The sub-group's task was to align the University's strategic plan with a financial plan. Drawing on the advice of UC budget and planning officials, the sub-group is updating the University's strategic plan by incorporating cost estimates and development goals (see Chapter Four, below).

Impact on Armenia
The Impact on Armenia sub-group built on discussions begun in 2003 concerning the various ways in which AUA has brought change to Armenia. The sub-group coordinated preparation of a

report by each academic unit concerning the impact of that unit's curricula and research center activities on Armenia, as well as a list of innovations introduced by the various academic and administrative units (see Chapter Five, below).

The University-wide Assessment and Evaluation Plan
Having spearheaded the production of various reports and studies, as noted above, the Steering Committee turned its attention to the incorporation of previous and current assessment activities into an overall University-wide Assessment and Evaluation Plan for ongoing data collection and analysis at all levels of the institution (see Appendix A). The Plan defines assessment activities at the institutional and departmental levels, specifies the person(s) responsible for each activity, questions to be addressed and types of supporting evidence to be provided, frequency, and person or groups responsible for carrying out the assessment activity and for implementing recommended changes. Academic programs, for example, are now expected to periodically assess themselves and to undergo review by panels including both internal and external reviewers (see Chapter Three, below).

Impact of the Educational Effectiveness Review Process
The process of preparing for the Educational Effectiveness Review has impacted the AUA community in a number of significant ways, among them:
- Deep engagement of AUA faculty in utilizing direct evidence of student learning;
- Enhancement of a culture of evidence in the University;
- Increase in cross-discipline communication resulting from the various tasks assigned in connection with the EE self-study.

Background

As noted in Chapter Two, the University adopted a four-phase plan of Program Review and revision in 2003. Phase 1 entailed a needs assessment, Phase 2 called for curricular revision based on Phase 1 findings. Phases 3 and 4, respectively, involved implementation and assessment of the revised curricula.

For Phase 1, academic units performed a detailed needs assessment in which they analyzed regional needs and markets, stakeholders, and professional standards. They then defined an educational approach that would integrate their findings with the institutional mission. In doing so, each program developed an educational paradigm, reviewed and redefined curriculum outcomes, admission requirements, and competencies, giving particular attention to outcomes assessment. Most AUA programs utilized a capstone experience, e.g., a thesis or project, as part of the assessment of whether students have acquired the expected competencies. Finally, each program produced a set of recommendations for implementing its defined educational approach.

For Phase 2, academic programs reviewed their mission statement, curriculum, objectives and competencies, and learning outcomes with the assistance of faculty, first and second year students, alumni, and community and professional stakeholders. It is important that this was a participatory process where all stakeholders were heard. No one constituency dominated the process. Ultimately, it was the responsibility of the faculty to ensure that the program curriculum met the high standards of AUA and of the profession that it represented, as well as the needs of the region.

Building on its prior needs assessment, each academic program prepared a curriculum development plan, which detailed
- an educational, curricular, and assessment approach, including a conceptual framework for curriculum development, and processes for assessing curricula, students, programs, courses, and faculty;
- a conceptual outline for relating competencies and outcomes to learning experiences and assessment methods;
- learning experiences and course objectives, content, outcomes, and assessment processes;
- program description, admission requirements, and course descriptions;
- academic planning information, including qualifications of faculty for each course, resources needed for each course, expected enrollment and frequency of each course, hiring needs for faculty positions, and a plan for faculty orientation.

One significant outcome of the Phase 1 and Phase 2 process was that the competencies expected of an AUA graduate from a particular professional program have been translated into learning outcomes (courses or other modalities). The MBA program, for example, first defined the following departmental objectives.
1. Develop an in-depth understanding of the functional fields of business and their interrelationships in complex organizations.

2. Encourage the ability to think critically and creatively within a global business context.
3. Create a heightened sense of ethical considerations in decision-making within the business world.
4. Provide a supportive environment for the advanced study of management practice, techniques and theory in Armenia and the region.
5. Empower graduates to be effective in the workplace and to exert significant and beneficial influence on future management practices in Armenia and the region.

The program then categorized each course according to whether it entailed Information, Practice or Reinforcement with regard to each objective. Adjustments were made to the program to insure that each course included at least one departmental objective, and that all departmental objectives were addressed (see MBA Assessment Report 2005, Exhibit V).

The revised curricula were implemented in 2005, and, as noted earlier, AUA is currently in Phase 4: assessment of educational effectiveness, which is being conducted through audits of the academic programs. As noted in Chapter Two, Phase 4 is being merged with Year 2 of the new University-wide Assessment and Evaluation Plan.

The New System
In order to institutionalize educational effectiveness, the University incorporated the Phase 1-4 activities implemented and tested in 2003-2006 into an overall University-wide Assessment and Evaluation Plan (see Appendix A), which was reviewed by the Board of Trustees at its March 2006 meeting. The Academic Program Assessment Plan is being implemented in 2006, beginning with Year 2 (see Chapter Two, above).

The Academic Program Assessment Plan is driven by data collected through the University's Management Information System or generated by academic and administrative units (e.g., reports). Analysis of data and follow-up is coordinated through the Office of Institutional Research and Assessment (OIRA), under the leadership of Dr. Lucig Danielian, and administrative departments are responsible for analyzing data pertaining to their area and implementing needed changes. Periodic Program Reviews insure that programs continue to be aligned with the University's mission.

Under the AUA Plan, academic programs are reviewed once within a three-year cycle. Year 1 entails a self-study by the academic program following Program Review Guidelines. Departments also prepare studies employing direct evidence of student work and a report on enrollment trends (see Admissions Audit, below). In Year 2, programs undergo a Program Review by a review panel of the Faculty Senate's Curriculum Committee that includes at least one external peer reviewer, to insure that the academic programs are meeting the mission of the University and to determine how recommendations in the previous Program Review are being implemented. The review panel's report is submitted to the Curriculum Committee, which discusses the report with the Dean, and then forwards it, along with any additional comments, to the Faculty Senate, the Provost, who forwards the report to the President. Year 2 activities also include a University-wide Admissions Audit carried out by the University-wide Admissions Committee, which consists of a representative from each academic program and the Director of Admissions. The Committee analyzes admission, retention, and graduation rates, grade

distribution data, enrollment data, as well as academic preparation and geographical makeup of the entire student body to insure that the University is progressing toward its goal of preparing students to address the needs of Armenia and the region for sustainable development. The Committee's report is submitted to Deans, the Faculty Senate, and the Provost, who forwards the report to the President (see Draft Guidelines for Admissions Audit). Year 3 is devoted to a University-wide review of the academic programs, based on the self-studies, the reports of the Program Review committees, and the Admissions Audit report. The Year 3 review is conducted by the Faculty Senate, which forwards its recommendations to the Deans and Provost. The Provost forwards the report to the President, who shares it with the Board of Trustees.

The Internal Component of Educational Effectiveness
It follows from the University's mission that assessment of educational effectiveness at AUA has both an internal and an external component. The internal component focuses on academic program and student learning and makes use of the following types of evidence.

Self-studies (Year 1) are prepared by each department with the participation of external stakeholders and examine the quality of programs relative to departmental goals, to the University's mission, and to the program's currency in the related discipline (see Program Audit Guidelines). The self-study is based on analysis of
  - course evaluations, which offer students an opportunity to participate in assessment of their learning;
  - faculty evaluations which examine the degree to which a faculty member's teaching and scholarship contribute to achievement of the University's mission;
  - direct evidence of student work demonstrating mastery of competencies;
  - indirect evidence resulting from University-wide surveys and trend data collected by the University on a wide variety of variables;
  - indirect evidence collected by the academic programs through focus group discussions and in-depth interviews with students, graduates, and other stakeholders.

Admissions Audit (Year 2) is conducted by the Admissions Committee (see above). The Audit will occur in 2006, and the Committee's report will be submitted to Deans, Faculty Senate, Provost, and President.

Program Reviews (Year 2) are overseen by the Curriculum Committee, which appoints an *ad hoc* Program Review team, including an external peer reviewer. The Program Review committees examine how programs are achieving the recommendations and goals set in their self-studies, how competencies, goals, and learning objectives are reflected in courses, and what systems are in place for continuous assessment of student learning. The reviews also ensure that the goals of the academic program are aligned with the University's mission. The Program Review committee submits its report to the Curriculum Committee, which discusses the report and recommendations with the Dean and the Provost. The academic programs submit the review reports to the Provost, along with a plan for implementing recommendations in those reports. The Provost shares those reports with the President.

As noted earlier, two academic units, the Department of English Programs (DEP) and the College of Health Sciences (CHS), participated in Program Audits in Spring 2006. The audit

committee reports have been submitted by the Curriculum Committee to the Faculty Senate, the President, and the Office for Institutional Research and Assessment.

The next round of all Program Reviews and Admissions Audit is scheduled for 2008. In the meantime, all academic programs are being asked to submit to the Office for Institutional Research plans for assessment of student learning for the remainder of 2006 and 2007. The plans include timelines and how the data will be used to improve student learning.

The audit of the Public Health program was conducted by a team consisting of three members of the Curriculum Committee from Political Science, Engineering, and English programs, respectively; the English program was audited by a team consisting of three members of the Curriculum Committee from Law, Business, and Public Health, respectively. Each audit team reviewed documentation submitted by the program being audited, which included a self-study report that updated information in the Phase 1 and Phase 2 reports. The teams met with faculty of the programs, current students, and the respective Associate Deans. The audit teams performed their task with precision and thoroughness, as evidenced by the following excerpts from the two reports.

> **MPH Audit Report:** *The MPH program has annual workshops to review the curriculum and to ensure the courses offered satisfy the needs of the students and the community. Curriculum review is thus seen as an ongoing process and there are a number of instances of curriculum enhancement reported in the documentation, including the development of an on-line IRB program. Curriculum enhancement appears to take into account not only the professional experience of the teaching faculty, but also students, graduates and alumni who regularly participate in program assessment and evaluation.*
>
> ➢ *The thesis, which remains the primary process of assessing student learning, allows students to demonstrate their ability for independent research. This capstone experience has been modified and improved in the last 2-3 years and a number of the issues relating to the thesis in earlier documentation have been effectively addressed. The role of the primary and secondary supervisors has been clarified; students are now able to seek the advice of CHCR researchers; the timeline for drawing up the thesis proposal has been adjusted; the evaluation forms for the thesis project have been simplified and the thesis project has been more clearly structured. The faculty is working on developing guidelines for advisors and students.*
>
> ➢ *The staff-student relationship is commendable and facilitative of learning. The MPH program is exploring new technologies to further improve mentoring of students during the thesis writing process. Generally, student satisfaction level is high. The Student Information manual is an excellent example of how important information is disseminated to students in a timely manner.*
>
> ➢ *The College of Health Sciences fosters professional development among its faculty, providing opportunities for junior faculty to study abroad and for its graduates to teach on the program. The faculty is active in promoting conferences and seminars in Yerevan, encouraging the exchange of ideas among health professionals. The close synergy*

between the MPH program and the CHSR ensures that students benefit from the expertise of the research staff and also that they are provided opportunities to participate in collaborative research projects. The research conducted at AUA in the area of PH is being disseminated through publications in local, regional and international journals.

DEP Audit Report: *The Department of English Programs (DEP) impacts the entire AUA community, and the DEP's mission is aligned well with the mission of the University. English language proficiency is a key component of the human capital Armenia will need for successful integration into global, political, and economic structures. DEP is the most advanced center for English language teaching methodology, materials, and training in Armenia. Through the Intensive English Program (IEP), the DEP plays an important role in socialization of students to American-style education. DEP has effectively integrated stakeholder needs and learning outcome assessment into its on-going activities.*

It was evident from the audit process that the DEP is committed to the practice and spirit of self-assessment. The DEP has demonstrated that it acts on self-identified needs and recommendations. The process of quality improvement in the DEP is creating programs that are well structured and well received by students. Surveys of students completing the IEP suggest they are confident in the skills they are acquiring. The DEP has a committed cadre of core teaching faculty. The Center for Research and Development in Applied Linguistics and Language Teaching shows great promise, and the University (and possibly the region) will benefit greatly from the eventual implementation of an enhanced exit exam for evaluating proficiency in English language skills.

The Review Team noted many promising enhancements undertaken by the DEP in the recent past. For instance, the introduction of student portfolios in the graduation requirement for CTEFL students is particularly appropriate for the professional development of teachers, which is a primary career path for DEP graduates. Students and faculty report significant career advancement for graduates of the program, which exposes students to a wide range of methods not generally used in Armenia and equipping them to disseminate these methods in Armenia.

A new development for AUA, a "free-standing" IEP has recently been initiated. The new program warrants close monitoring to answer such questions as: Would there be adequate faculty to provide instruction? Would total student numbers increase? Would there be a cash profit from this or would there be a need for budgetary support?

Another challenge the DEP is addressing is a transition in local leadership. The outgoing Associate Dean is to depart in June, and the incoming Associate Dean will be in place in August. Suitable arrangements will be made to handle the transition during the summer.

In summary, the DEP is on a good path. The DEP's self-assessment processes are designed for continuous review and improvement and adequately address the current needs of the DEP and AUA....

Other recommendations for the DEP would be to:
1. *Monitor and review the "free-standing" IEP.*
2. *Monitor and review the impact of the Writing Support Center.*
3. *Monitor and review the impact of the Advisory Board.*
4. *Review effectiveness of Portfolios for direct assessment.*
5. *Review indirect assessment mechanisms for effectiveness.*
6. *Review enrollment on regular basis.*
7. *Assess balance between 'native' and 'non-native' English speaking faculty.*
8. *If the DEP has not already done so, include a mention of the Portfolio requirement in the next AUA catalog.*

University-wide Review of the self-studies, Program Review reports, and Admissions Audit by the Faculty Senate, the Provost and the President, who conveys the results of the University Review to the Board of Trustees (BOT) (Year 3). This is a "state of the university" exercise that assesses the progress of the academic programs. It assists in determining the overall direction of the University and any needed changes in programs. It also assists the BOT to determine the amounts and kinds of financial support needed so that it can plan its development strategies accordingly. The Review will also inform the University's strategic planning efforts, and may lead to revision of the Strategic Plan. The next University-wide Review will occur in 2007.

The External Component of Educational Effectiveness

The external component of educational effectiveness focuses on the impact of AUA and its graduates on Armenia and the region. Evidence demonstrating AUA's impact outside the institution is gathered continually through employer and alumni surveys, annual reports of academic departments and their related research centers, and periodic analyses by academic departments. Several examples of curricular revisions based on employer or alumni surveys are noted here.

1) The College of Engineering reported revision of the CIS curriculum as follows: "…The second motivation for changing the program resulted from discussions with IT industry leaders in Armenia. In addition to the traditional software development areas, there is a strong presence of the chip design and testing technology. For example, Virage Logic and Synopsys, both major IT companies in Armenia, are both leaders in this area. The upper level management of these local firms expressed a keen interest in the CIS program to participate in the education of students in software areas that would be useful for their industries. Through extensive discussions among faculty as well as our advisory board members, the following revisions in the program were implemented.

…The program was revised to include the following requirements (total of 18 courses):
- Seven core courses – CIS 200, 210, 215 221, 260, 269 and 280
- Six elective courses – any combination of 200-level courses is allowed, other than core courses
- Two culminating experience courses – CIS 299 is repeated once
- Three approved minor courses in IESM or BM

As can be seen, the revision involved replacing the core Computer Architecture course (CIS 220) with Logic Design (CIS 221) as a core course. Furthermore, a set of chip-design oriented elective courses, namely CIS 222, 223, 224, 225 and 226, were added to the curriculum and the courses CIS 232, 261, 270, 240 and 245 from the old program were dropped. Note that the revision did not affect the number of units required for graduation.

The Dean and program Director initiated the revision process during discussions, when reflecting upon the program status. Subsequently, the local faculty and CIS advisory board members, particularly Drs. Yervant Zoryan and Razmik Abnous and Mr. Hovhannes Avoyan, were consulted on the proposed changes. In addition to informal discussions, the proposed revisions were discussed at program meetings. In parallel with these discussions representatives from the local IT industry expressed an interest in enlarging the scope of changes to include courses directed at chip-design. After numerous discussions with the aforementioned stakeholders, a vote was held amongst the faculty and the revised program was adopted in October 2005" (see CE 2006 update to the Self Study).

2) In Spring of 2006, the Law program "undertook a series of stakeholder meetings and surveys to assess current concerns…
       AUA Student Survey (2006)
       AUA Law Alumni Survey (2006),
       AUA Law Alumni M.C.L.S. Focus Group (2006)
       AUA Law Alumni LL.M. Focus Group (2006)
       Faculty Meeting Review of Key Findings for Self-Study (2006).

The clear and consistent message from all of these studies and reports is that Armenian society, students and the market have a demand for attorneys with more practical skills. In the ABA CEELI Employer Survey respondents underscored the need for practical legal skills and relevant legal knowledge and urged that legal education use interactive methods designed to develop problem-solving and legal thinking." The result of the above surveys and focus groups was significant revision of the curriculum (see below) (see also Law Department 2006 update to Self Study).

Chapter Five of this report describes the impact of AUA programs and AUA graduates on Armenia. Examples include enhancing the quality of ESL instruction in Armenia through the CTEFL and MATEFL programs, and development and application of the seismic base isolation technology. Chapter Five also describes innovations introduced by AUA. Examples include a no smoking policy in AUA buildings, a heating/cooling system powered by solar energy, a student loan program, new technologies and standards used in construction of the AUA Center and the Paramaz Avedisian Building, e.g., the post tension system for concrete, making it the first building in the Republic of Armenia constructed by this method.

Studies utilizing indirect evidence
As noted in Chapter Two, AUA's assessment activities make use of both indirect and direct evidence. Examples of studies utilizing indirect evidence that resulted in curricular changes are presented below as case studies.

Case Study #1
Between 1998 and 2001, the Department of English Programs (DEP) conducted a three-year, longitudinal needs analysis. Faculty and students in their first and second year of degree study were surveyed through a questionnaire. Two key components of the survey focused on students' writing experience prior to enrolling at AUA; secondly, the survey asked about the types of writing activities that were required in the first and second year degree programs after the students had completed the Intensive English Program (IEP). As a result of those data, IEP revised its syllabus to include writing types that were identified in the aforementioned tables. Secondly, the emphasis shown for "research papers" caused IEP to include this component as an integral part of its syllabus.

Further, the data gathered included rankings for "speaking activities" in the degree classes. Those data caused IEP to include a new speaking component concentrating on the identified speaking activities. The new Writing/Speaking course was extended from four to five hours. Thus, the Department of English Programs has established a continuing method for aligning its instruction toward degree requirements that can conceivably change over time. Degree programs may offer new courses, teaching methods and requirements. This regularized review should assist in making the necessary adjustments while addressing its own learning objectives as well as those of the degree programs.

Case Study #2
The Department of Law conducted interviews with 11 LL.M. graduates from the 1998-2004 classes and 7 MCLS graduates from each graduating class. Analysis of the above data led the Department to conclude in early Spring 2005 that its learning outcomes were jeopardized by the task of educating lawyers in the LL.M. program and non-lawyers in the MCLS program. While LL.M. graduates were obtaining important legal positions in Armenia, the inflow of lawyers to the program was declining. In order to align its stated outcomes "…to practice law as private or public attorneys; to emphasize practice-oriented studies, in particular in the area of business law; to provide students with competency in the actual practice of law…" it became necessary to modify the curriculum. Since lawyers and non-lawyers were co-students in the same courses, it was viewed as unproductive to try and accommodate both types of students in the same courses.

Consequently, with full faculty participation certain courses were eliminated, such as Accounting, which was viewed as less applicable for lawyers, thus freeing additional time for courses with high legal content. Thus, the goal of the Department became to attract and educate lawyers at the ratio of 2:1 to non-lawyers. Initial efforts to remedy this ratio have reversed the declining number of LL.M. students.

This alignment with desired learning outcomes/competencies was a major transformation for the Department. It was accomplished by a consensus of faculty and administration, thus energizing a change that was not limited to a top-down strategy. Potential LL.M. students responded positively. Further analysis of need-based factors led to consideration of courses changes and additions that seemed particularly relevant for lawyers in Armenia soon to be experiencing additional challenges from globalization and inward flows of investment. Such courses as International Investment Law, International Trade Law and the WTO, EU Law, Competition Law, Intellectual Property Protection, Transnational Litigation and Sustainable Development

Law and Good Governance have entered the discussions and deliberations as potentially valuable course offerings.

Case Study #3
During the 2005 academic year, the College of Engineering (CE) faculty took upon themselves a revamping of the Computer & Information Science (CIS) program in order to make it better aligned with the needs and career opportunities in the IT industry in Armenia. Extensive discussions were held with the faculty, members of the CIS Advisory Board, and selected members of the IT industry in Armenia, as well as selected executives of American IT companies with subsidiaries in Armenia (see minutes of CE faculty meetings). As a result, a number of courses were consolidated and other courses were added to provide a hardware-oriented option in the program. The College's faculty believe the revised program better matches the needs of the IT industry in Armenia, which is now developing strengths in electronic design automation as well as a traditional software orientation. The revised program was approved by the CIS faculty in Fall 2005 and became effective for the cohort starting in 2006.

Studies utilizing direct evidence
The WASC C&PR Visiting Team challenged the University to engage in assessment of educational effectiveness based on direct evidence of student learning. The WASC Steering Committee asked each academic unit to prepare an in-depth analysis of learning objectives or competencies, using direct evidence of student learning. The faculty approached this task with varied reactions ranging from misgivings to enthusiasm; by the end of the process, however, there was widespread agreement that the exercise produced useful results, and a commitment to continue this type of analysis.

As noted above, each of AUA's academic programs has been engaged in preparation of an in-depth analysis of learning outcomes based on direct evidence of student learning. Abstracts of those analyses by each program are presented here as case studies, with links to the reports themselves.

Case Study #4
The College of Engineering offers two master's-level degree programs, one in Industrial Engineering and Systems Management (IESM) and one in Computer and Information Science (CIS). Both programs require a Master's thesis or project conducted over a period of no less than two quarters. The student works under the direction of a faculty supervisor and the completed thesis must be approved by the supervisor and one other faculty member serving as the referee. The College has developed detailed guidelines for the students and faculty in selecting the thesis topic, conducting the research, and preparing the thesis report, see http://www.aua.am/aua/masters/ce/site2/policies.htm.

The College faculty decided to conduct this year a study on the effectiveness of the Master's thesis requirement in the two programs. The study involved: (a) review and identification of the stated objectives for the Master's thesis requirement in each program; (b) identification of a set of attributes of the Master's thesis, which are consistent with the stated objectives and develop a numerical scoring system for each attribute; (c) random selection and evaluation of theses by the faculty; (d) statistical analysis of scoring data for each thesis attribute against various student performance measures; (e) identification of areas of strength and weaknesses; (f) determination

of programs and procedures that the College faculty and administration can employ to address the weaknesses and build on the strengths of the theses work done by the students. The College intends to repeat the study a year from now to evaluate the progress made and to determine additional measures that can be taken to make this program requirement a more effective educational experience for the students.

The attributes adopted for evaluation of the thesis are stated in terms of six questions:
  (1) How well does the thesis integrate and synthesize knowledge learned from several courses in the program of study?
  (2) What is the technical/conceptual depth of the work done?
  (3) What is the novelty of the work done?
  (4) What is the significance of the problem solved and its relevance to Armenia?
  (5) How well is the thesis communicated, both in English composition and in format and style?
  (6) How well does the thesis reflect awareness of the state of the art and cite previous work?

The study revealed that while the best of the theses were satisfactory or good with respect to all attributes, the overall average theses scores indicated weaknesses in attributes 1 (synthesis), 2 (technical/conceptual depth), and 3 (novelty). Furthermore, attribute 6 (citation) was found to be barely satisfactory. Studies of correlation between theses scores and various measures of students performance, e.g., GPA, GRE/TOEFL scores, revealed mixed results.

The study led to 12 resolutions regarding actions that the College faculty and administration will take in order to improve the quality of theses in the College of Engineering. These were approved in a meeting of the faculty on April 13, 2006. The faculty also resolved to repeat the study a year from now.

Case Study #5
This study is one of the tasks the School of Political Science and International Affairs (PSIA) at the American University of Armenia (AUA) has undertaken during the past three years to improve student learning. The School completed a self-study of its educational program in 2004 that included a variety of indirect measures to assess how well students are learning. One recommendation that resulted from the formal self-study was to develop specific objectives for the capstone experience. The PSIA conference-like paper was an effort to fulfill that recommendation and to assess its effects on student learning through the direct examination of student work.

The goal of the capstone is to provide students with the opportunity to reflect on learning through their course work and to present a comprehensive study on a particular topic or policy area. A Faculty Advisor selected by the student supervises Master's Essays. The Master's Essay is a 50-page paper based on substantive original research and analysis related to a specific policy area.

In 2005, the PSIA faculty came to agreement on a set of 24 objectives for the Essays. These objectives are divided into content and format categories. A rubric was created that permits faculty to assess how well the student has achieved the objectives. The objectives and rubric were distributed to all second year students during the Fall Quarter and faculty filled them out for the first time as part of their regular assessment of the Essays and Papers. PSIA faculty conducted a study comparing Essays from 2004, before the rubric was implemented, with Essays

in 2005 after the rubric was in place. PSIA faculty who had not served as faculty advisors for Essays were asked to evaluate selected Essays using the rubric.

The objectives and rubric were related to clearer statements of purpose and policy recommendations and somewhat better literature reviews, conclusions, and discussions of limitations on the research but not to better command of the literature, original contributions to research, methodology, discussion of findings, and the level of sophistication of analysis. There were no changes between the years in clearness of writing, significance of work, or developing research questions and hypotheses that demonstrate an advanced understanding of the field. Results were higher for 11 of the 15 objectives for students with higher GPAs. Overall, the study found that students need to do better on policy recommendations and that they are already doing well on clear writing, literature reviews, and significance of work.

The data showed that students who are not at the top of the class, as determined by GPA, should be given extra assistance and attention in such assignments as terms papers. Several improvements have been made in preparation for the capstone, including a new student orientation and handbook on the objectives of the curriculum. For the 2006 capstone, students are being provided more time in the Summer Quarter to work on their project and faculty will meet with students to discuss the objectives and rubric. PSIA faculty will meet formally in June to discuss the capstone objectives and to come to agreement on how rubric scoring is best used and will develop specific recommendations to improve the curriculum and teaching methods in courses in order to improve student learning through the capstone.

Case Study #6
The study by the Department of English Programs is the first phase of a larger study designed to identify errors in the written English placement and exit essays of English language learners in the Intensive English Program (IEP) at the American University of Armenia (AUA). For this first study, 17 essays representing students with scores around 500 and below on the I-TOEFL (Institutional Test of English as a Foreign Language) were analyzed. These essays are writing samples from the weakest learners in the IEP.

Hundreds of errors in English grammar, lexicon, punctuation, and spelling were identified and categorized in an error inventory. The research was carried out following procedures of error analysis commonly practiced in applied linguistics. Based on the analysis, recommendations are made in this study for objectives to be covered in the four-week remedial English course which is offered to the IEP students with the lowest I-TOEFL and which precedes the 22-week regular IEP course designed for students with I-TOEFL scores of 500 and higher.

Case Study #7
In general, attorneys in Armenia have been assessed by legal employers as needing greater legal problem solving and critical thinking skills. From the beginning, AUA Law has incorporated such skills teaching into its method of instruction, but starting in 2004, it began to focus its instruction on two specific legal problem solving skills which are believed to be the most essential to proficient lawyering: case analysis and IRAC (Issue, Rule, Analysis, Conclusion) legal writing.

A direct evidence study of the exams from two separate groups of students shows that there are three components that in unique combination help explain the success of students in the law program: undergraduate legal background, high level of English language skills, and the ability to internalize the case analysis and IRAC skills taught in the first quarter of study. When a student is weak in one or both of the first two factors, the student's ability to learn and employ the case analysis and IRAC skills allows them to succeed in the program despite any other deficiency. This conclusion has implications for the department in terms of screening applicants to the program, and has convinced the department to reinforce these important skills throughout its curriculum.

Most importantly, success in the AUA Law program should translate into success in the job market. If the evidence shows that providing students with these analytical skills in the first quarter is a factor in their success in the program, it should also become a factor in their success in the job market. However, time and further evidence will be needed to assess this latest hypothesis.

Case Study #8
The MPH Program in the College of Health Sciences undertook an evaluation of direct evidence of student learning, using the MPH Thesis Projects as a subject of inquiry. They focused their evaluation on 3 areas: "Rigor" of student projects, as indicated by the "framework" or rubric that students chose for their Thesis Projects; "Quality" of student work, as determined by a blinded re-review of a sample of student Thesis Projects from 1999 and 2005; and "Impact" of both the MPH Thesis Project and the MPH Program in general, as evidenced by responses from an e-mail survey of MPH graduates.

Their main findings are:

1) Clear majorities of MPH students have chosen (and continue to choose) challenging and rigorous frameworks for their MPH Thesis Projects, with the most popular of these frameworks being the "Professional Publication" (Manuscript) framework – a framework that requires actual data collection and analysis;

2) Preliminary evidence suggests that the quality of student work – as exhibited in an objective review of MPH Thesis Projects – has improved over time; and

3) There is general consensus among graduates that the MPH Thesis Project is a worthwhile and valuable experience, with some students actually taking steps after graduation to further the work they began with their MPH Thesis Project.

The MPH Thesis Project is an important indicator of the quality of student work and of the quality of the MPH Program itself. The faculty and administration of the MPH Program will continue to use the information gleaned from the evaluation and review of MPH Thesis Projects to assure the quality of the MPH Program. Based on the present study, one area the MPH Faculty and Administration might want to explore further is the MPH Program's ability to deliver the very high levels of quantitative skills and competencies that MPH Students appear to demand.

In the future, the MPH Program might consider a system for regular, blinded reviews by objective and independent reviewers – possibly from the U.S. or Europe. These reviews could initially be used for internal evaluation and could be administered in such a way as to not impact individual student grades or graduation from the MPH Program. [link to study]

Case Study #9
The MBA program has developed a plan for its conference-like paper; the paper itself will be completed during Summer 2006. The program is utilizing a two-pronged strategy for in-depth assessment of the internship program, using both direct and indirect evidence. The reason for including indirect evidence is that it provides support and understanding of the macro-level impact; nevertheless, direct evidence constitutes the bulk of the effort.

Direct Evidence:
- The faculty will meet, discuss and finalize a list of skills and competencies that should be demonstrated during each internship. The list will align with the overall mission of the MBA program.
- A sample of internship reports completed in 2005 will be selected, and each report will be analyzed within the context of the skills and competencies identified earlier.
- A sample of internship reports completed in 2006 will be selected, and each report will be analyzed within the context of the skills and competencies identified earlier.
- Each student whose internship is being assessed will be invited to give a presentation to the faculty. Faculty will discuss each presentation in the context of the skills and competencies identified earlier and record their opinion.
- Faculty will summarize the results of the above assessment process and provide an action plan for improvement of educational effectiveness.

Indirect Evidence:
- The department will conduct a survey of students who have recently completed their internship.
- The department will solicit opinions about the internship program from hiring organizations.
- The department will analyze the findings.
- The faculty will discuss the findings and reach consensus on next steps.

The above initiative may lead to changes in the first-year curriculum of the MBA program as well as to steps that enhance the quality of the internship program.

Background

The American University of Armenia has incorporated planning and strategic thinking as an integral component of its institutional processes since its founding. In fact, the successful establishment of the University itself was based on the strategic thinking and planning of its founders. The University prides itself as having been founded along with the independence of Armenia in 1991; however the planning required to realize the establishment of the University evolved over two years.

When the three California academics who came together to create the American University of Armenia began their groundwork in 1989, the plan called for the establishment of the first American university in the USSR. That was the exciting plan brought to the Armenian government, the University of California, and the Armenian General Benevolent Union. During that period, the Armenian government was in the process of being taken over by the leaders of a democracy movement that began in 1988, but Armenia remained one of the fifteen republics constituting the Soviet Union until 1991.

The minutes of The Regents of the University of California on July 18, 1991 read as follows:
> "The Office of the President, in consultation with the General Counsel, is authorized to negotiate an affiliation agreement with the American University of Armenia Corporation pertaining to start-up technical assistance that the University would be prepared to provide in connection with the American University of Armenia, which the AUAC and the Ministry of Higher Education and Science are establishing in Republic of Armenia, USSR."

The break-up of the Soviet Union came unexpectedly, and the University's need for flexible planning that could survive early political changes was a requirement from the start. That has remained one of the main strategies of the University. Armenians and their government prided themselves on their educational institutions. Literacy rates were the highest in the Soviet Union, and Armenia had a highly developed system of universities and research institutes that produced scientists respected throughout the Soviet Union. Nevertheless, the limitations of a system controlled by one political party in a totalitarian political regime were clear and the idea of an American university was welcomed by the Armenian government.

A Complementary Approach

AUA's founders understood early on that in order for AUA to be welcomed into the higher education system, respect for Armenian institutions of higher learning was important and that it was imperative for AUA not to be seen as a threat. At the same time, the Armenian government was in the midst of drafting legislation that would make Armenian the official language and require that Armenian be taught as the first language in schools. Very early on it was decided that AUA would be a graduate institution that offered American-style Masters' degrees, a degree not then offered in Armenia, and that the academic programs, all offered only in the English language, would be those not already available in Armenian institutions. In addition, AUA's strategy included seeking opportunities for cooperation with other Armenian institutions of

higher learning, and the University included the rectors of the top Armenian universities in its Board meetings.

AUA's strategy was one of complementing local higher education by offering degrees not available elsewhere in Armenia or the region. This strategy allowed for an important by-product of the founding of the University in creating a model for the participation of the Armenian Diaspora in the development of Armenia. AUA remains today one of the best examples of Diaspora cooperation in Armenia.

This complementary approach met the University's mission and was the guiding principle for the establishment of all AUA academic programs, the last of which was the Computer and Information Science Program established in 2001. Service to the development of Armenia has been the main goal of AUA research activities.

Strategic Thinking Today
Armenia continues to change and the pace of that change is increasing. Annual economic growth rates are among the highest in the former Soviet Union, sectors for economic development have been targeted by the Armenian government with growth strategies in place, communication and travel barriers are disappearing, and a new generation of Armenians is tired of business as usual and demanding even more rapid and broader change.

More importantly, higher education in Armenia is evolving at a quicker pace than in the past. The Armenian government has adopted the American system of degrees with many state university departments now offering Bachelor, Master's, and Doctoral degrees. More recently, the Armenian government has signed on to the European Union's Bologna Process, and it is in the process of reforming university education so that it meets the requirements of the European Credit Transfer System. Degrees once offered only at AUA are now available in Armenian universities and in universities in the region. In addition, AUA is no longer the only university in Armenia with a foreign affiliation.

AUA's strategic thinking has evolved along with Armenia. In order to meet the University's mission, the emphasis for strategic planning has shifted from being primarily complementary to one that focuses on competition and excellence. That shift includes AUA planning that broadens the University's mission to include the region. A regional focus will assist in Armenia's development by providing new bridges, like those that AUA has built with the Diaspora. The challenge for the University is no longer only to develop academic programs that can serve Armenia and the immediate region. The challenge now is to produce excellence in academic programs that will bring the best and brightest students from the region and the Diaspora to Armenia to study alongside Armenians.

In recognition of these challenges, the University has in place a new process for the development and implementation of strategic plans. This new process integrates a variety of planning processes at the University and includes planning at the academic program level along with targeted project proposals, planning at the administrative level that includes the infrastructure needed to support the academic programs, fundraising plans and an endowment drive, plans for public outreach and information campaigns, and enrollment planning. The current Strategic Plan

extends to 2010. Development of the next five-year plan (2010-2015) will begin in 2008. During that year, academic programs will be preparing self-studies in keeping with the schedule set forth in the AUA University-wide Assessment and Evaluation Plan. Those self-studies will form the basis for the new Strategic Plan, which will be developed by a budget and planning group that includes faculty and administrators.

In order to support these efforts, AUA has hired a new Vice President for Development and Government Relations and a new Development Coordinator, both based in Oakland, California. In Yerevan, a new Registrar/Director of Student Affairs has been hired who will have responsibility for enrollment planning. It is anticipated that the support structure resulting from the first two appointments will facilitate the efforts of academic units to obtain funding for special projects.

AUA's First Strategic Plan
The first AUA strategic plan was developed in 1997 for the fifth anniversary of the University and was led by the then new President, Haroutune Armenian, in the first year of his appointment. Each academic program and research center was asked to develop a strategic plan that included a situation analysis, goals and objectives, and the resources required to meet the goals and objectives.

The individual plans were incorporated into a University-wide plan focused on the academic programs, "Strategic Planning for the 21st Century." The plan was the result of the participation of deans, faculty and staff of AUA and included the University's Board of Trustees and Board of Directors, the President of the Republic of Armenia and several government Ministers, the U.S. Embassy and USAID, and the President and Board members of the Armenian General Benevolent Union. The University of California participated through its members on the Board of Trustees.

The strategic plan included a situation analysis of the University's strengths and weaknesses and resulted in several priorities being identified for development, including the regional role of the University, faculty, academic programs, research, infrastructure, and finances. As a result of this process of strategic planning, the AUA mission statement was updated and revised.

The strategic plan was used by the President and the University's Board of Trustees to guide the development of AUA through the following five years. Many of the goals and objectives of the plan came to fruition and examples are increases in the number of resident Armenian faculty with advanced U.S. or European training and of resident faculty, expansion of the University with new academic programs such as the Department of Law and the Computer and Information Systems program, development of the research centers, improvements in infrastructure, and the establishment of an endowment fund.

Strategic Planning Today
In order to become a magnet for the best students, faculty, and researchers from a wider region and the Diaspora, AUA must position itself as the premier educational institution in the region, one that is the source of experimentation, analysis, synthesis, and intellectual discussion and

research. AUA must achieve excellence in order to be competitive and to continue to meet its mission.

The various stakeholders of the University participated in developing AUA's new Strategic Plan for 2005-2010. The document sets forth AUA's vision for its second decade and outlines specific strategic goals. The summary below of the three main goals is taken from the strategic plan document. In addition to these main strategic goals, the document includes a plan for the regional recruitment of students and a plan to develop continuing and adult education programs. Each academic program and research center developed a set of five-year goals and these specific targets are included in the Strategic Plan for 2005-2010.

The first of the three institutional strategic goals is excellence in AUA's academic and research programs. The specific targets are:

1.1 Institute processes for Curriculum Planning and Review in AUA's Core Academic Programs
      1.1.1 Continue to refine systems for evaluating educational effectiveness
      1.1.2 Develop a faculty evaluation system that assesses teaching effectiveness
      1.1.3 Define criteria for establishing and discontinuing academic programs
      1.1.4 Develop certificate options within degree programs
      1.1.5 Increase collaboration with other institutions
1.2 Increase Quality of the Applicant Pool and Diversify the Student Body
      1.2.1 Internationalize the student body
      1.2.2 Recruit students from the surrounding region
      1.2.3 Develop residence facilities for non-local students
      1.2.4 Develop student services for all students
1.3 Increase Activity of the University Research Centers and Integration of Research Center Activities in the Academic Program
      1.3.1 Increase the number of full-time resident faculty positions linked to research
      1.3.2 Include assessment of research quality in faculty evaluation process
      1.3.3 Insure greater integration of Research Center activities in the academic program
1.4 Increase Collaboration and Partnerships with Local and Regional Institutions
      1.4.1 Increase collaboration and partnerships with local and regional institutions and integrate with AUA curriculum planning process
      1.4.2 Increase distance learning capability
      1.4.3 Develop teleconferencing capability
      1.4.4 Increase affiliation and partnerships with US universities
      1.4.5 Increase linkages with local and regional communities engaged in fields reflected in the University's curriculum
1.5 Expand the Extension Program Utilizing a Market-Driven Approach
      1.5.1 Expand Extension programming, utilizing a market-driven approach
      1.5.2 Compile a portfolio of training courses
      1.5.3 Develop a plan to market items in the above portfolio
1.6 Create Study Abroad Opportunities for Advanced Undergraduate and Graduate Students

Even though AUA is only one-year into the new plan, many of the specific strategies outlined in the first strategic goal are already being addressed and others are in the planning process. As examples, AUA has a system in place for the evaluation of educational effectiveness, a draft policy on faculty evaluation has been reviewed by the Deans and forwarded to the Faculty Senate, and the faculty evaluation includes assessment of research. A new hire has been made who has expertise in enrollment planning, residential facilities for non-resident students are under construction, the title of Director of Student Affairs and the concomitant responsibilities have been added to the position of Registrar, a new teleconferencing room has been created in the main Baghramian building, and a new Dean of Extension is expanding the offerings of that program. The number of international students has increased from eight in 2003 to 25 in 2005.

The second strategic goal is achieving fiscal strength and sustainability; the specific targets are:

2.1 Tie Increases in Tuition to a Need-Based Financial Aid Program
        2.1.1 Conduct study to determine a realistic level of tuition increases
        2.1.2 Develop a system of assessing student financial need
2.2 Develop Major Research Agendas that Contribute to Economic, Political, and Social Development in Armenia and the Region
        2.2.1 Develop an ongoing system to identify local and regional economic, political, and social research needs
        2.2.2 Increase the number of direct grants
        2.2.3 Increase collaboration with local institutions on grant projects
        2.2.4 Develop major research agendas in each academic unit
            2.2.4.1 Develop at least one large-scale development project within each research center involving a budget of over $100,000
        2.2.5 Increase the presence of local scientists in the Research Centers
        2.2.6 Offer opportunities for practice-oriented and practical involvement of AUA students in Center activities
        2.2.7 Seek opportunities for internal collaboration and discipline integration within research activities
2.3 Increase Revenues from Rental of University Facilities
        2.3.1 Increase rental revenue from Baghramian Building
        2.3.2 Increase rental revenue from AUA Center
        2.3.3 Develop housing facilities for non-local students and utilize revenue from housing fees to maintain those facilities
        2.3.4 Develop a facility in Gyumri
2.4 Increase Fundraising
        2.4.1 Increase revenue from endowments, from $470,000 in 2006 to $770,000 in 2010
        2.4.2 Strengthen and expand the University's ties to the Diaspora worldwide
        2.4.3 Intensify the University's public relations efforts
        2.4.4 Increase alumni giving

Work has begun on several of the specific targets outlined in the second strategic goal. The loan and scholarship committees are developing guidelines that will address the assessment of student financial need. Efforts have been made by some of the research centers to increase collaboration, for example two joint research proposals were developed by the Turpanjian

Center for Policy Analysis and the Center for Business Research and Development during the past six months. Rental revenue from both the Baghramian Building and the AUA Center are on track and continue to contribute to the University's budget. A facility in Gyumri has been established through the Turpanjian Rural Development Program. The University has a new Vice President for Development and Government Relations, who has already made a visit to Capital Hill and USAID headquarters in Washington, D.C., and a Development Coordinator is newly on staff in the Oakland office. The University has begun designing a strategic public relations and outreach plan that will be coordinated with development efforts. Alumni donations have increased, for example the alumni of the School of Political Science and International Affairs raised funds for the new teleconferencing facilities in the Baghramian Building.

The third, and last, strategic goal is strengthening academic management and leadership and administrative management. The specific targets are:

> 3.1 Increase the proportion of full-time to part-time faculty
>> 3.1.1 Increase the ratio of full-time to part-time faculty from 45:55 in 2005 to 50:50 by 2010
> 3.2 Develop a Faculty Handbook
> 3.3 Continue Implementation of Faculty Senate Model
> 3.4 Develop and Implement Policy on Faculty Titles
> 3.5 Develop and Implement Policies on Appointment and Promotion
> 3.6 Seek ways of enhancing administrative effectiveness and efficiency
>> 3.6.1 Increase Yerevan-based decision making
>> 3.6.2 Develop a system of outcome-based Quality Assurance
>> 3.6.3 Develop effective information management systems
>> 3.6.4 Implement a system for collecting and maintaining institutional data

Most of the strategic targets in the third goal are being developed or are continuously being improved. The Faculty Senate is functioning and its Curriculum Committee is conducting the first formal reviews of the academic programs. The Faculty Handbook is in place and some of the policies will undergo revision this year. The policies on faculty titles and appointment and promotion are in place and implementation is beginning along with the new faculty evaluation policy. Yerevan-based decision-making has increased: admissions decisions are now made in Yerevan, and a new dean has been appointed, who is in residence. The AUA President has asked all Deans and Associate and Assistant Deans to discuss and come to agreement on devolution of some responsibilities locally, and the plans of one academic program have already been submitted for review. The University now has a functioning Office for Institutional Research and Assessment, and it has taken over responsibilities for the collection and maintenance of all data, for example, the University-wide surveys on alumni and employers. The University has produced its first Annual Fact Book and the statistics and data are available on-line. The 2005 Fact Book was designed with input from the faculty and administration and undergoes constant improvement. There will be electronic updates after each academic Quarter in 2006, culminating in a 2006 Fact Book that will include data that can be used for trend analyses.

In addition to the three main strategic goals for the institution as a whole, each academic program and research center developed a set of five-year goals to address questions posed about (1) how ongoing excellence of the academic program will be ensured, (2) how the program will contribute to the development of Armenia and the region, and (3) how viable the academic program is financially and the resources required to meet the program's needs. These planning exercises pointed directly to the need for increased budgets, for example to recruit top faculty, to support top students in need of financial aid, and to create excellence in University services.

Recently, all academic programs and research centers were asked by the AUA President to provide updates on progress toward the goals. The academic programs reported advancement on many of their strategic goals and pointed to barriers that must be overcome in order to achieve some goals. An important by-product of the AUA President's request is that the Deans were reminded that progress is being monitored and that the University has expectations that the goals proposed by the academic programs can and will be met.

For example, the College of Engineering had as a goal the development of continued opportunities for interaction of its students with industry and reported in its update that the project course for the Industrial Engineering and Systems Management program has been expanded from ten to 16 weeks so that better projects are developed, internships in the IT industry have increased, and students interact now with industry professionals, who are admitted to courses under concurrent enrollment. As another example, the Department of Law had as a goal the strengthening of the LL.M. program through increasing the size of the LL.M. enrollment cohort to roughly double the size of the MCLS cohort. The Department reported that progress has been made and that two-thirds of the program's applicants admitted in the first round to the Academic Preparatory Program in 2006 were LL.M. applicants, thus exceeding the target.

The Future of Strategic Planning
Longer term forecasting tries to predict forces or factors that may occur and tries to position an organization so that it is situated to respond to those forces. Converging economic, political, and social forces in Armenia argue in favor of education in the region, both graduate education for the first-time degree candidate and for professionals seeking continuing education or reeducation. The context of Armenia and its neighbors will be in growing linkages via regional associations such as the Black Sea Economic Cooperation and international organizations such as the World Trade Organization and the Council of Europe. Interest in studying in Armenia will be generated from the unique opportunity it provides in offering American graduate education at its best.

AUA is committed to the strategic goals it has set for itself, and administrators and faculty understand that continuous efforts are required in order to realize the goals by 2010, and to go even beyond them. As the University moves forward on its strategic plan, needs become apparent and new structures and processes are developed. For example, the AUA President has guided the drafting of a new fiscal plan that aligns the development of the academic programs with the fiscal strategies of the University.

In order to align the University's strategic plan with a fiscal plan, AUA sought assistance from budget and planning specialists in the University of California's Office of the President. That

collaboration has resulted in a financial plan that sets specific measurable and realistic fiscal targets for the University to be achieved by the year 2010 (see AUA Strategic Fiscal Plan). The plan is based on the already established baseline level of revenue sources and composition of the core academic programs budget revenue streams. Table 1 shows the baseline average of revenue streams for 2001-2005.

Table 1. Baseline Average for 2001-2005

Tuition and Fees	14%	$420,000
Government Grants	4%	120,000
Private Grants and Gifts	36%	1,080,000
Investments	16%	480,000
Auxiliary Enterprises	30%	900,000
TOTAL REVENUE	**100%**	**$3,000,000**

In the interest of stabilizing predictable funding streams for the Core Academic Programs, the percentage of revenue from private grants and gifts has been reduced from 36% to 25% in the revenue targets for 2010, and the percentage from more stable sources such as tuition, investments, and auxiliary enterprises has been increased (Table 2).

Table 2. Revenue Targets for 2010

Tuition and Fees	23%	$1,035,000
Government Grants	3%	135,000
Private Grants and Gifts	25%	1,125,000
Investments	17%	765,000
Auxiliary Enterprises	32%	1,440,000
TOTAL REVENUE	**100%**	**$4,500,000**

It is expected that the additional revenue reflected in the development targets of 2010 will be directed towards achieving academic quality and excellence in education. The costs of the University's support functions will remain relatively stable or will increase less, proportionately, leveraging on economies of scale. Additional revenue from auxiliary enterprises will be sufficient both to cover the increased costs of these entities and to generate further support for the academic departments' budget. New projects undertaken by the research centers will be self-sufficient in covering the direct costs and will generate more overhead revenue to cover a larger portion of the costs of the University's support functions. Hence most of the additional revenues will alleviate the currently tight budgets of the academic departments.

As of this date, the Strategic Plan is being revised to incorporate both the Fiscal Plan and a Development Plan, which is still in the drafting stage. The following summary reflects the development targets that the University will strive to achieve by the year 2010 to generate new revenues in the stated amounts, beyond the current baseline level in Table 1.

1. Raise additional $130,000 for the student loan portfolio to reach $250,000.
2. Recruit 40 full tuition-paying students to generate additional $300,000 in Tuition and Fees.
3. Generate additional $30,000 in Tuition and Fees from Education Abroad activities.
4. Generate additional $30,000 in Extension Course Fees from adult and continuing education.
5. Secure enough government grants to guarantee $135,000 for the Core Academic Programs budget.
6. Secure a multiyear pledge to guarantee at least $150,000 for CIS or another academic program.
7. Raise at least $300,000 from an institutional donor (Lincy foundation or other) to support general funds annually.
8. Maintain an annual giving level of at least $70,000 annually.
9. Raise $6,000,000 to be invested in the University's general endowments pool to generate additional $300,000 annually.
10. Double the activity of the research centers to boost the research center revenue up to $500,000.
11. Increase the revenue from HyBusiness by $30,000 to reach $170,000.

In this fiscal plan, development begins with the educational goals of the University. Academic programs are asked to identify the resources needed to meet their goals and, in addition, to produce specific project proposals that will move both the academic program and the University forward. For example, the School of Political Science and International Affairs has a proposal and budget for the establishment of Armenia's first computer-assisted telephone interviewing center for pubic opinion polling. Development efforts are derived from these educational goals and projects, and the infrastructure needed to ensure their realization, and include both targeted fundraising for specific projects through grants and donors and general fundraising for the endowment. The fiscal plan includes a shift to two-year budget plans, as opposed to the current one-year plans, and five-year budgetary projections.

Planning in the academic programs now includes formal needs analyses that consist of a review of competing programs in Armenia and the region, job placement for graduates, and data collected from students and alumni. This research has been an integral part of the self-study process for all academic programs since 2003. The analyses comprise an important component of the information that will be used to assist the Faculty Senate and Board of Trustees in decisions on modifications to current degrees and the addition of future degrees.

The AUA Strategic Plan for 2005-2010 is being integrated with income and expense projections to 2010, along with the development plans needed to meet projected expenses. Further, while earlier strategic planning focused almost exclusively on the academic programs, the current planning initiative integrates academic program plans with multi-year budget projections, resource development and allocation plans, and a quality assurance plan based on continuous assessment. The University's strategic planning has evolved and is now an essential institutionalized process that is at the center of decision-making processes. As noted earlier, the assessment cycle that begins in 2008 will coincide with initiation of discussions regarding the University's strategic plan for 2010-2015.

Introduction

In the short span of fifteen years and with limited resources at its disposal, AUA has succeeded in being a force for innovation and change in Armenia. AUA's impact has been felt both in and outside the classroom. Faculty have designed academic programs and courses that were unique in Armenia, introduced new pedagogical methods, contributed to legislative changes and trained a new generation of graduates equipped to advance the University's mission of addressing the needs of Armenia and the region. Challenged in the classroom, participating in ongoing research projects, and interacting with Armenian leaders in the public and private spheres, AUA's students have transformed themselves into agents of change. The past, present, and future accomplishments of AUA graduates will continue to be the University's legacy.

This chapter summarizes the impact of each AUA program on Armenia and the contributions of the University as a whole. The following is only a partial list of innovations introduced by AUA.

Impact of the University

- Offered the first MBA program in Armenia. The program introduced the use of case studies as an integral part of teaching many courses.
- Offered the first MPH program in Armenia.
- Offered the first LL.M. program in Armenia. The program created competition in the educational sector, which resulted in the establishment of LL.M. programs in several Armenian institutions.
- Offered the first MCLS program in Armenia. This is the first cross-disciplinary law program in Armenia.
- Offered the first CTEFL program in Armenia. This was the first graduate program in Armenia to offer a professional qualification for teachers of English as a foreign language.
- Offered the first MATEFL program in Armenia. This was the first masters-level program in applied linguistics with a focus on training teacher-researchers.
- The Center for Health Sciences Research (CHSR) conducted the first pilot program for improving prenatal health education - preparation of health education materials, and training modules for nurses and obstetrician/gynecologists.
- CHSR wrote, compiled, and produced the first National AIDS Bulletin.
- CHSR undertook the first primary health care needs assessment in Nagorno-Karabagh.
- AUA was the first institution in Armenia (and NIS) to be accepted into membership of Association of Schools of Public Health in the European Region (ASPHER).
- Implemented a quality assurance project in a hospital for the first time in Armenia under the AUA/Nork Marash Medical Center project (2001-2005).
- Sponsored the Digital Library of Classical Armenian Literature, which has given a new impetus to Armenological research both in Armenia and internationally.
- Introduced new construction technologies, with its AUA Center and Paramaz Avedisian Building projects.

- Conducted the first public hearing in Armenia on environmental issues related to a construction project (in connection with the Paramaz Avedisian Building).
- AUA's College of Health Sciences was a driving force over the past decade in development of an anti-smoking program in Armenia.
- Implemented personnel policies establishing a transparent recruitment process; salary surveys; pay and classification systems, and an employee code of conduct.
- AUA's Papazian Library is open to the public and used extensively.
- AUA librarians were instrumental in founding the Armenian Library Association.
- First institution to introduce formal graduation ceremonies.
- AUA is the first institution in Armenia to undergo accreditation by an American agency.
- AUA's student loan program is unique in Armenia.
- During the difficult years of 1992-1994, AUA supported over 100 scientists and researchers through small grants.
- AUA's Garo Meghrigian Eye Institute for Preventive Ophthalmology (GMEIPO) has been the first program applying public health approaches to ophthalmic care in Armenia. A regional ophthalmic unit opened in 2003 in Sevan, the first facility to provide primary and secondary eye care (including surgical care) on the district level in Armenia.
- Classroom participation by students was unknown under the Soviet system of education; AUA students have welcomed the opportunity enthusiastically.
- AUA's Department of Law is working with the Armenian judiciary to implement the introduction of civil and common law judicial opinion construction in Armenia.
- Assisted the newly formed University in Artsakh by providing library materials and organizing courses on English.
- The Birds of Armenia project has been one of the University's most important conservation projects. In 1997, the project created a water channel to separate Gulls Island – a unique place for breeding of Armenian Gulls at Lake Sevan– from the lakeside. Due to the decreasing level of the Lake, the island had become susceptible to human and animal disturbance, which strongly affected gull nestlings. This measure led to protection of the entire colony of Armenian Gulls.

Impact of AUA's Academic Programs

AUA regularly surveys the employers of its graduates, since one aspect of measuring impact is the link between learning outcomes and skills needed in the workplace. The 88 organizations responding to the 2004 employer survey included international non-profits (31.1%), foreign governmental organizations (4.9%), foreign and international private organizations (11.7%), joint-ventures (4.9%), local state and governmental organizations (15.5%), local NGOs (7.8%), and Armenian business organizations (7.8%). Among those employers, 89.1% are satisfied with the performance of their AUA graduate employees (47.5%, very satisfied). Almost 80% agreed that the graduates contributed to the overall success of the organization. AUA will continue the dialogue with employers. The accumulated information is analyzed and applied to further educational learning (see below).

The College of Engineering (CE) and the School of Business and Management (SBM) were the first academic units established at AUA, alongside the Intensive English Program (IEP). The CE offered programs in Earthquake Engineering and Industrial Engineering; the SBM offered an

MBA program. Over the years, both colleges adapted their curricula to local needs. The CE, for example, expanded its Industrial Engineering program to include systems management, and, in 2001, added the Computer and Information Science degree program in response to local software industry needs. The CE eliminated the degree program in Earthquake Engineering because of the lack of significant construction activity in the early 90s, although it continues to carry out research in that area. The SBM has continually revised the MBA program to address market and employer needs. The IEP was incorporated in the Department of English Programs, introducing a certificate program (CTEFL) in 1992, and a Master's (MATEFL) program in 2002.

The following section will describe the impact of AUA's academic programs and research centers on Armenia. It should be noted that another important dimension of AUA's impact is the transformation in the students themselves, from passive absorbers of knowledge to engaged and pro-active problem-solvers.

College of Engineering (CE) (established 1991)
Industrial Engineering and Systems Management (IESM)
The College has concentrated on the Industrial Engineering and Systems Management (IESM) degree, which has seen wide application. A recent survey of IESM graduates showed that of the 202 graduates, 36.5% were employed in engineering; 32.0% were employed in office/clerical jobs; 14.7% in managerial jobs; 8.4% in higher education; 7.9% in academic/research jobs and 0.5% in owning their own businesses. The College has added an entrepreneurial course in hopes of accelerating movement toward self-ownership. This change, however, will need time and continued adjustment to market conditions. Sixteen individuals have completed doctoral studies and are engaged in teaching/research. It is most likely that leadership in impact upon Armenia will come from this group and others who follow them (see CE study on impact).

Computer and Information Science (CIS)
The information technology (IT) sector in Armenia has shown rapid growth during the past few years. Studies indicate that the industry is in need of trained IT specialists, particularly those with management training and English communication skills.[1] The CIS program is designed to provide a sound background in the fundamentals of computing, while also providing a minor in business management. The program has produced 35 graduates, virtually all now employed in the IT industry (see CE study on impact).

The Engineering Research Center (ERC)
 AUA's Engineering Research Center has pioneered the use of seismic base isolation technology in Armenia. Dr. Mikayel Melkumyan, former AUA faculty member, and since 2005, Research Professor at AUA, has led that effort. Dr. Melkumyan conducted valuable consultations with Dr. James M. Kelly of the University of California, Berkeley, a pioneer of base isolation. As a result of this collaboration, more than 30 buildings in Armenia have been retrofitted or built anew.

The first solar project at the Engineering Research Center began in 1995 with installation of a solar monitoring station (SMS) on the rooftop of the AUA building. Since May 1995, SMS has collected solar radiation data, thereby enabling the evaluation of cost effectiveness of any solar energy device or system installed. The first solar driven desiccant system in the NIS and one of

---

1. "Armenia's Software Advantage," The McKinsey Quarterly, 2004, no. 1.

the few in the world providing space heating and cooling was designed for the 154-seat auditorium of AUA and is installed on the rooftop of the AUA building. A 5kW photovoltaic power system was added on the rooftop to power several 1kW hydrogen fuel cells. This system will be the first in the Former Soviet Union countries.

A small grant through the ERC to a professor of physics at Yerevan State University led to his collaboration with a UC Berkeley professor. They have received several grants, and one of their many joint papers was awarded the Brunauer Award of the American Ceramic Society.

CIS, in collaboration with the IT company Sourcio, is conducting the project *Electronic Medical Records,* sponsored by Sun Microsystems. The project will offer healthcare providers a comprehensive, web-based solution to automate vital health-related processes within the medical practice. Assistance is provided by the Armenian Ministry of Health, the Armenian Chamber of Doctors, and the Armenian American Wellness Center. Students in computer science from AUA, Yerevan State University and State Engineering University of Armenia work on the project.

Through its seminar series, the CIS program offers opportunities for presentation and discussion of current trends and advances in the field of computer science by prominent visiting specialists. In June 2006, the College of Engineering hosted Professor Emeritus Donald E. Knuth of Stanford University, who received an honorary doctorate from the National Academy of Sciences of Armenia. He gave several lectures at AUA for the academic and professional communities, as well as held question-and-answer sessions with students at AUA, Yerevan State University and the State Engineering University of Armenia (see CE study on impact).

School of Business and Management (SBM) (established 1991)
The MBA program has changed significantly since its inception. Specifically, it has moved from a general MBA program to one graduating specialists. This change is due to the market needs expressed by local hiring organizations. In addition to training students in specific functional areas, the MBA program has focused on delivering graduates with an understanding and appreciation of ethical behavior in their daily business activities.
Many of SBM's 493 graduates are advocates for ethical and non-corruptive practices. There are many examples of MBA graduates who have resigned from well-paying positions due to the unethical behavior of their employers. Individual student projects have had an impact, as well. For example, an MBA graduate established the first FM radio station in Armenia, based on a business plan prepared as a class assignment (see SBM study on impact).

Center for Business Research and Development (CBRD)
Early on, the CBRD introduced a number of projects that were unique in Armenia, among them the business incubator concept and the translation of books on economics, business, and management from English to Armenian.[2] Initially, the main thrust of the CBRD was creation of a Business Incubator that would provide support for small businesses in the form of structure, tools, and services. The list of potential incubator projects included production of laser crystals and artificial jewelry, production of wooden goods, import and sale of foreign automobiles, laser medical devices, and commercial publishing. However, outside financial support for the Business Incubator project was not forthcoming, and CBRD changed its focus to respond to an

---

[2] The list of books published by the CBRD is at Appendix D.

increasing number of requests from foreign investors and international organizations for local knowledge and support for their enterprises and projects. In that connection, CBRD carried out an evaluation of the operation of the Cold Storage facility in Gyumri, market research for investors interested in the tourism infrastructure and hotel industries and in the poultry industry. A CBRD market research study financed by the European Economic Community laid the groundwork for design and operation of the air cargo terminal at Zvartnots Airport.

In addition, CBRD has played a pivotal role in training managers and leaders. It has provided services to IMF, UNDP, World Bank, USAID, Armenian Apostolic Church, Armenia Fund, Virage Logic, Nork Marash Medical Center, Kotayk Beer, Midland Armenia Bank, ArmenTel and others. Programs have focused on assisting organizations to develop in-depth understanding of business functional areas including leadership, communication, and team building skills. Recently, a U.S.-owned international corporation purchased three technology companies in Armenia with very diverse organizational cultures. CBRD is assisting to resolve merger organizational issues as well as employee leadership development.

In June 2007, CBRD will host the International Conference Academy of Business and Administrative Sciences (ABAS). The conference marks the occasion of the first international business conference of its kind in Armenia. Speakers and attendees are expected to participate from Georgia Russia, Romania and other countries in the region (see SBM study on impact).

Department of English Programs (DEP) (established 1991)
The Department of English Programs surveyed its alumni to determine to what extent its CTEFL and MATEFL graduates have been able to apply their learning in practice and to what extent graduates have been successful in finding employment. The CTEFL program has operated in Armenia since 1992; the MATEFL program is in its third year. A total of 126 students have graduated or are about to graduate from the CTEFL, the MATEFL or both programs. The survey found that the impact of AUA's CTEFL and MATEFL graduates has been significant. The majority of new English teachers in high schools and universities in Armenia are AUA graduates. Of that group, eighty percent had enhanced their pay, rank, or responsibilities.

DEP has followed its survey with focus-group interviews to further understand the impact of its specific courses on teaching and explore methods for enlarging the student intake in and beyond Yerevan. The results indicated that those graduates who were currently teaching are willing to promote the courses they had taken at AUA. Some participants indicated that they were not only teaching language to students in their institution, but also to faculty who were required to teach through the medium of English (see DEP study on impact).

Intensive English Program (IEP)
It should be noted that the DEP devotes considerable resources toward preparing AUA students to pursue their studies in the English language. Thus, the DEP continually tests its assumptions about teaching English in Armenia (or elsewhere, since its practices are linked to international research in teaching English as a foreign language). The DEP's noteworthy results directly contribute to preparing Armenian students to pursue their studies in AUA's various disciplines at the master's degree level. Having been the first such intensive English program in Armenia and the Caucasus, the IEP now informs other English programs as well. Brusov Yerevan State

Linguistic University (the primary state language institute) currently teaches essay writing modeled after AUA's IEP.

DEP's CTEFL and MATEFL programs were the first of their kind in Armenia. Thus, the progression from IEP to CTEFL and MATEFL has benefited not only AUA but also the teaching of English in Armenia. In the 1990s, DEP helped create AELTA, the Association of English Language Teachers of Armenia. This important creation has drawn together teachers of English from throughout Armenia through conferences, seminars, studies and a newsletter. AELTA is now a branch of the international organization of Teachers of English to Speakers of Other Languages (TESOL). Its oldest branch in Armenia is located in Vanadzor. Many of the current and past officers and committee members of AELTA have been graduates of AUA's CTEFL/MATEFL Programs (see DEP study on impact).

School of Political Science and International Affairs (PSIA) (established, 1994)
PSIA introduced the first Master's degree in political science and international affairs in Armenia. The program has graduated 257 students, who were introduced to a number of courses unique in Armenia, such as democratic theory, Armenian legislative processes, public administration, policy analysis, and western social science methodologies, Armenian legislative processes, public administration, policy analysis, and western social science methodologies. The School is assisting Yerevan State University in the design and implementation of its first graduate degree program in public administration (see SPSIA study on impact).

The School has endeavored to link its competencies primarily to the public sector, although many graduates have found employment in the private sector and the para-public sector (USAID, IMF, World Bank, and NGOs). In providing education to its students, the School has not only included unique courses but has experimented with a capstone experience, which requires completing a Master's Essay or a Policy Internship Project, the latter including an emphasis on policy analysis. The School recently undertook a study evaluating the quality of the learning outcomes particularly as being measurable in the capstone experience (see Chapter Three, above).

The Turpanjian Center for Policy Analysis (TCPA)
This research center pursues two goals: assisting in the transition development of Armenia, and providing research, both conceptual and field work, experience to graduates and current students. TCPA led the monitoring and evaluation work associated with the USAID Earthquake Zone Recovery Program and performed continuing assessment of its development, conceptual design, empirical study and analysis and findings.

The $35 million Earthquake Recovery Zone Program was USAID's largest single endeavor during its years of humanitarian assistance to Armenia. The Program's impact included the sheltering of more than 10,000 displaced families, virtually the entire residual need following the 1988 earthquake, and restoration to public use of public buildings, schools, museums, parks, and squares that had been used as temporary shelters. It is clear that the researchers, particularly the graduates and students involved in that project learned a great deal while giving much of themselves.

In addition to the academic program and Turpanjian Center for Policy Analysis, the School is frequently asked for opinions, short term consulting, short studies, and various, diverse, efforts of assistance. TCPA, for example, published the first directory to the Armenian National Assembly (1996); the first nationwide directory to Armenian print media; the first household survey on the education sector (1996); the first study of think tanks in Armenia (1997); the first qualitative and quantitative study of communication processes and public health (1998); the first representative sample of households living in temporary shelters (1999) as a result of the 1988 earthquake; the first surveys of Members of Parliament (2003), the first nationwide survey on the public's attitudes and knowledge of human rights, and more than a dozen other major activities carried out for such groups as the Armenian government, particularly for the National Assembly; USAID; UNDP; Urban Institute; Open Society Institute and others (see SPSIA study on impact).

College of Health Sciences (CHS) (established, 1995)
In 1995, the College of Health Sciences introduced a Certificate in Public Health program. The program was revised to an MPH program in 1997. There are now 111 MPH graduates.

The CHS utilizes a quality assurance methodology in evaluating the academic program as well as the outcomes of health care consultation and research. Assessment materials have been developed and translated into Armenian and Russian. A multi-year program has been conducted at the Nork Marash Medical Center prioritizing the development of management systems performance. As part of developing the quality assurance framework, CHS translated and published An Introduction to Quality Assurance in Health Care by Avedis Donabedian. The book is the major text available in Armenian on the subject and is used by professionals at the ministry of Health as well as at various health service levels. The academic program benefited from receiving a peer review (analogous to accreditation) at the European level conducted by ASPHER (Association of Schools of Public Health of the European Region). In 2005, CHS and CHSR hosted the 27th annual Conference of ASPHER for the first time in an NIS country. Participants included representatives from Europe, Africa and elsewhere (over 50 countries) (see CHS impact study).

Center of Health Sciences Research and Development (CHSR)
The American University of Armenia has been a pioneer in promoting non-smoking culture in independent Armenia; since the beginning, the Baghramian Building has been a non-smoking building. AUA has made its tangible contribution in building a healthier and safer Armenia through anti-tobacco projects since 2003. Together with its partners, the Armenian Public Health Association and Armenian Public Health Union, AUA initiated and facilitated establishment of a public Coalition for Tobacco Free Armenia (CTFA). It was the first successful attempt to build a tobacco control coalition in Armenia. Today, the Coalition for Tobacco Free Armenia unites 24 NGOs committed to the idea of tobacco control in Yerevan and throughout the country. Since March 2005, the rights of non-smokers in Armenia are protected by law. Under the anti-tobacco law, smoking is banned at the premises of all health, educational and cultural institutions.

With support from the Open Society Institute Network Public Health Program, the experts' team of the Armenian Public Health Alliance (ArmPHA) developed a comprehensive informational package for Armenian policy and decision makers called "Contemporary Issues on Tobacco Control in Armenia." Empowering people and building public support for tough tobacco control

policy measures was and remains the primary goal of the Coalition for Tobacco Free Armenia and the ArmPHA. The American University of Armenia continues supporting the anti-tobacco movement through educational programs and research that provides valuable data for evidence-based policymaking.

CHSR conducted the first national survey on infant nutrition. Survey results showed that breastfeeding—an essential element in post-partum feeding—was neglected during Soviet times. Further research and cooperation with the Ministry of Health resulted in tripling the rate of breastfeeding in Armenia and in a doctoral dissertation completed in Armenia with assistance from AUA in 1998.

A Prevention of Blindness program was initiated by CHSR and directed by one of the CHS graduates, an ophthalmologist, who gained additional training in the USA and UK. In addition, The Garo Meghrigian Eye Institute for Preventive Ophthalmology (GMEIPO) was established in 1999. It applied the first public health approaches to ophthalmic care in Armenia. A regional unit (ROU) opened in 2003 in Sevan, becoming the first facility to provide primary and secondary eye care (including surgical care) at the district level in Armenia. These and other programs have contributed to research, reciprocity, and evaluation of health professions in Armenia (see CHS impact study).

Law Department (established, 1996)
Graduates of the Law Department have integrated well into the Armenian legal profession. Over 109 graduates have been employed in public, para-public and private spheres. Over 14 alumni are judges or hold high public offices in ministries and government. Over 15 alumni are currently working in para-public settings (e.g., USAID, World Bank, EBRD, American Chamber of Commerce) on a variety of legal reform and public policy development projects. The para-public sector has been the largest, best funded, and most influential player in public policy and legal reform in Armenia. Many alumni have gone into the private sector either in law firms or in practice. Several founded their own law firms, often together. Several alumni teach at local universities.

AUA has fostered awareness of issues of public concern, including constitutional reform, election laws, corporate law, and environmental protection. A recent forum discussed legal regulation of the mass media. Forums are open to the public and facilitate not only understanding and analysis of public issues but extend knowledge of AUA's respect for and approach to the study of law.

Department of Law faculty and administrators participate not only in teaching but in public service *pro bono* activities. During 2005, one law lecturer was asked to assist an international election monitoring group coming to observe elections in the Republic of Nagorno Karabagh (NKR). Two AUA students accompanied the election monitors to NKR as assistants (see Law Department impact study).

Legal Research Center (LRC)
The Law Department and Legal Research Center established the first Student Law Review, creating a web site for access: www.armlawreview.org. This source serves as a forum for law

students from all Armenian institutions to post and publish their academic work; materials are published in English providing access to interested parties outside Armenia.

In 2003, AUA's students established a first law Student NGO, entitled Shitaq ("Truth"). The NGO organizes a public legal seminar series on legal issues of concern to the public, round table discussions on human rights in Armenia, and seminars on topics such as military service, human trafficking, and constitutional reform and amendments.

The Department provides judicial training seminars to judges at the request of the Armenian Court of Cassation (highest level appellate court). The first seminar presented to the Court of Cassation dealt with the European Court of Human Rights and its implications for judicial decision-making and opinion drafting in Armenia. A future training program will concentrate on incorporating elements of precedent into Armenian judicial decision-making. The Department also offers Continuing Legal Education to graduates, providing legal updates to substantive areas. The first seminar (2006) focused on recent constitutional amendments.

The Department maintains the first comparative and international law library with a collection of legal materials specifically oriented to comparative and international law. The library is open to the public and maintains open stacks (see Law Department impact study).

University Extension (established 1992)
Although non-degree oriented, the AUA's Extension Program has extended learning to over 9,000 persons. Its programs are driven by demand that benefits individuals pursuing skills in a variety of fields. While the English language program has been the most in demand, courses have included additional subjects, including Armenian language pedagogy, translation and interpretation, environmental safety, media, library science, negotiation and settlement, accounting, banking, finance, taxation, international economic relations, business communication, office management, government, computer programming, software use and public administration. Courses may be offered for a period of hours or extend over months.

The Program has endeavored to reach people outside Yerevan. Several courses have been offered in Gyumri: English language classes, Translation and Interpretation and a course in collaboration with the Women's Entrepreneurship Program. By 2005, some 250 students had participated in Extension courses in Gyumri.

With the active cooperation of USAID and the MacArthur Foundation, the Extension Program promoted seminars and workshops intended for the professional development of lawyers and judges; a further conference was offered dealing with topics in Political Science relating to "Transcaucasia Today." Additional workshops have included social change utilizing means available to non-governmental organizations, the growth of the software development industry in Armenia, bar-coding in trade and commerce, computer software applications, and a detailed examination of Armenia's new Criminal Code.

The Extension Program has attracted participants from neighboring countries such as Syria and Iran. The region is familiar with Extension's comprehensive English program. That program has recently been certified as TOEFL IBT- Internet Based Test Center – a resource that should

enhance the importance of Extension as a competence Center (see Extension Program study on impact).

Environmental Conservation and Research Center (ECRC) *(established 1992)*
AUA is helping to raise environmental awareness in Armenia. All AUA students are required to take a course in environmental science. AUA's Environmental Conservation and Research Center promotes environmental conservation through education, conducts basic and applied research on the environment, provides internships and mentoring for environmental professionals, and engages in ongoing dialogue with non-governmental organizations, local scientists, and international organizations working to improve the environment of Armenia and the region.

One of the most comprehensive conservation initiatives in Armenia has been AUA's Birds of Armenia project. The project began in 1992, when Mr. Sarkis Acopian of Easton, PA asked AUA to locate ornithologists who could work on a field guide to the birds of Armenia. Combining field observations from 1992 to 1995 with information in Institute of Zoology files dating to 1918, the project's ornithologists identified 346 resident and migrant species within the borders of Armenia. AUA provided all the logistical support for the project, which brought together ornithologists from the U.S., Armenia, Russia and the U.K. The Field Guide to the Birds of Armenia was published in English in 1997. An Armenian translation followed, along with the Handbook of the Birds of Armenia, which contains more technical detail than the Field Guide. The Birds of Armenia office at AUA continues to provide consulting services and guided visits to bird sanctuaries.

The above environmental awareness and conservation efforts have produced advances toward a better environment in Armenia. AUA student research projects have determined sources and levels of toxic metals in Yerevan and Lake Sevan. Environmental Education Conferences hosted by ECRC have built consensus around the need for a new environmental education agenda for Armenia, an agenda under consideration in the Armenian Parliament. ECRC's work with NGOs and international organizations has directly led to Armenia's ratification of the Aarhus Convention, committing the government to providing all citizens with access to information about Armenia's environment (see ECRC study on impact).

Turpanjian Program for Adult Education and Rural Development *(established 2006)*
The purpose of this initiative is to promote sustained economic growth through investments in both capacity building and education. The Program, which will be delivered through a partnership of local Armenian institutions, will result in rural development through adult education, an improved standard of living throughout Armenia, and job creation in rural areas. The Program objectives are: to develop a system of regional research and adult education that aims to lead and sustain economic growth, to develop economic opportunities, primarily in rural Armenia, for the largest number of families, and to create an environment of entrepreneurship in rural Armenia. Work on the Program has just begun with the opening of two offices in Gyumri and Stepanakert.
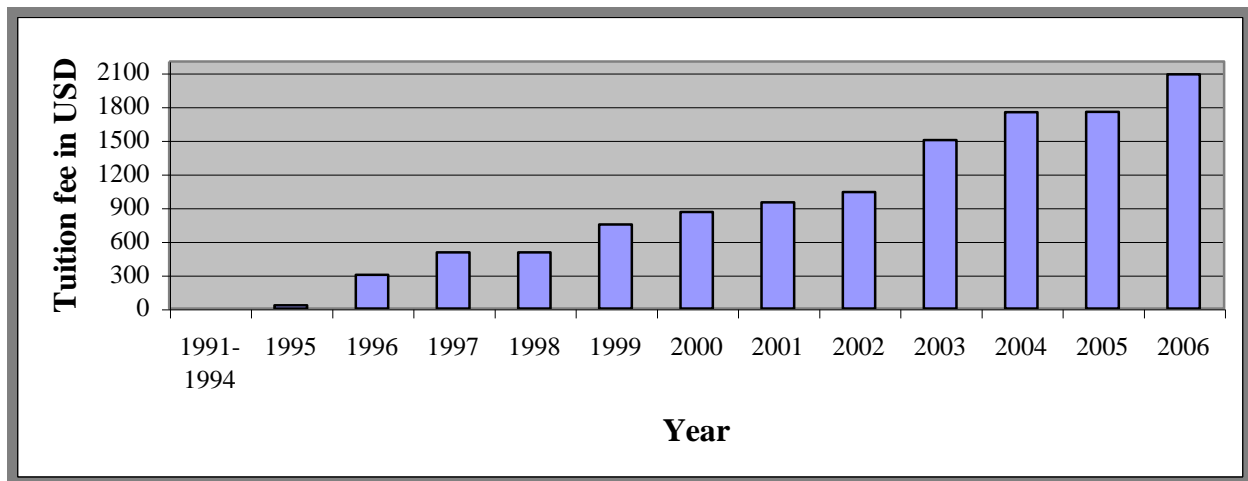
AUA and Armenia – A Look Back

A remarkable confluence of factors contributed to AUA's growth during its first fifteen years: political change in the USSR, financial support from the Armenian General Benevolent Union and from private donors, funding from USAID and ASHA, the donation of a facility by the Armenian government, and the readiness of a pool of students to look to new economic, educational, legal, and business models for building "a democratic state based on social justice and the rule of law[3]." The challenges were significant. Among them: shortages of electricity and water in the early years, escalating costs of operation in more recent times, inability of some prospective students to afford the cost of attending AUA, shortage of office and classroom space, inadequate means of communication.

Over the years, AUA has addressed each of those problems. The first AUA class of 101 students was fully subsidized, as students lacked the financial means to pay any fees. Tuition was set at $2000 per quarter ($6000 per year) and has remained at that level throughout AUA's history. The subsidy, however—which applies to citizens and long-term residents of Armenia, and to CIS citizens—has decreased over time; today citizens and long-term residents of Armenia pay $2085 per year and CIS citizens pay $2500 per year. At the same time, AUA has introduced scholarship and loan programs to make AUA more easily accessible for low-income students. The following table shows the gradual increase in annual tuition for citizens and long-term residents of Armenia.

<u>Table 3.</u> Increases in Tuition for Citizens and Long-Term Residents of Armenia. 1991-2006

Since 1991, AUA has also expanded its physical facilities with the addition of three buildings. At this time, AUA's main facility for delivery of academic programs is the Baghramian Building. Several years ago, AUA remodeled the Baghramian Building to increase space for faculty offices and classrooms. Construction of the new classroom facility, the Paramaz Avedisian Building,

---

[3] The Constitution of the Republic of Armenia, Article 1.

will further ease the shortage of space for academic programs. The AUA Business Center, which began operations in 2002, functions as a revenue-producing conference center. The Barsam Building was donated to AUA in 2005. It is a former hotel, currently being remodeled by AUA to include housing for students and faculty, hotel space, and commercial rental space. One idea under consideration is utilizing space in the Barsam Building to establish a bed-and-breakfast operation that could serve as a pilot for business under the Turpanjian Adult Education and Rural Development Initiative, (see pp. 42, above) and could also train staff that would share their experiences in rural areas.

In the early years, communications between Armenia and California were limited to telephone and fax. Today, AUA has a wireless network within the Baghramian Building and surrounding community. New facilities at the AUA Center and the Baghramian Building allow for high band-width Internet video feeds, linking sites around the globe to classrooms and conference rooms for small group meetings and seminars. On a smaller scale, web cams and voice-over IP support individual meetings and student advising activities. Faculty and administrators can communicate with ease across twelve time zones.

Although the supply of electricity in Yerevan is now less problematic than in the early 90s, AUA has installed its own generators as insurance against power disruptions.

AUA now possesses physical facilities, academic and administrative infrastructure tested and strengthened through the accreditation process, and planning tools that will allow it to realize its vision of becoming a leading regional resource of higher education.

AUA and Armenia—A Look Forward
When first established, AUA made the decision to support the local higher education institutions by offering academic programs that would complement, rather than compete with, curricular offerings in the local state universities. At that time, AUA was unique in being the first private institution in Armenia. The past decade has witnessed the creation of over ninety private universities in Armenia and the addition of programs similar to those offered at AUA, e.g., business and law, at both private and state institutions. AUA is no longer unique and faces numerous competitors. In addition to 13 state and 5 foreign joint-venture institutions, there are fifty-five private institutions in Armenia, including 9 Armenian branches of Russian state and private institutions. Out of the fifty-five private institutions, thirty-three are fully accredited by the Ministry of Education of Armenia and four are accredited partially (by specialties). Tuition fee ranges from $250 to $1100, the average being $600. AUA's competitive advantage must come through the excellence, currency, and applicability of its programs. In order to maintain excellence in its academic programs, AUA must insure that a quality control system is in place and functioning. The University-wide Assessment and Evaluation Plan adopted in 2006 is a major component of that system. Programs will be current so long as AUA faculty are active participants in advancing knowledge in their field. In that connection, the University will need to offer to faculty opportunities for professional development, e.g., attendance at professional meetings, research support, and incentives/rewards for significant contributions to knowledge in their field. Programs will be applicable so long as AUA faculty identify regional needs and develop educational and research programs to address those needs.

Armenia's annual economic growth rates are among the highest in the former Soviet Union, the Armenian government has targeted sectors for economic development, barriers to communication and travel are disappearing, and a new generation of Armenians is demanding more rapid and broader change. As Armenia moves toward economic, legal, and political integration at the international level, it will need a cadre of professionals with the education and tools to effectively represent Armenia's interests in the global community. The American University of Armenia can play a critical role by providing the education and training that those professionals will require. Educational programs at AUA must include both graduate education for the first time degree candidate and for professionals seeking continuing education or re-training. To attract students, faculty and researchers, however, AUA must position itself as the outstanding educational institution in the region that is the source of experimentation, analysis, synthesis and intellectual discussion and research.

AUA's unique contributions to Armenia are described in Chapter Five above. However, the University is cognizant of its responsibilities as the unique representative of American higher education in the Caucasus region. As we project the future role of AUA in an evolving Armenia and region, the University needs to keep the following in perspective:

The Inherent Value of the Education it Offers
Students may come to AUA in order to get better job opportunities; however, it is the responsibility of AUA faculty to insure that students receive an education that is of value independently from whatever job market it serves. A surgeon who graduates from AUA's MPH program will be a better surgeon even if he/she does not get a job in public health. Graduates of the LL.M. program will definitely be better policy makers even if they do not practice law. The University's programs need to provide a strong core preparation as well as the breadth that will help graduates for both vertical and horizontal mobility in their careers. As stated earlier, AUA is about the transformation of the individual and through the individual the communities from which he/she comes. This transformation is achieved through an emphasis on personal value systems but also through the development of options for the individual and society. AUA is about introducing alternative choices and the ability to make the right choice. AUA is about quality of professional and educational practice. AUA provides an environment where new technologies are developed and adapted, but we also are concerned with the development of the sociology that needs to be an integral part of every new technology. Without the appropriate social developments technology will not be able to impact the community.

The University in a Global Society
The University was developed as an institution that has global roots, whether through engagement of an international faculty and the University of California, support of the worldwide Armenian Diaspora, or the US Agency for International Development. AUA's graduates need to be an integral part of the global society and the economic opportunities it offers for them and their communities. AUA can achieve such a global perspective in its programs by:

- *Diversification of the student body through regional and international recruitment;*
- *Continuing diversity of the faculty and academic resources*;

- *Creating opportunities for exposure to a diversity of ideas;*
- *Improving cross-disciplinary fertilization.*

Integration of Western Perspectives with Eastern Cultural Identity
As Armenia moves forward to become a vibrant economy in its region, it will continue to adopt a Western-European mode of developing its various sectors of production. Within such an evolving environment, AUA must insure that the process does not lead to an alienation from the rich culture and heritage that Armenia and its region embody. That is one of the reasons why AUA was established in Armenia. The funds which were initially made available to establish the University could very well have been used to provide scholarships to help young men and women from Armenia study in the U.S. With establishment of the University in Armenia, the Western perspective has taken root in the rich soil of Armenia's cultural heritage. AUA has demonstrated that the technology it introduces can also enrich and expand the possibilities of the local culture. The Digital Library of Classical Armenian literature is a prime example of this possibility. The University should aim at providing a forum for enrichment whether it is through such projects as the Digital Library or through providing a podium for a lecture by an Armenian scholar to present his research about the parallels of the poetic language of the medieval giant Saint Gregory of Nareg and the music of J.S. Bach.

The following recommendations are aimed at assisting AUA to achieve pre-eminence in the region. The recommendations are reflected in the AUA Strategic Plan.

- **Recommendation 1**: Identify educational needs in the Caucasus region and determine which of these needs can be met by AUA.
- **Recommendation 2**: Develop major research agendas that contribute to economic, political, and social development in Armenia and the region and that integrate research center activities in the academic program.
- **Recommendation 3**: Implement enrollment management planning that projects future enrollment trends and develops enrollment targets based on institutional and other data, including the review and implementation of plans for regional recruitment, both inside and outside Armenia.
- **Recommendation 4**: Provide opportunities for professional development of AUA faculty.
- **Recommendation 5**: Develop ways to enrich the AUA educational experience by attending to sociological, cultural, and other implications of new knowledge and technologies.
- **Recommendation 6**: Implement the integration of the Strategic and Fiscal Plans with new Development and Public Relations Plans.

Impact of the Accreditation Process
The self-reflection required by the accreditation process has been beneficial to the University in a number of ways. Specifically,
- strategic planning efforts are now more focused, as academic program development plans are aligned with realistic financial and development plans;
- data collection and analysis are now more systematic as a result of the Management Information System and the University-wide Assessment and Evaluation Plan;

- AUA has institutionalized assessment through structures such as the University-wide Assessment and Evaluation Plan, which defines a schedule of ongoing assessment activities tied to quality control and program improvement;
- Having understood the benefits of the direct evidence analysis exercise described in Chapter 3 above, AUA departments are now committed to the process of ongoing self-reflection and analysis to improve student learning.

The University is thus confident that the systems are in place to sustain the momentum generated through the Educational Effectiveness Review process. Equally important is the cultural change that the accreditation process has brought about. The concept of evidence-based conclusions and decisions is now a reality at AUA.

In summary, the accreditation process in general, and the Educational Effectiveness Review in particular have helped the University to develop processes for curricular, strategic, and financial planning, and tools to assess progress in achieving institutional goals. We believe that AUA has emerged from the accreditation process a stronger, more flexible, and more confident institution, one that is now well equipped to enter the next phase of its development.

APPENDIX A. University-wide Assessment and Evaluation Plan

	LEVEL	TASK	PERSONS RESPONSIBLE	QUESTIONS TO BE ADDRESSED/EVIDENCE	FREQUENCY	RESULTS REPORTED TO	RESPONSIBLE FOR IMPLEMENTING RECOMMENDED CHANGES	DATES OF IMPLEMENTATION
1	Institution	Review Mission Statement	Faculty Senate; Deans; Provost	Is the Statement aligned with institutional vision?	Annual	President; Trustees	Provost; Faculty Senate; Deans	2007
2	Department	Review of Individual Faculty Performance	Provost; Deans	Is the faculty member meeting the expectations for teaching, research, public service? Evidence: teaching evaluations; faculty evaluations; publications; outreach to community	Annual	President	Deans; Individual Faculty member	Review is at the end of each contract, starting at the end of Spring Quarter 2006.
3	Department/ Institution	Review of Academic Programs	Curriculum Committee, President	Where are the programs in the assessment process? Do they have components as stated in the departmental self-study in place? How are competencies, goals and learning objectives reflected in courses? Evidence: Departmental Self-Studies and updates, student portfolios, syllabi.	Every 3 years: 1st year - submission of departmental self-studies; Review of departmental criteria for admission (see point 7) 2nd year - review by Curriculum Committee and external peer reviewers. 3rd year - review of academic programs by Provost and President (see point 4). Review of University-wide criteria for admission (see point 8).	President; Provost, Faculty Senate	Deans, Faculty members	Spring 2006 - PH and DEP; Summer 2006 - LAW and PSIA; Fall 2006 - EC and MBA.

#								
4	Institution	Review of Academic Programs	Provost, President, Board of Trustees	Are the programs aligned with the institutional mission? Are the programs at least comparable to similar programs in U.S. universities? Evidence: qualifications of faculty; level of preparation of admitted students; applied research addressing local problems; quality of student work; self-studies of academic programs and audit reports.	Every 3 years	President; Faculty Senate; Board of Trustees/Education Committee	Provost; Deans; Faculty	2007
5	Institution/ Department	Assess Impact on Armenia -- Assessment of Programmatic Effectiveness	Provost; Deans; Associate Deans, Faculty Senate; Students, alumni.	What impact is the institution having on Armenia and the region? How is the program contributing to "sustained development" in Armenia? Evidence: Surveys of alumni and employers; data on employment of alumni; changes in external environment effected by research at AUA.	Every 2 years	President; Board of Trustees; news media	Provost; Deans, Associate Deans	March - May 2006
6	Department	Review of Learning Assessment Systems	Provost; Deans; Associate Deans	What systems are in place to assess educational effectiveness? What results have they produced? How are changes implemented? Evidence: "culminating" experience	Annual	President; Faculty Senate	Provost; Deans; Associate Deans	November - December 20 2006
7	Department	Review of Departmental Criteria for Admission	Provost; Deans; Associate Deans; Students; Registrar	Do current criteria yield adequate numbers of qualified students? Evidence: student profiles; admission/retention rates	Every 3 years	President; Faculty Senate	Deans; Associate Deans	2008

8	Institution	Review University-wide Criteria for Admission	Faculty Senate; Deans; Departmental Admissions Committees; University-wide Admissions Committee, Registrar	Do current criteria result in selection of students with skills and aptitude needed to meet programs' expectations?	Every 3 years	President;	Academic Senate	2009
9	Institution	Review Admissions Process	University-wide Admissions Committee; Faculty Senate, Registrar	How can the process be more efficient? <u>Evidence:</u> student and faculty surveys re efficiency of Admissions Office; admission/retention rates.	Every 3 years	President	Director of Admissions; Admissions Office	
10	Institution	Performance Review of Individual Deans	President; Provost	Is the Dean meeting institutional expectations for leadership? <u>Evidence:</u> interviews with departmental faculty, students, alumni; external peer reviews of department; impact of the program on Armenia and the region.	Every 3 years	President; Provost; Board of Trustees/Education Committee	Provost; Dean	Summer 2007
11	Institution	Review Range of Programs Offered	Faculty Senate; Deans	Is the range of programs aligned with the institutional mission? Need to add or discontinue programs? <u>Evidence:</u> Enrollment data; Armenia's needs; quality of existing programs	Every 3 years	President; Trustees	Provost; Faculty	2007
12	Institution	Performance Evaluation of Provost	President	Is the Provost meeting institutional expectations for leadership? <u>Evidence:</u> interviews with Deans, departmental faculty, administration, students.	Every 3 years	President; Trustees	Provost, President	

13	Institution	Performance Evaluation of President	Board of Trustees	Is the President meeting expectations of leadership? How well is the University achieving its mission? Evidence: progress of the University	Every 5 years	Board of Trustees	President; Board of Trustees	2007
14	Institution	Structure and functioning of Board of Trustees	Board of Trustees	Is the structure and functioning of the Board of Trustees adequate to its responsibilities? Evidence: Board and committee minutes	Every 5 years	Board of Trustees	Chairman of the Board; Board of Trustees	2008
15	Institution	Performance Evaluations of Individual Staff	Department Heads	Has the staff member met or exceeded expectations stated in his/her job description? Evidence: written self-appraisal; supervisor's written evaluation	Annual	Department heads; individual staff; Director of Administration; Individual personnel file	Individual staff member; supervisors; department heads	Review is at the end of each year
16	Institution	Performance Evaluation of Registrar/Director of Student Affairs	Director of Admission, Provost	Has the Registrar met or exceeded expectations stated in his/her job description? Evidence: Enrollment statistics, student academic records, other indicators of student services.	Every 2 years	President; Board of Trustees	Registrar, Provost	2008

APPENDIX B. Inventory of Educational Effectiveness Indicators

CATEGORY	1. Have formal learning outcomes been developed?	2. Where are these learning outcomes published? *(Please specify)*	3. Other than GPA, what data/evidence is used to determine that graduates have achieved stated outcomes for the degree? (e.g., capstone course, portfolio review, licensure examination)	4. Who interprets the evidence? What is the process?	5. How are the findings used?	6. Date of last program review for this degree program
At the institutional level:	Learning outcomes are stated in the University's mission statement	Catalog, website	University-wide employer and alumni surveys, self-studies of the academic programs, program reviews, reports of the academic programs on the impact of programs and students in Armenia and the region.	In year three of the University Assessment and Evaluation Plan, the Faculty Senate, President, Provost/Vice President, and Board of Trustees review the self-studies and formal reviews of the academic programs.	Findings are used to develop the AUA strategic and fiscal plans, including a formal review of the University's mission.	
List each degree program:						
Master of Engineering in Industrial Engineering and Systems Management	**YES**	Departmental Website, course syllabi, Departmental Self Studies	Direct: Study completed in 2006 and planned for 2007 evaluating the Master Project/Thesis (capstone experience). Indirect: Annual exit survey of graduating students administered by the College of Engineering, University-wide alumni survey, University-wide employer survey, employment data collected by career center, needs analysis on competitive programs performed for the self-study.	Dean, Associate Program Director, and faculty of the academic program through self-studies and program review process, Office of Institutional Research.	Findings are used by the faculty to improve student learning. For example, as a result of an analysis of the capstone, there will be co-supervision of masters theses by two faculty members when such action is likely to improve the quality of the thesis and ensure the synthesis of concepts.	July 2006

Master of Science in Computer and Information Science	YES	Departmental Website, course syllabi, Departmental Self Studies	Direct: Study completed in 2006 and planned for 2007 evaluating the Master Project/Thesis (capstone experience). Indirect: Annual exit survey of graduating students administered by the College of Engineering, University-wide alumni survey, University-wide employer survey, employment data collected by career center, needs analysis on competitive programs performed for the self-study, survey of potential employers administered by the College of Engineering.	Dean, Program Director, Associate Program Director, and faculty of the academic program through self-studies and program review process, Office of Institutional Research.	Findings are used by the faculty to improve student learning. For example, interviews with employers and a curriculum review resulted in a major revision of the program making the curriculum more flexible and eliminating the two-track system.	July 2006
Master of Business Administration	YES	Course syllabi, Departmental Self Studies	Direct: Study evaluating the capstone is in progress. Plan for 2007 under development. Indirect: Interviews with graduates and employers for the self-study, University-wide employer survey, needs assessment for the self-study collected data on competitive programs, surveys of internships sponsors.	Dean, Associate Dean, and faculty of the academic program through self-studies and program review process, Office of Institutional Research.	Findings are used by the faculty to improve student learning. For example, resume building and interviewing skills seminars will be introduced for the internship project.	October 2006
Master of Political Science and International Affairs	YES	Departmental Website, Student Handbook, course syllabi, Departmental Self Studies	Direct: Study completed in 2006 and planned for 2007 to evaluate Master's Essay, student portfolios of work. Indirect: Graduating Students Exit Survey administered by School of Political Science and International Affairs, University-wide alumni survey, University-wide employer survey, needs assessment for the self-study collected data on competitive programs, focus groups with graduates and	Dean and faculty of the academic program through self-studies and program review process, Office of Institutional Research.	Findings are used by the faculty to improve student learning. For example, as a result of indirect data collected in the self-study and a formal review of the curriculum, the two economic courses have been redesigned with new	July 2006

			students, employment data from career center, surveys of internship holders and sponsors, student evaluation of Master's Essay.		objectives and learning outcomes.	
Master of Public Health	YES	Student Handbook, course syllabi, Departmental Self Studies	<u>Direct</u>: Evaluation of MPH thesis project. Plan for 2007 under development. <u>Indirect</u>: Exit survey of graduating students and alumni survey administered by College of Health Sciences, University-wide alumni survey, University-wide employer survey, needs assessment for the self-study collected data on competitive programs, employment data from career center, monitoring achievements of graduates, research publications and participation in scientific conferences	Dean, Associate Dean, Associate Program Director, and faculty of the academic programs through self-studies and program review process, Office of Institutional Research.	Findings are used by the faculty to improve student learning. For example, changes in course sequencing were made in response to student comments provided in the interviews in order to assist students in their theses projects.	May 2006
Master of Laws	YES	Departmental Website, course syllabi, Departmental Self Studies	<u>Direct</u>: Evaluation of Legal Writing Program/Master's Essay, student portfolios of work <u>Indirect</u>: University-wide employer survey, Department of Law survey of alumni and students, University-wide alumni survey, employment data from career center	Dean, Assistant Dean, and faculty of the academic program through self-studies and program review process, Office of Institutional Research.	Findings are used by the faculty to improve student learning. For example, analysis of student work led the Department to the decision to develop new materials for the Legal Methods and Analysis course so that it includes a mix of both U.S., International as well as Armenian legal case studies.	October 2006

Master of Comparative Legal Studies	YES	Departmental Website, course syllabi, Departmental Self Studies	Direct: Evaluation of Legal Writing Program/Master's Essay, student portfolios of work Indirect: University-wide employer survey, Department of Law survey of alumni and students, University-wide alumni survey, employment data from career center	Dean, Assistant Dean, and faculty of the academic programs through self-studies and program review process, Office of Institutional Research.	October 2006
Master of Arts in Teaching English as a Foreign Language	YES	Course syllabi, Departmental Self Studies	Direct: Study evaluating Master's Thesis in progress, student portfolios. Indirect: Student and alumni surveys administered by Department of English, alumni employment data provided by Career Center, University-wide employer survey, University-wide alumni survey, needs assessment for the self-study collected data on competitive programs.	Dean, Associate Dean, and faculty of the academic programs through self-studies and program review process, Office of Institutional Research.	Findings are used by the faculty to improve student learning. For example, a two-unit basic statistics course has been added to the curriculum as a result of data collected in the self-study in order to improve the capstone.	May 2006