EVALUATION

Final Performance Evaluation of the Leadership for Education and Development Scholarship Program (LEAD)

November 13, 2016

FINAL PERFORMANCE EVALUATION OF THE LEADERSHIP FOR EDUCATION AND DEVELOPMENT SCHOLARSHIP PROGRAM (LEAD)

November 13, 2016
Task Order No. AID-263-TO-16-00004

ACKNOWLEDGEMENTS

COVER PHOTO: A group photo celebrating the successful completion of the USAID-funded LEAD program. The event was attended by USAID Mission Director and officials, Egyptian government representatives, partner NGOs, AUC faculty and staff, and LEAD alumni. This event took place on April 20, 2016 in Moataz Al Alfi Hall, AUC New Cairo campus. The photo was taken by the AUC Photographer is Mohamed Fahmi.

CONTENTS

ACRONYMS

AUC	The American University in Cairo
BCR	Benefit-Cost Ratio
BOT	Board of Trustees
BUE	British University in Egypt
CBA	Cost-Benefit Analysis
DEC	USAID Development Experience Clearinghouse
EQ	Evaluation Question
FUE	Future University in Egypt
FYE	First Year Experience
GI	Group interview
GOE	Government of Egypt
GPA	Grade point average
GUC	German University in Cairo
4ICU	4International Colleges and Universities
IRR	Internal rate of return
ISSA	AUC's Office of International Students and Study Abroad
KII	Key informant interview
LEAD	Leadership for Education and Development Scholarship Program
LOTUS	Leadership Opportunity Transforming University Students Scholarship Program
LPI	Leadership Performance Index
LSP	Local Scholarship Program
MEK	Misr El Kheir
MOHESR	Ministry of Higher Education and Scientific Research
MOP	Ministry of Planning
MSA	Modern Sciences and Arts
NGO	Non-governmental organization
NPV	Net Present Value
NSCE	North South Consultants Exchange
OSD	AUC's Office of Student Development
QED	The QED Group, LLC
QS	Quacquarelli Symonds
ROI	Return on investment
SDR	Social discount rate
SIMPLE	Services to Improve Performance Management, Enhance Learning and Evaluation
SOS	AUC's Support Office for Students
SOW	Statement of Work
USAID	US Agency for International Development

EXECUTIVE SUMMARY

In 2004, USAID/Egypt began funding the Leadership for Education and Development (LEAD) Scholarship Program. Partnering with the American University in Cairo (AUC), 414 beneficiaries studied at one of Egypt's top universities. AUC selected bright, motivated young people and launched them into promising careers, equipped with a high-quality education in which they learned to think critically and solve problems creatively. As AUC students, they honed their English language, leadership, and other soft skills. They demonstrated great potential in their applications to the program and their experience at AUC both boosted their confidence to pursue ambitious careers and strengthened their commitment to community service. Alumni describe the experience as "transformative" and USAID should watch with interest how these future leaders help transform Egypt.

EVALUATION PURPOSE AND QUESTIONS

The purpose of this evaluation is to provide USAID/Egypt with information to make decisions about LEAD's efficacy and relative importance in the higher education portfolio. It is hoped that the findings of this report are taken into consideration in designing future scholarships programs. The primary audiences are the Ministry of Higher Education and Scientific Research (MOHESR) and USAID. The final evaluation report will be accessible to the public via USAID's Development Experience Clearinghouse (DEC) within three months of report completion.

Although LEAD began in 2004, the statement of work (SOW) for this evaluation pertains to the cooperative agreement that was in place from 2007 to 2016. Only six of the eight LEAD cohorts are evaluated here; i.e., Cohorts 3 through 8. The scope tasked the team with answering five questions:
1. To what extent are the students and alumni of the LEAD equipped with the skills to potentially assume positions of leadership in academia, government, industry and business?
2. To what extent are the students and alumni satisfied with the program services (English Language training, computer training, team building, and library and research skills)?
3. To what extent has the LEAD succeeded to achieve gender balance with the program services (English Language training; computer training; cohort development, team-building, library and research skills, study skills, etc.)?
4. What is the Return on Investment of the LEAD?
5. To what extent does AUC have the institutional capacity and resources to achieve sustainable results?

PROJECT BACKGROUND

LEAD was designed to support economically disadvantaged youth who cannot afford quality education. The scholarship program targeted promising, but economically disadvantaged, students from public schools in all 27 governorates. The students had achieved a minimum score of 85% on the *Thanaweya Amma* and demonstrated leadership and community participation during their pre-university years.

By providing disadvantaged youth with the opportunity to earn an undergraduate degree at AUC, LEAD was supporting the development hypothesis that such opportunities will contribute to a better educated workforce that responds to Egypt's labor market needs. The cooperative agreement with AUC states that LEAD's primary objectives were to: (a) train and equip these students with the skills necessary to become leaders in their societies, and (b) enable students to become agents of change in Egypt's development. The agreement did not specify that students had to return to their home governorates upon graduation, nor did it target specific development sectors, so students were free to choose any field of study from among the majors offered at AUC.

From 2007-2016, LEAD offered full scholarships to 308 students; 154 females and 154 males. The scholarship included tuition, fees, books, health insurance, housing, monthly allowance, English language

training, and access to all AUC services. Some students also participated in US Study Abroad, attended international conferences, or served as interns to NGOs and businesses. In addition, LEAD held an annual leadership conference, retreats, training in leadership, and a variety of other activities. Each cohort was assigned a student life coordinator to provide guidance and support.

EVALUATION METHODS AND LIMITATIONS

The team used a mix of quantitative and qualitative data collection and analysis methods. The evaluation began with a document review, followed by the development of data collection tools. The team relied on data from an online survey (n=104), LEAD databases, qualitative data from group discussions with alumni (n=29), and interviews with individuals from USAID/Egypt, LEAD, AUC, hosts of internships and US Study Abroad, and employers (n=54) to answer questions 1, 2, 3, and 5. Data collection was a challenge since LEAD had ended, AUC was not in session during data collection, many stakeholders were on vacation, contact lists were incomplete and contained outdated information, and alumni displayed survey fatigue, as demonstrated in declining response rates to LEAD annual surveys. For example, LEAD staff provided data for Cohorts 4-8 before LEAD ended. Unfortunately, details about Grade Point Average (GPA) and Leadership Performance Index (LPI) scores were missing for Cohort 3. Other missing data included contact information for some dismissed and withdrawn students. Also, contact information for alumni had not been maintained and was no longer accurate. This became apparent when the team attempted to contact alumni to participate in focus groups and respond to the online survey. The team reported these concerns to SIMPLE who reported them to USAID/Egypt.

The answer to Question 4 (Return on Investment [ROI]) was based on a Cost-Benefit Analysis (CBA). The CBA calculated three basic indicators: Net Present Value (NPV), Benefit/Cost (B/C) ratio, and Internal Rate of Return (IRR). Calculating the costs was straightforward, but quantifying the benefits was challenging and required many assumptions about the Egyptian labor market and social value of higher education. It was also problematic to benchmark the ROI analysis in the absence of a counterfactual or information about alternative investment options.

FINDINGS AND CONCLUSIONS

Evaluation Question (EQ1): To what extent are students and alumni of LEAD equipped with the skills to potentially assume positions of leadership in academia, government, industry and business?

Summary of key EQ1 findings: A majority of alumni thought AUC-managed activities and services, more so than LEAD-managed activities, "contributed" or "fully contributed" to development of their leadership skills (see Table 1 below). Overall ratings for US Study Abroad (managed by AUC but funded by USAID and Orascom Construction Industries), extracurricular activities, and academic courses were 77.8%, 60%, and 59.4%, respectively, followed by LEAD-managed retreats (44.4%) and student life coordinators (44.4%). Very few alumni (18.6%) thought the LPI was an effective way of monitoring their engagement in leadership-related activities.

LEAD's support package included: (a) a full academic scholarship, including English language courses as needed , (b) student life coordinators to provide guidance and support, (c) annual conferences designed to develop and practice leadership skills and set future goals, (d) retreats to other governorates to broadened students' understanding of Egypt and strengthened cohort team building experiences, (e) leadership training and civic engagement activities, (f) USAID/Egypt-funded US Study Abroad, international conferences, and internships, and (g) other LEAD-specific activities (e.g., book review sessions; and meet-the-expert sessions on current affairs). Additionally, LEAD students had access to the full range of AUC services, including First Year Experience (FYE) orientation, library and research skill development, mentoring and study skills development, psychological counseling, career counseling, computer support, and extracurricular activities.

LEAD alumni compare favorably to their AUC colleagues in English language, leadership, and other soft skills that are valued in the private sector in Greater Cairo/Giza and abroad. The largest percentage of LEAD alumni surveyed (30%) specified that they are working in international or multinational companies, followed by Egyptian companies (28.6%), international/multinational organizations (21.4%), NGOs (4.3%), and the public sector (5.7%). Few alumni (11%) currently live in governorates outside the Cairo/Giza area, with 68.3% currently residing in Cairo/Giza and 20.7% outside of Egypt. Existing job titles indicate that alumni have already begun assuming positions of leadership in their places of work.

Table 1: LEAD-Managed compared to AUC-Managed Services
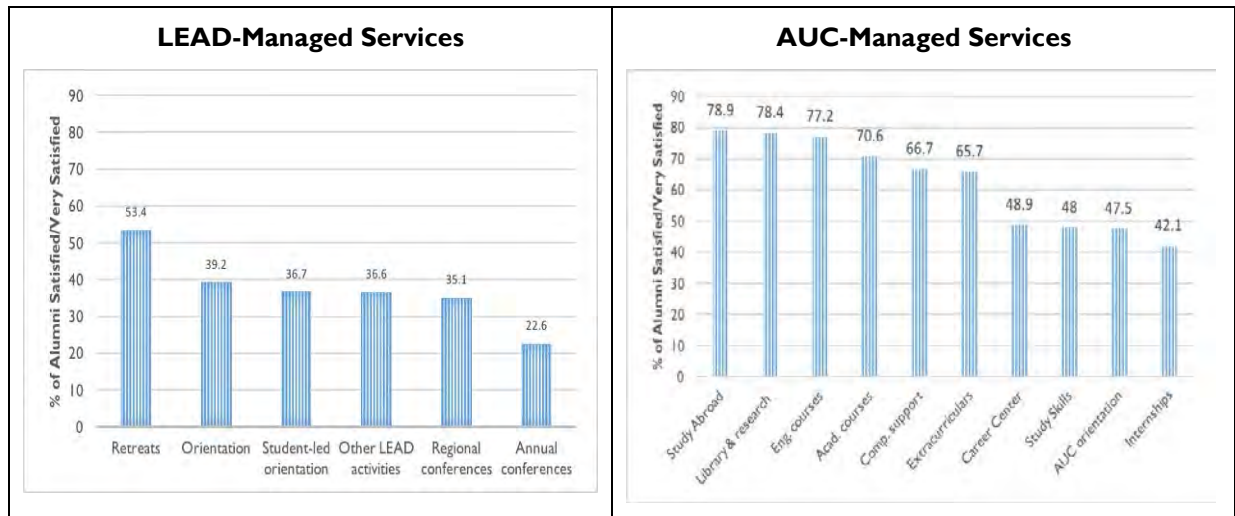
Conclusions EQ1: LEAD alumni are well equipped with the skills to potentially assume positions of leadership, with alumni crediting AUC-managed activities with making the greatest contribution to development of their leadership skills. Furthermore, alumni's current career paths suggest they are assuming positions of leadership in the private sector in Cairo/Giza and abroad, though less likely to assume positions in the government or in their home governorates. To further illustrate this point, the majority of alumni (58.6%) who responded to the survey work in the private sector. A significant number (35.7%) work in NGOs, as well as international and multinational organizations, while very few (5.7%) work in the public sector/government.

Evaluation Question 2 (EQ2): To what extent are students and alumni satisfied with the program services (English language training, computer training, team building, and library and research skills)?

Summary of key EQ2 findings: Regarding the overall LEAD experience, 67% of alumni considered it positive/extremely positive and 94.7% are likely to recommend such a program to others. The graphs above show that alumni were more satisfied with AUC-managed activities than LEAD-managed activities. LEAD students who participated in US Study Abroad, which was funded by USAID/Egypt and Orascom Construction Industries and managed by AUC, gave it the highest satisfaction rating of all the activities (78.9%). Alumni were also very satisfied with library and research skill development (78.4%), English language courses (77.2%), and academic courses (70.6%). Of LEAD-managed services, retreats ranked the highest (53.4%), followed by staff-led and student-led orientations at 39.2% and 36.7% respectively.

Conclusions EQ2: While LEAD sought student feedback and modified the program over time in response, alumni were only minimally satisfied with LEAD-managed activities/services. LEAD missed the opportunity to provide a better experience for students in two key areas: orientation and student life coordinators. Fully effective LEAD orientations and student life coordinators would have better addressed the unique challenges of LEAD students and helped them adjust to their new environment.

Evaluation Question 3(EQ3): To what extent has lead succeeded to achieve gender balance with the program services (English language training, computer training, cohort development, team building, library and research skills, study skills, etc.)?

Summary of key EQ3 findings: An equal number of females and males (154 each) were admitted to the LEAD program. Although there were no reported gender differences in services offered, there was a statistically significant difference between genders on the LPI, GPA, US Study Abroad, and graduation rates.[1] Similarly, 61.1% of those dismissed from LEAD were males (n=27).

Conclusions EQ3: LEAD succeeded in achieving gender balance in selection of scholarship recipients and provision of program services. Females exceeded male performance on (a) LPI scores, (b) enrollment in US study abroad, and (c) graduation rates but are relatively comparable on cumulative GPAs; i.e., equivalent to a 0.078 higher cumulative GPA for females across Cohorts 4 - 8.

Evaluation Question 4 (EQ4): What is the return on investment of LEAD?

Summary of key EQ4 findings: The Internal rate of return (IRR) is estimated to be an average of 18% for all LEAD graduates. The lowest IRR is for graduates from the School of Humanities and Social Sciences (11%) and the highest for students from science and engineering (19%). The average IRR is double the social discount rate of 8% and falls within the estimated range of 18-21% for private/public university graduates when lifetime earnings are forecast equal to LEAD graduates. While costs were relatively straightforward to calculate, non-monetary benefits were not quantifiable and, thus, not included in the analysis. Had they been included, the IRR for LEAD graduates would have been higher than 18%.

Conclusions EQ4: Investing in LEAD is considered an acceptable opportunity cost of capital from the standpoint of Egypt's national economy. Moreover, investments in higher education at other private or public universities might yield a higher IRR, but not necessarily the same employment results.

Evaluation Question 5 (EQ5): To what extent does AUC have the institutional capacity and resources to achieve sustainable results?

Summary of key EQ5 findings: AUC has demonstrated its commitment to supporting financially disadvantaged students through its strategic plan and efforts to increase its share of LEAD program costs. The university's institutional capacity includes a full range of services and activities to help students from socio-economically disadvantaged backgrounds adjust to AUC and succeed in their studies. These services help make it one of Egypt's top-rated universities, but also the one with the highest tuition.

AUC utilizes several internal mechanisms to assist disadvantaged students. These include full-tuition scholarships to 20 students each year under the Public School Scholarship Fund (PSSF), scholarships to five Upper Egyptians under Empower, and the shift from merit- to needs-based financial assistance. AUC has also been successful in securing resources from external sources such as Al-Ghurair Foundation, Orascom Construction Industries, and Misr El-Kheir.

Conclusions EQ5: AUC has the institutional capacity and commitment to sustain a LEAD-type scholarship program, but limited internal funds for assisting disadvantaged students. Still, the university is capable of attracting external funding for such scholarship programs, though not of the same scale as LEAD. Given AUC's high tuition cost, it may not be an appropriate option for donors wishing to

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[1] The average LPI scores for females in Cohorts 4-8 (n=103) was 2.81 out of a maximum possible score of 4.0 and 2.60 for males (n=97). Females (n=137) represent 51.5% of the graduates and males 48.5% (n=129). LEAD records also show that the average cumulative GPA for females in Cohorts 4-8 (n=114) was 3.276 on a 4-point scale and 3.198 for males (n=104).

maximize the number of scholarships. It is currently the only option in Egypt, however, if donors wish to fund liberal arts education at a top-ranked university.

RECOMMENDATIONS

As the LEAD program is now completed, actionable recommendations for the implementing partner are no longer relevant. The recommendations, therefore, focus on broad issues that USAID/Egypt should consider when designing future scholarship programs. The overarching recommendation is that USAID/Egypt consider what they wish to achieve with future scholarship programs. This will drive other decisions.

If USAID wishes to prioritize development of potential leaders in the private sector in Egypt and abroad:
Recommendation 1: A future program should consider funding scholarships at universities where students graduate with strong English language and soft skills that are valued in the private sector, especially multinational companies.

If USAID wishes to prioritize development of potential leaders in the government and NGO sectors:
Recommendation 2: A future program should consider funding scholarship programs that focus on ways to keep students connected to Egypt and their communities, e.g., serving-learning experiences in home governorates where students were volunteering before leaving for university, practicums or capstone projects that encourage students to contribute to Egypt's development, and guidance on re-integrating back into students' home communities.

If USAID wishes to continue funding scholarships at AUC, but at reduced costs:
Recommendation 3: Minimize the support package for AUC to include only:
- Tuition, books, housing, living allowances, and other required fees
- Funding for English language training and semester abroad
- Student life coordinators with higher caseloads and support from peer mentors, 5-10 years of relevant work experience, and job training
- A first semester orientation program that focuses on the unique challenges of LEAD-type scholars and how they can take advantage of the extracurricular activities and support offices at AUC
- An M&E system that uses feedback from students to improve services, and follow-up to ensure improvements are reported back to those students

If USAID wishes to achieve greater gender balance in program outcomes:
Recommendation 4: Future programs should monitor male students closely to ensure they are getting the support they need to continue their studies through graduation.

If USAID wishes to achieve a high ROI:
Recommendation 5: If USAID's overriding concern is to achieve higher returns on its investments in higher education, it may choose to restrict its financing of programs of study to focus on Engineering (19% internal rate of return) and Business (15% internal rate of return) as opposed to the Humanities and Social Sciences (11% internal rate of return) and/or the School of Humanities (11% internal rate of return). However, if USAID is interested in continuing to offer a broad range of programs of study to economically disadvantaged youth to a variety of high quality Egyptian private universities, USAID should not be dissuaded from investing in AUC, despite their higher costs, given that the internal rates of return across all programs of study, subjects of this evaluation, exceed the social discount rate.

Overall, the recommendation regarding sustainability is:
Recommendation 6: Given that AUC has the commitment, institutional capacity, and potential resources to sustain funding for disadvantaged students, consideration should be given to the extent to which additional funding to AUC is valuable in advancing USAID/Egypt's long-term strategy.

INTRODUCTION

The purpose of this final performance evaluation of the Leadership for Education and Development (LEAD) Scholarship Program is to "provide USAID/Egypt with information to make decisions about the program's efficacy and relative importance in the higher education portfolio. It will provide findings to be taken into consideration in the design of future scholarships programs" (Refer to Annex 1 for the Evaluation Statement of Work). Given this mandate and the fact that LEAD has already ended, the recommendations that follow each set of findings and conclusions will focus on the design of future programs rather than actionable recommendations for the implementing partner.

The audience for the evaluation is the Ministry of Higher Education and Scientific Research (MOHESR), USAID/Egypt – particularly the Office of Education and Health, USAID/Washington, and the implementing partner, the American University in Cairo (AUC). It will be shared with relevant stakeholders and submitted to the Development Experience Clearinghouse (DEC) for public access and use.

The statement of work lists five specific evaluation questions relevant to LEAD Cohorts 3-8:

1. To what extent are the students and alumni of the LEAD equipped with the skills to potentially assume positions of leadership in academia, government, industry, and business?
2. To what extent are the students and alumni satisfied with the program services (English language training, computer training, team building, and library and research skills)?
3. To what extent has the LEAD succeeded to achieve gender balance with the program services (English language training, computer training, cohort development, team building, library and research skills, study skills, etc.)?
4. What is the Return on Investment of the LEAD?
5. To what extent does AUC have the institutional capacity and resources to achieve sustainable results?

The main tasks – data collection and analysis – were undertaken with these five questions in mind. The methodology for these tasks is described below in the section, "Methods and Limitations," and further detailed in Annex II.

As the implementing partner (AUC) and a majority of the alumni are in Cairo, all evaluation tasks were completed in Cairo between August 1 and September 1, 2016. Data analysis and report writing took place from September 3-25, 2016.

The evaluation team was composed of six personnel: a team leader, two local evaluators, a statistician, and two economists. Support was provided by an evaluation manager from Services to Improve Performance Management, Enhance Learning and Evaluating (SIMPLE) and by The QED Group's subcontractor, North-South Consulting Exchange (NSCE).

BACKGROUND

IDENTIFYING INFORMATION

Title: Leadership for Education and Development (LEAD) Scholarship Program
Cooperative Agreement: 263-A-00-07-00023
Total Cost: USAID—US$37,788,144; Partner cost share: US$10,908,800
Dates: March, 7, 2007 to July 30, 2016
Implementing Partner: The American University in Cairo (AUC)
Geographic Coverage: All 27 governorates
Beneficiaries: 308 students admitted to program; 266 graduated to date

CONTEXT

The Egyptian higher education system continues to be challenged by inequitable access, poor quality, and gross inefficiencies. It is plagued by its poor reputation for producing graduates lacking in expert thinking and complex communication skills much needed in a knowledge-based economy. The Government of Egypt (GOE) and Egyptian policymakers recognize that a serious reform effort is needed to improve the higher education system in order to stay competitive in the global society.

In support of the GOE's efforts to reform its education systems, USAID/Egypt has provided significant support to primary and higher education in Egypt in the areas of school based reform, institutional support, and scholarships.

In Egypt, the quality of private education is reputed to be of higher quality than public education, with the gap narrowing at the secondary stage but widening tremendously at the higher education stage. Amidst this educational gap is the increasing divergence between more economically advantaged youth and their economically disadvantaged cohorts who cannot afford quality private education. These gaps result in the more economically advanced portion of the student population gaining access to the more productive and profitable jobs in Egypt and abroad.

USAID/Egypt's past and present scholarship programs—Leadership for Education and Development (LEAD) Scholarship Program, Leadership Opportunity Transforming University Students (LOTUS) Scholarship Program, and Local Scholarship Program (LSP)—have all aimed to address the education imbalance and develop the potential of economically disadvantaged students to contribute to the country's development.

USAID STRATEGY

LEAD contributes to USAID/Egypt's Development Objective 22, "Improved Access to Quality Education in Selected Governorates," by expanding access to quality higher education opportunities for excellent high school graduates from economically deprived backgrounds across Egypt. The program also contributes to Intermediate Result 22.1, "Access Expanded to Girls and Women," by equally targeting male and female students in each of the governorates for an equal number of scholarships.

The development hypothesis is that increased scholarship opportunities for targeted youth will contribute to a better educated workforce that responds to Egypt's labor market needs.

OVERVIEW OF LEAD

AUC started implementing LEAD in July 2004. The final LEAD agreement with AUC, the subject of this evaluation, was awarded in March 2007 and ended in July 2016. The original cooperative agreement states that LEAD's objectives were to:

1. Train and equip students with the necessary skills to become leaders in their societies.
2. Enable these students to actively contribute to development-oriented program services and activities.

LEAD allowed financially disadvantaged graduates of public high schools who scored a minimum of 85% on the *Thanaweya Amma* (i.e., final year exams for secondary students) to attend AUC. LEAD selected both a female and a male student annually from all 27 governorates and awarded them a full scholarship, except for Cohort 8 which was a smaller cohort; i.e., 30 scholarship recipients (15 females and 15 males) as opposed to 50 as in Cohorts 3 through 7. The scholarship included tuition, fees, books, medical insurance, housing, a monthly allowance, English language training, and an activities/support package. Selection of students was also based on their demonstrated leadership and community participation during the pre-university years. Once accepted to the program, students were free to choose their majors from among those offered at AUC. They were also expected to demonstrate leadership and engage in community service, as well as maintain a grade point average (GPA) of not less than 2.0 throughout the program.

LEAD's support package included:

- Student life coordinators assigned to each cohort to provide guidance and support
- Orientation to help students adjust to AUC
- Annual conferences that provided a venue for students to share their experiences and concerns, develop and practice leadership skills, and set future goals
- Retreats that broadened students' understanding of Egypt by way of travel to other governorates and strengthened cohorts through team building experiences
- Leadership and civic engagement activities, including training on topics such as the art of debating, project budgeting, emotional intelligence, and boosting self-esteem
- Other activities, for example, movie nights on individual, social, and developmental challenges; book review sessions; and meet-the-expert sessions on current affairs
- US Study Abroad,[1] international conferences, and internships for a portion of the students

LEAD students additionally had access to the full range of AUC services, including, First Year Experience (FYE) orientation, intensive English training, library and research skill development, mentoring and study skills development, psychological counseling, career counseling, computer support, and extracurricular activities.

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[1] The US Study Abroad component was managed by AUC's Office of International Students and Study Abroad, but funded by USAID/Egypt and Orascom Construction Industries.

METHODS & LIMITATIONS

The evaluation team used a mix of quantitative and qualitative data collection and analysis methods (refer to Annex II for a detailed description of the methods and limitations used in this evaluation, including documentation of steps taken to ensure confidentiality). The team began with a review of program documents (refer to Annex IV), followed by the development of quantitative and qualitative tools for data collection (refer to Annex III).

An online survey of alumni was the primary source of quantitative data used to evaluate questions 1, 2, 3, and 5. The survey was sent to students from Cohorts 3-8, as well as continuing and dismissed students and students who had voluntarily withdrawn. In total, 104 people responded to the survey, a 35% response rate.[2] The questions addressed alumni's satisfaction and perceptions, in addition to demographics. The team also accessed LEAD's alumni database for GPAs, LPI scores, and the employment status of graduates Cohorts 4-8. [3]

The qualitative tools aimed to collect information and perceptions to supplement and add context and depth to the statistical analysis. The team conducted group discussions with alumni, LEAD program staff, and AUC faculty and staff. Five discussion sessions with a total of 29 alumni were held. Fifty-four stakeholders were interviewed as a group or individually, and comprised former LEAD staff, AUC faculty and staff, members of AUC's Board of Trustees, representatives from organizations that hosted interns, direct supervisors and human resource managers, and host universities participating in the US Study Abroad component.

The main limitations with regard to evaluation questions 1, 2, 3, and 5 were as follows:

- **Timing:** SIMPLE obtained information from the LEAD Project Program Office prior to demobilization. However, the SIMPLE evaluation team requested additional documentation once they began their work, but accessing LEAD information was a challenge because the program had already ended. Moreover, former staff could only provide limited additional information. Data collection in August was compromised by the fact that AUC was not in session and potential informants were on vacation. This left the team little option but to work with a small sample size.
- **Alumni participation:** The contact information provided to the team was outdated. Furthermore, alumni may have been experiencing survey fatigue, as indicated in the constantly declining response rate to LEAD's annual surveys. To counter this, the team designed a short survey to be completed in less than ten minutes and made it available via Survey Monkey for three weeks. The team shared the link on social media groups for alumni and followed up several times. Twenty-one percent of those who completed the survey were unwilling to provide demographic information (n=22), thereby limiting the strength of the cross-tabulations.
- **Documentation:** LEAD staff provided GPA and LPI data for Cohorts 4-8 before LEAD ended. Unfortunately, details were missing for Cohort 3. Other missing data included contact information for some of the dismissed and withdrawn students. Additionally, contact information for alumni

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[2] According to "Survey Response Rates," on SurveyGizmo.com, internal surveys generally receive a 30-40% response rate (or more), compared with the 10-15% response rate for external surveys.

[3] The evaluation team's understanding is that the original SOW was to evaluate Cohorts 4-8 and LEAD responded by providing data associated with those cohorts. However, after LEAD ended, the SOW was changed to also include Cohort 3. Unfortunately, LEAD staff had moved on at this point and data had been turned over to USAID.

had not been maintained and was no longer accurate. This became apparent when the team attempted to contact alumni to participate in focus groups and respond to the online survey. The team reported these concerns to SIMPLE who in turn reported them to USAID/Egypt.

- **Correlations:** Twenty-two of the 104 alumni who responded to the online survey did not fill out the section on demographics. Most of those 22 had completed the rest of the survey but abandoned it before starting the demographic section, which began by asking their name. One of the explanations could be that respondents did not want to be connected to their previous responses or simply that they were no longer interested in completing the survey. Because they did not provide any demographic information, it was not possible to follow-up with them. This limited the team's ability to fully analyze the other responses, for example, by gender, cohort, and home governorate.

The team conducted a descriptive analysis on the quantitative data, using Stata 11 software, which focused on frequency distribution and correlations. A content analysis, focusing on themes and correlating them with gender and cohort, was done on the qualitative data.

A Cost-Benefit Analysis (CBA) was done on Question 4, Return on Investment (ROI), to evaluate the social profitability of the investments. This analysis covered the full span of the learning and lifetime earnings for LEAD alumni and emphasized the social (as opposed to private) profitability of investments/ recurrent costs incurred in the course of the LEAD scholarship program. The scope of the CBA analysis contained: (a) stream of program costs (for Cohorts 3-8) based on figures from LEAD's final modification budget; (b) estimates of LEAD graduates' lifetime earnings, which are estimates of age-earnings based on data derived from multi-sector salary surveys; and (c) the appropriate social discount rate (SDR), which reflects the opportunity cost of capital as estimated/used in the context of Egypt's national planning/ policymaking endeavors.

The team measured ROI by calculating the Internal Rate of Return (IRR), which reflects lifetime magnitudes of costs derived from LEAD's initial budget and 14 modifications, and estimated benefits of the lifetime earnings of LEAD graduates.[2] The IRR was benchmarked against a Social Discount Rate (SDR) of 8%,[3] classified by field of study (i.e., Business, Science and Engineering, Humanities and Social Sciences, and Global Affairs and Political Policy) and gender. The IRR is used as a CBA indicator to measure LEAD's lifetime social profitability of the investments. Moreover, an adjustment to lifetime earnings, based on idle times related to military service and job search (18 months for males and one year for females), was considered in the analysis.

There were several limitations to the ROI analysis:

- **Costs:** The full costs were limited by the absence of data on students' private monetary expenditures and opportunity costs of foregone earnings during their university studies.
- **Benefits:** The full benefits are limited to lifetime earnings, excluding earnings from the civil service and entrepreneurial activities. They are further limited to benefits that can easily be monetized and, therefore, do not include non-monetary and other non-quantifiable or intangible benefits. This is a common limitation faced by similar evaluations due to the uncertainties implied when assigning numerical values to those types of benefits.

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[2] The sources used were multi-sector salary surveys for Egypt (2014-2016), updated and consolidated by occupation and length of expertise.
[3] The 8% SDR rate is used in Egypt's Sustainable Development Strategy of 2015. This was confirmed in discussions with officials from the Ministry of Planning (MOP).

- **IRR's Benchmarking:** Limited by the absence of similar evaluations of higher education initiatives, counterfactual analysis was conducted using the average tuition fees and costs of private higher education in Egypt (as a proxy of the free market – non-subsidized cost), with different scenarios of lifetime earnings, compared with LEAD.

FINDINGS, CONCLUSIONS & RECOMMENDATIONS

EVALUATION QUESTION 1 (EQ1): TO WHAT EXTENT ARE STUDENTS AND ALUMNI OF LEAD EQUIPPED WITH THE SKILLS TO POTENTIALLY ASSUME POSITIONS OF LEADERSHIP IN ACADEMIA, GOVERNMENT, INDUSTRY, AND BUSINESS?

One of the objectives of LEAD, as stated in the cooperative agreement between USAID and AUC, is "to train and equip these students with the necessary skills to become leaders in their societies." Furthermore, one of the expected outcomes is "Providing activities that would develop these students' leadership skills and enable them to be involved in extracurricular student activities and services on campus."

LEAD's leadership component included all of the following:

- **LEAD conferences:** Eleven annual conferences were held at AUC and addressed topics such as political awareness, educational reform, the environment, street children, entrepreneurship, sexual harassment, and breast cancer. The conferences brought together senior officials from USAID, officials from the Egyptian Government, partner NGOs, social workers, and education experts. In some cases, there was Egyptian media coverage of the conferences. One of the conferences' main objectives was "to provide students with hands-on experience organizing and planning major events."[4]
- **International and regional conferences:** Students had the opportunity to apply for conferences held outside of Egypt. A total of 60 students (33 females and 27 males) traveled abroad for conferences.[5]
- **Retreats:** The primary purpose of the annual retreats was cohort development and team building, and included training on topics such as "Changing Your Mindset," "Self-Awareness," and "Subcultures of Egypt." The retreats further provided the opportunity to get to know Egypt, as students traveled to such places as Marsa Matrouh, Ain Sokhna, Hurghada, Sharm El-Sheik, and El-Gouna. Students were involved in selecting the locations and timing of the retreats.
- **Training:** Training sessions were conducted for LEAD students on such topics as the art of debating, project budgeting, emotional intelligence, and boosting self-esteem.
- **Thematic activities:** These included meet-the-experts sessions, movie nights, and book reviews on topics selected by the students.
- **LEAD student life coordinators:** Each student life coordinator worked with a specific cohort to provide "continuous support, life coaching experience, and mentoring to students."[6]
- **A Leadership Performance Index (LPI):** This was designed by LEAD to "measure the scholar's learning and growth in leadership, civic engagement, and professional endeavors."[7] Students were given LPI scores based on portfolios that encouraged self-reflection and critical thinking, professional performance (punctuality and discipline), and learning from LEAD training.

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[4] American University in Cairo, *Leadership for Education and Development Program* (Cairo: AUC, 2014), 14.
[5] According to LEAD's Annual Technical Progress Reports, three students travelled in 2010-2011; six in 2011-2012; eight in 2012-2013; 25 in 2013-2014; and 11 in 2014-2015.
[6] American University in Cairo, *Leadership for Education and Development Program* (Cairo: AUC, 2014), 7.
[7] Ibid., 17.

In addition, LEAD students had access to the following AUC services and activities that are available to all AUC students:

- **Study Abroad:** US Study Abroad opportunities were managed by AUC's Office of International Students and Study Abroad (ISSA), and were funded by LEAD and Orascom Construction Industries. They were generally held for one semester (except for two students funded by Orascom Construction Industries who completed a full year abroad) at such schools as Georgetown University, State University of New York (New Paltz and Stoney Brook), and the universities of Arizona, Chicago, Colorado, Illinois, Maryland, Rochester, and Virginia. The number of students who participated in US Study Abroad reached 206 (83 males and 123 females), including 25 LEAD students who were funded by Orascom Construction Industries.[8]
- **Internships:** Many of the internships were organized through AUC's Career Center. They were typically one-month placements at companies such as IBM, Chipsy Factory, Ghabbour Auto, Toyota Service Center, Tatweer International, Shlumberger, Maersk Shipping Agency, Henkel, and SODIC.[9] Students also interned at NGOs, such as Association of Upper Egypt, Hope Village Society, and Egyptian Initiatives for Personal Rights.
- **Career counseling:** AUC's Career Center helps students explore career options, beginning with selecting a major. The center organized special sessions for LEAD, for example, on self-assessment. The office also helps students write their resumes and prepare for job interviews; hosts an annual career day and semi-annual employment fairs; and provides information on job opportunities.

> *"The career center saw our potential. They gave us extra help in writing our resumes because they knew we are doing extra things" – Alumnus in group discussion.*

- **Counseling and mentoring:** AUC's Support Office for Students (SOS) provides counseling for emotional wellness as well as student mentoring for academic success.
- **Academic courses**: Students received English language training, their GPAs could not fall below 2.0, and they were expected to graduate within five years.
- **Extracurricular activities:** AUC's Office of Student Development (OSD) oversees extracurricular activities and encourages students to help lead and participate in them. The activities are voluntary for AUC students, but mandatory for LEAD students. Data are not available from AUC regarding the specific activities chosen by LEAD students and was not part of the evaluation team's data collection efforts.

The evaluation team analyzed quantitative and qualitative data from the online survey (n=104) and discussions with alumni (n=5 discussion groups) to determine the extent to which alumni thought LEAD-managed and AUC general services and activities contributed to development of their leadership skills; their perspective on LPI as a tool for measuring progress in leadership development; whether alumni are applying their newly acquired leadership skills inside and outside of work; and whether employers recognize and value those skills.

Finding 1.1: Alumni agreed that AUC-managed activities contributed to development of their leadership skills.

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[8] LEAD Annual Technical Progress Report 2014-2015, 6.
[9] Ibid., 4.

The alumni who responded to this question on the survey (n=101) rated the following AUC-managed activities as contributing or fully contributing to development of their leadership skills: US Study Abroad (77.8%), extracurricular activities (60%), academic courses (59.4%), career center (43.4%) and internships (35.6%) (refer to Graph 1).

Graph 1: Percent of Alumni who thought AUC-Managed Services Contributed/ Fully Contributed to Leadership Development
(n=101)
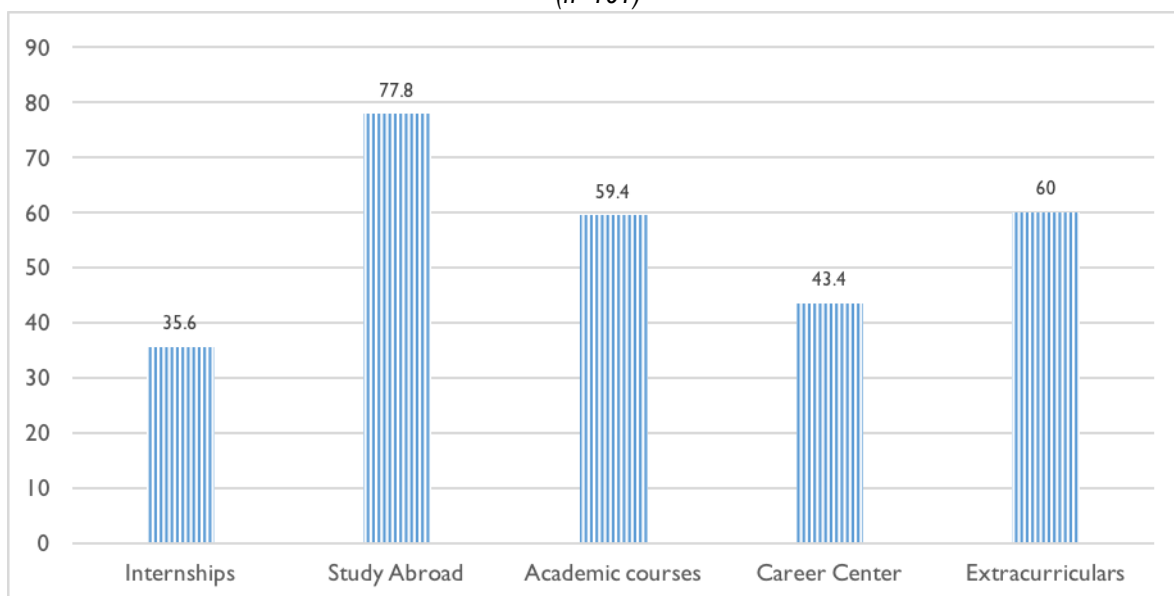
Most alumni considered US Study Abroad the most beneficial activity. In both the comment section of the survey and group discussions, they pointed out that:

- The experience of being completely independent for the first time in their lives allowed them to engage in self-discovery and identify a leadership style that best suits them;
- Exposure to a variety of leadership styles, teaching techniques, and cultures opened their minds and helped them become more tolerant;

Extracurricular activities that alumni specified as contributing to their development as leaders were the student union and community service clubs. Both helped them practice their leadership skills.

Finding 1.2: The percent of alumni who agreed that LEAD-managed activities contributed to the development of their leadership skills was low.

Graph 2 shows the extent to which alumni thought the LEAD-managed services contributed to development of their leadership skills.[10] Survey respondents (n=101) rated retreats and student life coordinators highest (44.4% each), followed by leadership training (38.1%), book reviews, movies, and meet-the-expert sessions (33.7%), international and regional conferences (26.5%), and annual conferences (19.2%). In the comment section of the survey, alumni cited the annual conferences and retreats as

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[10] The categories, "contributed" and "fully contributed," correspond to ratings of 6 and 7 on the 7-point scale used in the online survey.

practical ways of furthering their leadership skills, especially since they participated in the design and management of these activities.

Graph 2: Percent of Alumni's who thought LEAD-Managed Activities Contributed/ Fully Contributed to Leadership Development
(n=101)
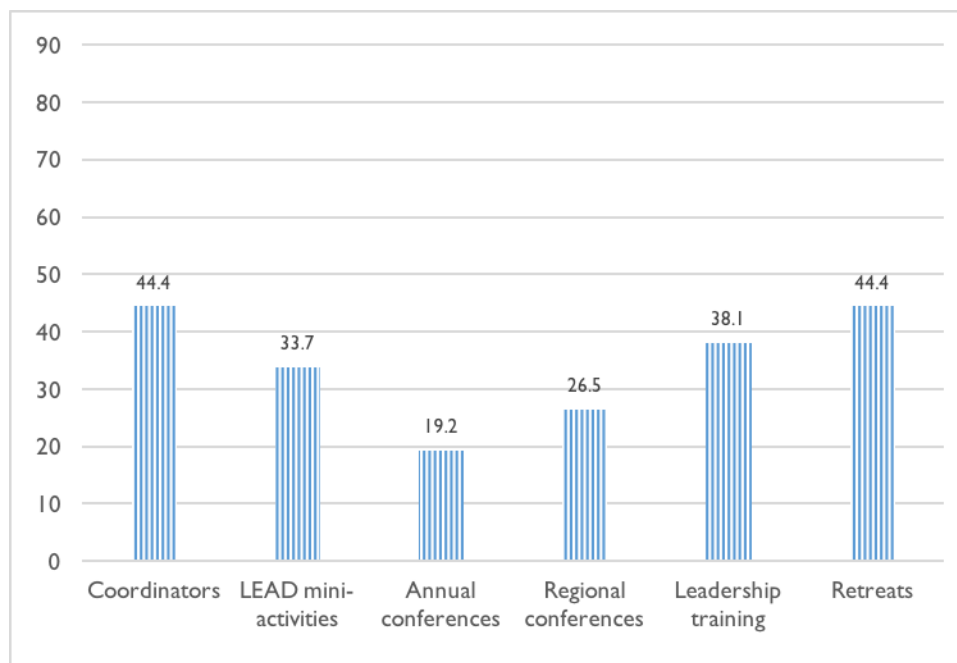
Finding1.3: Alumni rated the Leadership Performance Index (LPI) an ineffective method of monitoring students' level of engagement in leadership-related activities.

Only 18.6% of the respondents to this question on the online survey (n=98) thought the LPI was "effective" or "fully effective," while 40.2% considered it "ineffective" or "completely ineffective." The highest level of satisfaction was recorded for Cohort 6 and the lowest for Cohorts 7a and 7b. There was no significant difference between males and females. Moreover, there is a moderate positive correlation coefficient (0.55)[11] between the alumni's rating of LPI and their overall level of satisfaction with the LEAD program.

In discussion groups, alumni described how the timing of LPI requirements sometimes interfered with their academics. Moreover, the requirements added to their already heavy workloads and were well beyond what other AUC students were required to do. Initially, they said, greater emphasis was placed upon the quantity of activities, with insufficient attention given to how the activities helped students develop.

The LPI system was altered in view of the group discussions held with staff and students for the 2008 midterm evaluation of LEAD.[12] However, students were still not satisfied because they believed LPI emphasized quantity of information rather than a meaningful description of the impact of the experiences.

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[11] The correlation coefficient is a measure that determines the degree to which two variables' movements are linearly associated and varies from negative 1 for full negative relationship to 1 for full positive relationship. The closer the coefficient is to 0 the weaker is the relationship.
[12] LEAD Annual Technical Progress Report October 2008-September 2009, 9.

One cohort was so dissatisfied that it again pushed for reform of the system to limit the number of pages for the "Best Works Portfolio" and to place more emphasis on students' self-reflection and critical thinking, rather than quantity.

Conclusion 1.1: LEAD alumni are well-equipped with the skills to potentially assume positions of leadership, with the greatest contributions coming from AUC-managed activities.

Finding 1.4: Alumni are making use of their acquired leadership skills in the workplace.

The online survey asked alumni to indicate the ways they were making use of their leadership skills since completing their scholarship program. Of the 96 respondents who answered this question, 65.6% indicated that they have applied leadership principles (i.e., delegation, teamwork, time management). Also high on the list was gaining new expertise (59.4%), which is a sign of a great leader (refer to Graph 3 for the full range of responses).[13]

Graph 3: Percent of Alumni Applying Leadership Skills on the Job
(n=96)
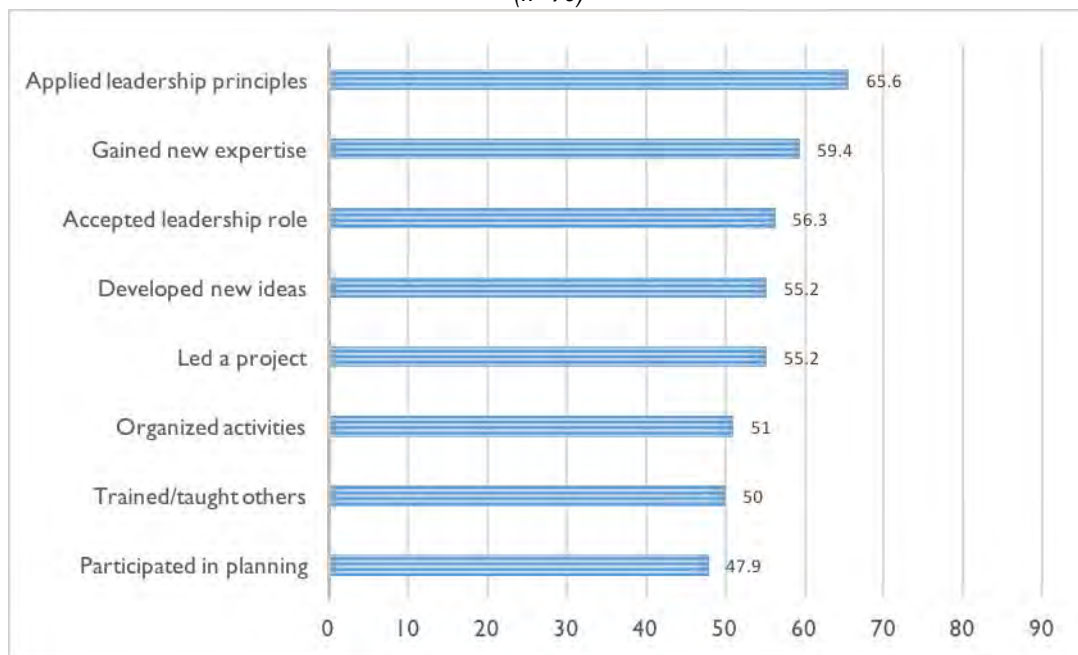
Finding 1.5: The majority of alumni currently live in the Cairo/Giza area or abroad.

Of those surveyed, 68.3% (n=56) currently reside in Cairo/Giza, while 20.7% (n=17) live outside of Egypt. Only 11% (n=9) are living in governorates outside the Cairo/Giza area. Twenty-five percent of those living abroad are pursuing advanced academic degrees. Other possible explanations for not returning to their home governorates may be related to the Egyptian labor market (e.g., lack of relevant jobs or low salaries). Still, home governorates are benefitting from remittances and the inspiring example of LEAD alumni. Some alumni spoke of the desire to return to their home governorates in the future, either to work or to establish projects or NGOs to benefit their communities.

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[13] Kenneth Mikkelsen & Harlod Jarche, "The Best Leaders Are Constant Learners," *Harvard Business Review*, October 16, 2015; and Bill Taylor, "The Best Leaders Are Insatiable Learners," *Harvard Business Review*, September 5, 2014.

In all discussion groups, alumni described the challenges of returning to live in their home governorates. They talked about how much their perspectives and attitudes have changed and about the wide gap that now exists between themselves and their families and friends. Although the LEAD Handbook indicates that students were "encouraged to seek civic engagement opportunities in their home governorates and communities,"[14] the evaluation team could not verify that this happened. Nor are there any indications that LEAD helped students or families with re-integration.

Finding 1.6: Current job titles indicate that alumni have already begun assuming positions of leadership.

LEAD's database shows that alumni have assumed positions of leadership, with those who graduated earliest having higher positions. A sample of titles includes:

- Academia: Instructor, teaching assistant, research assistant, academic advisor
- Government: Judge, first lieutenant, economic researcher
- Industry and business: founder, chief executive officer, corporate officer, territory executive, business process consultant, marketing executive, account executive, regional manager, quality assurance and quality control manager, operations manager, regional financial analyst, engineer (process, product support, quality, contract, software, property risk), human resource business partner, broadcast journalist, social media manager

The majority of alumni (58.6%) who responded to the survey work in the private sector. A significant number (35.7%) work in NGOs, as well as international and multinational organizations, while very few (5.7%) work in the public sector/government.

Finding 1.7: Outside of work, alumni are making use of acquired leadership skills.

One of the objectives of LEAD was to "enable these students to actively contribute to development-oriented program services and activities."[15] While some alumni are working professionally in development-related organizations or in corporate social responsibility within companies, others are volunteering outside of work. In their non-work activities (n=98), 69.4% who responded to the online survey are involved in knowledge sharing, which is a sign of collaborative leadership. Another 61.2% are engaged in volunteer efforts, which is consistent with AUC's culture and the idea that generous leaders give back to their communities or neighbors.

Conclusion 1.2: The current career paths of LEAD alumni suggest they are most likely to assume positions of leadership in the private sector in Cairo/Giza and abroad, and less likely to assume positions in the government or in their home governorates.

Recommendation 1.1: If USAID prioritizes development of potential leaders in the private sector in Egypt and abroad, future program design may want to consider funding scholarships at universities, such as AUC, where students graduate with strong English language and soft skills that are valued in the private sector, especially multinational companies.

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[14] American University in Cairo, *Leadership for Education and Development Program* (Cairo: AUC, 2014), 14.
[15] LEAD Cooperative Agreement, 2007, p. 9.

Recommendation 1.2: If USAID prioritizes development of potential leaders in the government and NGO sectors, future program design may want to consider funding scholarship programs that focus on ways to keep students connected to Egypt and their communities (e.g., serving-learning experiences in their home governorates where students were volunteering before leaving for university, capstone projects that encourage them to contribute to Egypt's development, and guidance on re-integrating into their communities).

EVALUATION QUESTION 2 (EQ2): TO WHAT EXTENT ARE STUDENTS AND ALUMNI SATISFIED WITH THE PROGRAM SERVICES (ENGLISH LANGUAGE TRAINING, COMPUTER TRAINING, TEAM BUILDING, AND LIBRARY AND RESEARCH SKILLS)?

Overall, 66% of survey respondents (n=104) rated their experience with LEAD as positive or extremely positive. Not one person rated the experience as extremely negative, and only 3% rated it as negative. The negative ratings were given by someone who withdrew from the program and two others who did not provide their names. No explanation was provided as to why the three survey respondents rated their experiences as negative.

To dive deeper into the question of satisfaction, the evaluation team examined how alumni felt about the LEAD-managed and general AUC services listed in EQ2. The team closely investigated LEAD student life coordinators, as they triggered extreme opinions among alumni who participated in the discussion groups.

Finding 2.1: Alumni were satisfied with AUC-managed services/activities.

As Graph 4 demonstrates, the level of satisfaction with AUC services was high. Data from the online survey show that the highest level of satisfaction was with US Study Abroad, with 78.9% "satisfied" or "very satisfied" (ratings of 6 or 7 on a 7-point scale); followed by library and research skill development (78.4%), English language courses (77.2%), and academic courses (70.6%).

Gender differences in ratings of services were minimal (more detailed gender differential findings are discussed for EQ3), while differences among cohorts stood out a bit more, with Cohorts 4 and 8 giving the highest ratings and Cohorts 7a and 7b the lowest. No evidence was available to explain why some cohorts rated activities higher than other cohorts.

As in EQ1, US Study Abroad received the highest ratings. This may beg the question, why not fund the full degree program in the United States if students are so satisfied with the experience abroad?[4] This question was addressed in discussion groups with alumni (n=5 groups). All but one who responded did not find this option appealing because: (a) they needed the first few years at AUC to adjust before traveling abroad; (b) they valued the opportunity to be in Egypt where they could connect with local issues and build networks; (c) they preferred to be with a mutually supportive cohort, rather than alone; and (d) they feared a difficult transition back home after being away for so long.

Alumni also commented on the high quality of education at AUC. They talked about how a liberal arts education changed their perspective and helped them become more tolerant. The classes gave students opportunities to learn and practice presentation skills, as well as strengthen their analytical skills. Alumni appreciated the freedom to choose their majors and classes. Faculty noted that LEAD scholars were

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[4] This question arose from the interviews conducted and was then included as part of the discussion group guide used with alumni.

outstanding students and above average. Initially, LEAD students stood out as their English was not as good and they dressed differently. However, it did not take long for them to fit in.

While not addressed in the online survey, discussion group participants talked openly about psychological counseling services that are offered to all AUC students. They appreciated the services and took advantage of them. According to the counseling office, LEAD students (male and female) accessed the service at about the same rate as non-LEAD students, although AUC does not have the data to support this. The counseling office further indicated that issues among LEAD and non-LEAD students were similar and typical of their age group and phase in life. While LEAD students initially faced challenges of cultural adjustment and bullying from non-LEAD students (and, to a lesser extent, from faculty), they coped with these problems on their own and with support from other LEAD students.

Graph 4: Percent of Alumni Satisfied or Very Satisfied with AUC-Managed Services
(n=104)
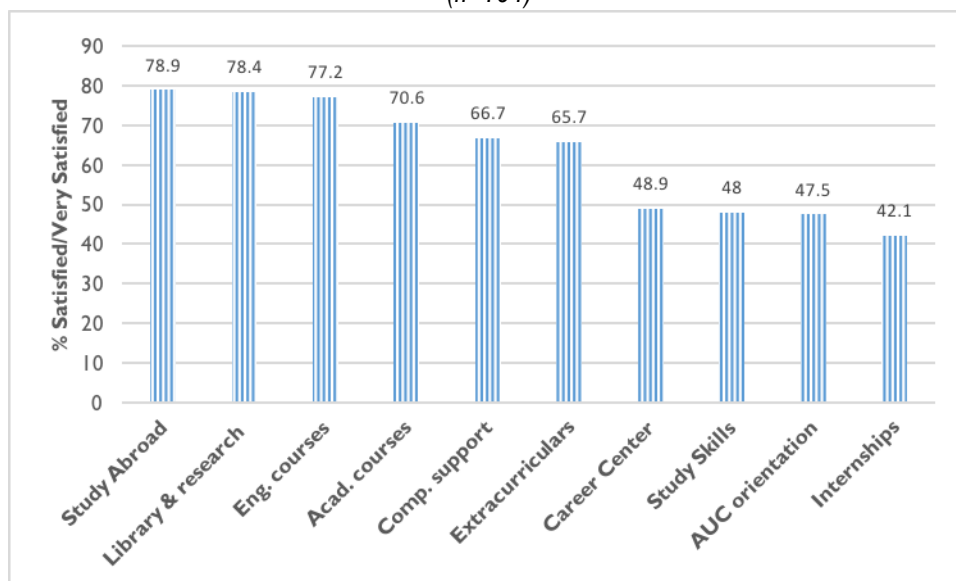
Finding 2.2: The level of satisfaction was low for LEAD-managed activities.

Alumni who responded to the survey (n=104) were generally less satisfied with LEAD-managed activities than AUC-managed activities (refer to Graph 5). In fact, retreats were the only LEAD activities rated above 50% (i.e., 53.4% of respondents were "satisfied"/"very satisfied"). Still, it only rated higher than the lowest rated AUC-managed activity (i.e., internships at 42.1%). Satisfaction with LEAD services varied by cohort, with Cohorts 5 and 8 being the most satisfied and Cohorts 3 and 7b the least satisfied. Conferences received the most ratings of dissatisfied/fully dissatisfied (refer to EQ1 for a discussion of this issue). The next lowest rated activities were orientations, with 39.2% of survey respondents dissatisfied/ fully dissatisfied, and student-led orientations at 36.7%. The pace of the orientations was one of the problems noted by alumni in discussion groups. Earlier cohorts stated that too much information was given too soon, which they could not absorb well enough. Later cohorts complained that information was spread out too much and some topics addressed too late to be fully useful. Alumni also commented that they were insufficiently orientated on how to function well in the AUC environment. Others maintained that some information (e.g., personal hygiene) was presented in a condescending and insulting way.

LEAD used student feedback to make adjustments to the orientation program, for example, having students from former cohorts take the lead (student-led orientations). However, alumni in the discussion groups reported that these changes were not well received initially because students were not given sufficient guidance on how to present effective orientation sessions.

Graph 5: **Percent Satisfied or Very Satisfied with LEAD-Managed Services**
(n=104)
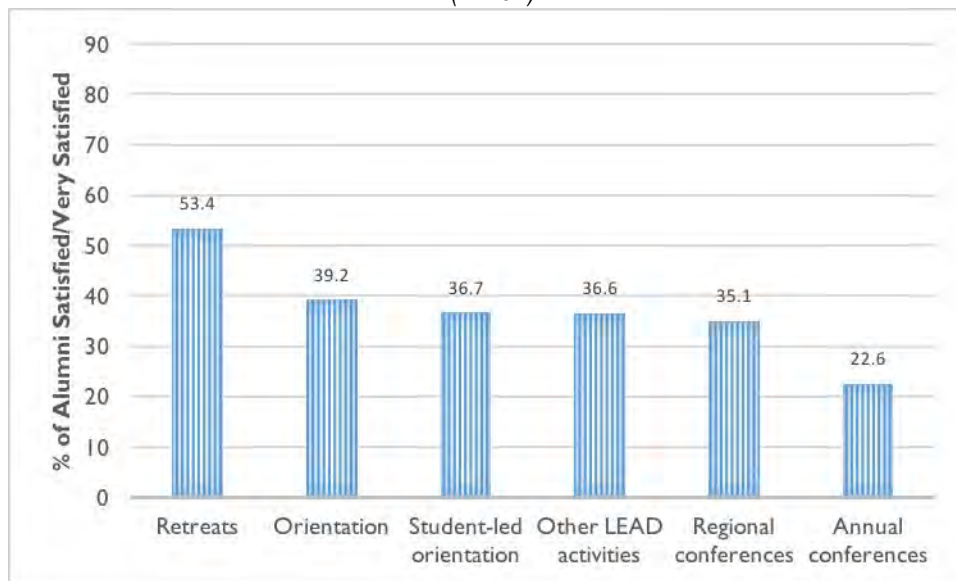
Finding 2.3: Alumni had extreme opinions about LEAD student life coordinators.

Some 44.4% of the survey respondents who rated the contributions of the student life coordinators (n=99), thought they contributed/fully contributed to student development, while 12.1% rated them as not contributing. The extreme nature of these ratings is further highlighted by considering the number of respondents who gave the highest rating (7 on a 7-point scale), which was highest of any other LEAD services or activities, at 24.2%. On the flip side, the number of respondents who gave the lowest possible rating (1 on a 7-point scale) was 8.1%, which was higher than everything except regional and international conferences.

There was a statistically significant difference among cohorts in their rating of coordinators.[16] Cohort 3 gave an average rating of 3.6 on a 7-point scale, while Cohort 5 assigned a rating of 5.9. Interestingly, Cohort 3 had the highest number of dismissed students, which may have resulted in more negative feelings about the coordinators and other aspects of the program. Alumni in discussion groups also noted that some coordinators appeared more concerned with administrative details, rules and penalties, and numbers, than showing genuine interest in the students. They did not help students deal with the culture shock or homesickness. Alumni were not happy with the high turnover among coordinators as that made it difficult to develop relationships and some alumni were displeased with the fact that coordinators occasionally overstepped their bounds by bypassing students in their communications with faculty – a challenge that non-LEAD students did not face.

Despite the negative comments, 44.4% of alumni rated coordinators a 6 or 7 on a 7-point scale. They saw them as a unique feature of LEAD and as playing an important role. Alumni expressed gratitude for

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[16] The p-value is less than 0.01, which indicates a statistically significant difference. The p-value is defined as the probability, under the assumption of the hypotheses being tested, of obtaining a result equal to or more extreme than what was actually observed. The smaller the p-value, the larger the significance because it tells the investigator that the hypothesis under consideration may not adequately explain the observation. For typical analysis, using the standard $\alpha = 0.05$ cutoff, the null hypothesis ("null hypothesis" usually refers to a general statement or default position that there is no relationship between two measured phenomena) is rejected when p < .05 and not rejected when p > .05.

coordinators' interest and commitment, citing the long hours they worked routinely and sacrifice of their personal time to accompany students on retreats and conferences. Alumni further appreciated coordinators taking their input and feedback into account and adapting the program to best suit the needs of the students. Many of those who had a positive experience with the coordinators now consider them friends and have remained in contact.

Finding 2.4: Overall, alumni rated their LEAD experience positively and are highly likely to recommend the program to others.

Of the surveyed alumni (n=94), 66% rated their overall experience as positive or very positive and only 3.2% rated it negatively. None rated it extremely negative. The highest level of overall satisfaction was recorded for Cohorts 5 and 8 and the lowest for Cohort 3. Even those not highly satisfied indicated they would recommend a LEAD-like program to others. As much as 94.7% of those who answered this question (n=94) said they are likely to recommend it.

It was clear in the discussion groups and key informant interviews that alumni recognized and appreciated the value of the LEAD experience. They believed it had transformed their lives and was a turning point.

Finding 2.5: There is a positive correlation between whether LEAD staff sought alumni's opinions about LEAD services and the level of alumni satisfaction.

LEAD documentation and interviews show that the standard practice was to assess student satisfaction at the end of activities by way of short, written questionnaires. The coordinators also sought input from students on various topics. The staff then used student input and feedback to make changes in orientations, retreats, annual conferences, thematic activities, and the LPI.

More females than males in the online survey (n=103), and more students in Cohort 5, reported that LEAD staff had sought their opinions. Furthermore, Cohort 5 was the most satisfied that their opinions had been considered. Those alumni whose opinions were sought had an average overall satisfaction rate that was significantly higher than those who reported not being consulted about how services should be delivered.[17] The average satisfaction rate of consulted alumni was 6.10 on a 7-point scale, while alumni who were not consulted had an average satisfaction rate of 4.54.

Conclusion 2.1: While LEAD sought student feedback and modified the program over time in response to that feedback, alumni were still only minimally satisfied with LEAD-managed compared to AUC-managed activities/services.

Conclusion 2.2: There was a missed opportunity for LEAD to provide a better experience for students in two key areas: orientation and student life coordinators.

Recommendation 2.1: To achieve greater satisfaction from an AUC scholarship program at a reduced cost, future higher education scholarship initiative designs should consider only:

1. *Full tuition, books, housing, living allowances, and other required fees*
2. *Funding for English language training and semester abroad (AUC provided these services under LEAD)*

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[17] The p-value is less than 0.01, indicating a significant difference.

3. *Student life coordinators with greater caseloads and support from peer mentors, 5-10 years of relevant work experience, and job training*
4. *An orientation program in the first semester that focuses on the unique challenges of LEAD-type scholars and how to take advantage of the extracurricular activities and support offices at AUC*
5. *A monitoring and evaluation system that includes collecting and using student feedback to improve services and following up to ensure improvements are reported back to students*

EVALUATION QUESTION 3 (EQ3): TO WHAT EXTENT HAS LEAD SUCCEEDED TO ACHIEVE GENDER BALANCE WITH THE PROGRAM SERVICES (ENGLISH LANGUAGE TRAINING, COMPUTER TRAINING, COHORT DEVELOPMENT, TEAM BUILDING, LIBRARY AND RESEARCH SKILLS, STUDY SKILLS, ETC.)?

LEAD's original aim was to achieve gender balance in the selection of scholarship recipients, with one female and one male selected from each governorate. Although not stated in the cooperative agreement with AUC, the working assumption was that there would also be gender balance in the delivery of program services.

To answer EQ3 more broadly, the team examined the gender balance in the selection of scholarship recipients and services offered, as well as gender differences in satisfaction levels. Next, the team assessed gender differences in achievement both during and at the end of the scholarship program.

Finding 3.1: LEAD achieved a perfect gender balance in program admissions.

LEAD records show that the total number of students admitted to the scholarship program in Cohorts 3-8 was 308. There was an equal number of females and males (154). Thus, LEAD succeeded in attaining a perfect gender balance in admissions.

Finding 3.2: There were no reported differences between females and males in terms of services offered, but some difference in terms of the services used.

Feedback from alumni, LEAD staff, and AUC staff verified that all services were offered equally to both females and males. Alumni indicated no gender biases in the nature of or access to the services offered. Although the available data cannot be used to determine precisely whether both genders took equal advantage of the services, neither LEAD nor AUC staff noted any major differences in the use of those services. US Study Abroad was offered equally to females and males, but, as Table 1 shows, females were more qualified to participate. This resulted in more females (123) than males (83) being selected to study abroad.

Table 1: US Study Abroad Selection Criteria, by Gender

Criteria	Percent Males	Percent Females
GPA of 2.8 or above	80.8	84.2
LPI of 3.0 or above	27.9	44.9
Both Criteria Met or Exceeded	26.7	41.6

Finding 3.3: The level of satisfaction among female versus male alumni varied by activity.[18]

The online survey revealed that the satisfaction level among females (n=71) was statistically significantly greater than males for US Study Abroad and academic courses. 90.9% of females and 72% of males were "satisfied"/"very satisfied," while 77.6% of females and 65.6% of males were "satisfied" or "very satisfied" with academic courses.

There were two areas in which males were more satisfied than females (i.e., AUC's First Year Experience [FYE] and LEAD's student life coordinators), but the differences were not statistically significant. For FYE, 54.6% of males and 43.8% of females gave satisfactory or very satisfactory ratings, while 53.1% of males and 46.9% of females rated LEAD's coordinators similarly.

Conclusion 3.1: LEAD succeeded in achieving a gender balance in the selection of scholarship recipients and in providing program services.

Finding 3.4: Females thought activities contributed to their leadership skills more than males.

More female alumni considered the five activities shown in Graph 6 as having contributed or fully contributed to the development of their leadership skills.

Finding 3.5: Females' GPA and LPI achievements were higher than those of males.

According to LEAD records, the average cumulative GPA for females in Cohorts 4-8 (n=114) was 3.276 on a 4-point scale and 3.198 for males (n=104).[19] The higher GPAs for women were likely not attributable to easier programs since females enrolled in the full range of majors. Roughly twice as many females studied business (48 females vs. 20 males), twice as many males studied engineering (86 males vs. 45 females), a roughly equal number of males and females studied social sciences (16 males vs. 21 females), and three times as many females studied global affairs and political science (23 females vs. 7 males) (refer to Table 31, Annex V).

Similarly, the average LPI score for females in Cohorts 4-8 (n=103) was 2.814 (out of 4.0) and 2.606 for males (n=97). Both genders rated as low the effectiveness of LPI in measuring progress in leadership development.

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[18] This analysis is somewhat limited because: (a) the LEAD databases shared with the evaluation team did not include Cohort 3, and (b) of the 104 respondents who completed the online survey, only 82 provided their gender and roughly 59.76% of those were female.

[19] Although this evaluation dealt with Cohorts 3-8, the team was only able to access GPA and LPI data for Cohorts 4-8. It is worthy to note that in comparing the means of cumulative GPA (3.276 females and 3.188 males) the difference in means was statistically significant at level 0.1. However, if the two male students who were dismissed from LEAD and continued using financial aid are excluded, there will be no statistically significant difference.

Graph 6: Alumni's Rating of Leadership Activities, by Gender
(% who thought activities contributed/fully contributed to development of leadership skills, n=101)
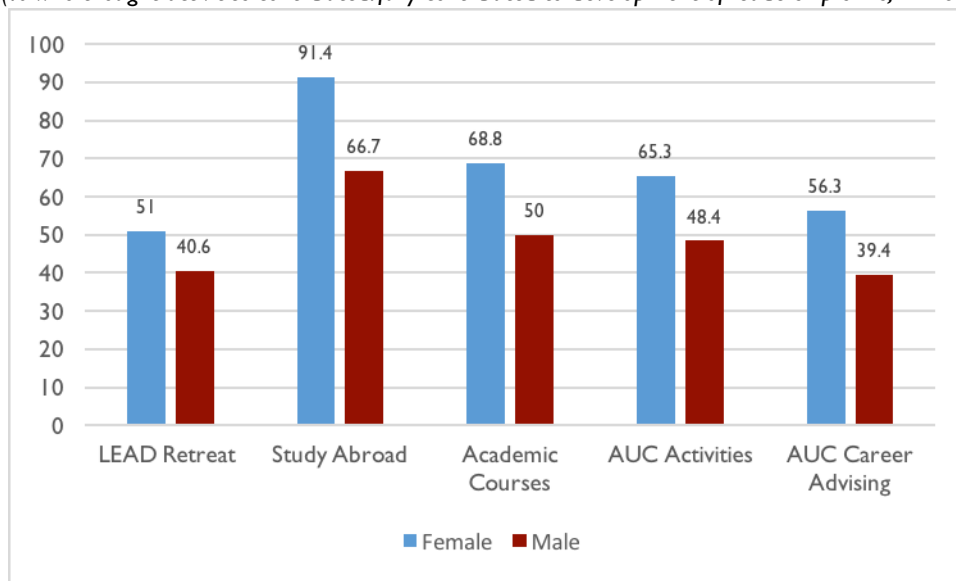
Finding 3.6: More males than females were dismissed from the program.

LEAD records show that of those who were dismissed from LEAD Cohorts 3-8, 63% were males (n=17) and 37% were females (n=10). The students were dismissed mainly because their GPA and LPI scores fell below the required standards noted in the LEAD Handbook. The number of students who voluntarily withdrew from the program was roughly the same for males (n=5) and females (n=4).

Finding 3.7: The graduation rate for female students was higher than that for males.

Of the 308 students admitted in Cohorts 3-8, 266 have graduated. Females (n=137) represented 51.5% of the graduates, while males represented 48.5% (n=129). This means that 88.4% of women and 83.2% of men who entered the scholarship program completed it. This is consistent with completion rates at US universities.[20]

Finding 3.8: There are few significant gender differences in post-LEAD achievements.

There were no statistically significant gender differences in post-LEAD achievements (e.g., applying leadership skills on the job or to non-work related activities, or length of time to find first job). Of those who provided information about their sector of employment (n=70), all who reported working in the public sector are female (4 females). However, LEAD records show that there are also male alumni occupying positions in the government: a judge in the Egyptian State Council and a diplomatic attaché at the Egyptian Ministry of Foreign Affairs.

There is a significant difference in the number of unemployed females (15.9% or n=13) versus males (8.5% or n=6) (total n=82). However, it should be noted that the national unemployment rate for females

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[20] http://nces.ed.gov/das/epubs/2005169/gender_4.asp accessed on 24 Sep 2016.

currently stands at 20-30%.[21] The top reasons alumni gave for being unemployed are that they are either searching for jobs (n=7) or in graduate school (n=6). Only one online respondent gave maternity leave as the reason for not currently working, while another indicated military service.

Conclusion 3.2: Females' achievements in terms of GPA, LPI scores, and completion rates in the LEAD program were greater than males, with no apparent advantages given to them from LEAD or AUC.

Recommendation 3: To achieve greater gender balance in terms of program outcomes, male students should be monitored more closely to ensure they are getting the support they need to continue their studies through graduation.

EVALUATION QUESTION 4 (EQ4): WHAT IS THE RETURN ON INVESTMENT (ROI) OF THE LEAD)?

Finding 4.1: The average internal rate of return (IRR) for LEAD graduates is 18%.

Table 2 presents the calculations of the social parameters and profitability indicators for Cohorts 3-8. As seen, the IRR for all graduates from Cohorts 3-8 is 18%. This is more than double the 8% social discount rate (SDR), a rate that is considered the acceptable opportunity cost of capital from the perspective of Egypt's national economy (refer to Annex V for details of the calculations).[22]

Findings at the school level range from 11% (for both the schools of Humanities/Social Sciences and Global Affairs/Public Policy) to 19% (for the School of Sciences and Engineering). With an IRR of 18%, the School of Business ranks one percentage point behind the School of Science and Engineering. From a gender perspective, the IRR calculations do not reveal significant differences between males and females (17% and 16%, respectively). This result is due to an assumed five-year reduction in lifetime earnings associated with women temporarily exiting the labor market for child care years.

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[21] Ragui Assaad and Caroline Krafft, "*The Evolution of Labor Supply and Unemployment in the Egyptian Economy: 1988-2012.*" http://erf.org.eg/wp-content/uploads/2014/02/806.pdf (accessed September 17, 2016).
[22] The discount rate is the interest rate used to determine the present value of future cash flows. The discount rate takes into account not just the time value of money, but also the risk or uncertainty of future cash flows. The greater the uncertainty of future cash flows, the higher the discount rate. The social discount rate is the opportunity cost of capital from the perspective of the national economy, or the community in the broad sense.

Table 2: ROI Calculations
(Egyptian pounds)

Social Profitability Parameter/Indicator	Present Value[23] of Costs (1)	Present Value of Benefits (2)	Net Present Value (NPV) (2-1)	Benefit/Cost Ratio[24] (2/1)	Internal Rate of Return (IRR)[25]
	Egyptian pounds			Percent	
All Graduates	203.69	700.51	496.82	344	18
School of Business	52.07	119.80	67.73	230	15
School of Science & Engineering	100.31	499.73	399.41	498	19
School of Humanities & Social Sciences	28.33	38.53	10.20	136	11
School of Global Affairs & Public Policy	22.97	32.86	9.89	143	11
Males (of all graduates)	98.78	405.16	306.38	410	17
Females (of all graduates)	104.91	295.35	190.44	282	16

* All figures given in present value terms

The Benefit/Cost ratio (BCR) is estimated at 344% for all 266 graduates. In line with the IRR findings, the School of Science and Engineering ranks first among the four schools, with a BCR of 498%. The Schools of Humanities and Social Sciences and Global Affairs and Public Policy rate the lowest at 136% and 143%, respectively. Note that the School of Science and Engineering's BCR is twice that of the School of Business (230%). Given a minor difference of four percentage points in terms of the IRR, the large difference observed in the BCR merits the following clarification: the IRR indicates profitability, it does not reflect the magnitude of benefits or costs. Contrariwise, the BCR is affected by the magnitudes of both benefits and costs. Given that the number of graduates from the School of Science and Engineering (131) is close to double the corresponding number of graduates for the School of Business (68), the difference of the resultant gender-based BCR is correspondingly large.

Also, the gender-based difference of the BCR (410% for males vs. 282% for females), compared to the narrow gap of the IRR (17% for males versus 16% for females), is explained by the number of males in the

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[23] Present value (PV) is the current worth of a future sum of money or stream of cash flows, given a specified discount rate. Future cash flows are discounted at the discount rate, and the higher the discount rate, the lower the present value of the future cash flows.

[24] Benefit/Cost Ratio (BCR) attempts to identify the relationship between the costs and benefits of an investment project or program. BCRs are most often used to detail the relationship between possible benefits and costs, both quantitative and qualitative, of undertaking new projects or evaluating completed ones. The BCR is calculated by dividing the total discounted value of the benefits by the total discounted value of the costs. BCR is usually formatted in absolute number terms (e.g., 2.3), rather than in percentage terms (e.g., 230%). However, the latter is being used here for the purpose of comparison with the findings in the "Merit and Needs-Based Scholarship Program (MNBSP) Evaluation Report." This report was prepared by Management Systems International (MSI) under the Independent Monitoring and Evaluation Contract (IMEC) for USAID/Pakistan and the Higher Education Commission (HEC), Government of Pakistan (GOP), Contracted Under No. GS-23F-8012H and Order No. AID-391-M-11-00001.

[25] Internal rate of return (IRR) is a metric used in capital budgeting and project evaluation to measure the profitability of potential or existing investments. Internal rate of return is a discount rate that makes the net present value (NPV) of all cash flows from a particular project equal to zero.

School of Science and Engineering (the top-ranked school in terms of profitability), which is nearly double that of females from the same school (86 vs. 45).

Finding 4.2: The IRR for non-LEAD AUC graduates is estimated at 19%.

The IRR for the non-LEAD AUC education scenario is estimated at 19%. The factor underlying the slightly higher IRR of this scenario is related to the additional cost of the LEAD program, compared to the regular non-LEAD education offered by AUC.

Finding 4.3: The IRR for graduates of other private and public universities is 18-21%.

The counterfactual for graduates of other private and public universities is an IRR ranging from 18% to 21%. The range reflects different assumptions regarding the lifetime earnings of graduates, as compared to the assumptions set for LEAD graduates. The basic assumptions are: (a) earnings of other institutions are equal to LEAD graduates' earnings, (b) earnings of other institutions are estimated at 85% of LEAD graduates' earnings, and (c) earnings of other institutions are estimated at 75% of LEAD graduates' earnings (refer to Annex V for calculations of the counterfactual scenarios).

Conclusion 4.1: Investments in LEAD are worthwhile from a social point of view, given that the IRR is double the social discount rate.

Conclusion 4.2: Investments in higher education at other universities would yield a higher IRR, but not necessarily the same employment results regarding employer satisfaction with LEAD alumni's English, leadership skills, and other soft skills (see Finding 1.5).

Recommendation 4: If USAID's overriding concern is to achieve higher returns on its investments in higher education, it may choose to restrict its financing of programs of study to focus on Engineering (19% internal rate of return) and Business (15% internal rate of return) as opposed to the Humanities and Social Sciences (11% internal rate of return) and/or the School of Humanities (11% internal rate of return). However, if USAID is interested in continuing to offer a broad range of programs of study to economically disadvantaged youth to a variety of high quality Egyptian private universities, USAID should not be dissuaded from investing in AUC, despite their higher costs, given that the internal rates of return across all programs of study, subjects of this evaluation, exceed the social discount rate.

EVALUATION QUESTION 5 (EQ5): TO WHAT EXTENT DOES AUC HAVE THE INSTITUTIONAL CAPACITY AND RESOURCES TO ACHIEVE SUSTAINABLE RESULTS?

The evaluation team's statement of work suggested finding "indicators that the AUC valued LEAD and… is prepared to increasingly take on the costs of the program…Overall, USAID has funded approximately 83 percent of the LEAD program and AUC contributes the remaining 17 percent. USAID's intention was that AUC – a major beneficiary of the program – would increase its funding over the life of the project" (refer to Annex I for the Statement of Work).

To address the question of sustainability, the team relied primarily on a document review and interviews with key informants at AUC, including faculty, staff, senior leadership, and members of the Board of Trustees. The new president of AUC arrived too late for the team to secure an appointment with him.

Finding 5.1: AUC has demonstrated its commitment to supporting economically disadvantaged students.

AUC's strategic plan highlights diversity as one of its five values and its top priority is detailed in the plan.[26] The strategy to diversify the student body, economically, socially, and nationally, includes the following:

- "We will deliberately focus attention on our enrollment strategy and admissions process to 'build a class' that is diverse not only in nationality and socio-economic background but also in skills, talents and interests."[27]
- "Among our Egyptian undergraduates, we believe a modest increase in enrollments of students from outside greater Cairo would enhance our diversity and better serve Egypt. We are targeting an increase of students from public schools and/or governorates outside Cairo, Giza and Alexandria to 10% of the total Egyptian undergraduate complement—approximately doubling the (non-LEAD) proportion of such students today."[28]

This commitment to diversification was echoed in key informant interviews. The five faculty members available for meetings commented on how much they valued LEAD students in their classrooms. The students enriched the learning environment by adding perspectives other than those of the stereotypical AUC student who has lived in a "bubble," and sharing experiences from across Egypt. They worked hard, which inspired their classmates; helped peers with homework; and insisted on practicing English as much as possible. In turn, non-LEAD students gained a greater appreciation for their own good fortunes and some even defended LEAD students against bullying.

A member of the Board of Trustees confirmed that the faculty supported LEAD and saw it as an important way to fulfill AUC's mission and contribute to Egypt's development. It also resonated with AUC leadership. He expressed his pride in having helped "provide a world-class education to students from all the governorates of Egypt, which has changed their lives, the lives of their families, and their communities." He emphasized that diversity is part of AUC's mission, which LEAD helped fulfill.

"LEAD is one of the most important programs AUC has ever been involved with…What LEAD did was so integral to AUC's aspirations...The Board of Trustees really believes in it…and I have a missionary zeal for it!" – Member of AUC's Board of Trustees

AUC's commitment has been further demonstrated by the slight increase in AUC's financial concessions and contributions to LEAD. When the cooperative agreement was signed in 2007, it was expected that AUC would cover 21% of the costs including a 30% reduction in tuition, 30% reduction in student housing, 80% of the project director's salary and benefits, meeting expenses for one off-campus event per year, and sales tax on various expenses.[29] AUC's cost share rose to 22.4% in the final budget modification.[30]

Finding 5.2: AUC is strongly structured to serve students from a variety of backgrounds.

AUC offers a full range of services and activities to all students at no extra cost. Of particular interest are the following AUC offices and services that help students from socially or economically disadvantaged backgrounds adjust to AUC and succeed in their studies:

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[26] AUC. *Our Community of Learning: A Strategic Plan for AUC at its Centennial.* (Cairo, April 2015), p. 5.
[27] Ibid., p. 13.
[28] Ibid., p. 14.
[29] USAID. Cooperative Agreement, Program Description. Cairo, 2007), p. 12.
[30] USAID. Modification 14 to Cooperative Agreement. (Cairo, 2016).

- Office of Student Financial Affairs and Scholarships helps make it possible for students to study at AUC through financial aid, scholarships, fellowships, and work-study programs. This includes eight LEAD students who were unable to complete their degrees before LEAD ended in July 2016.
- First Year Experience (FYE) is a mandatory program to orient students to AUC as well as the academic, personal, and social competencies needed to succeed there.
- Support Office for Students provides students, especially those who are struggling academically, with academic counseling and mentoring.
- Student Counseling Center services include, but are not limited to, psychological counseling and wellness workshops.
- Office of Student Development provides opportunities for students to integrate with others who have similar interests through a wide variety of extracurricular activities and community service opportunities.
- Office of Residential Life assists with the transition to independent living and adjustment to university life.
- International Students and Study Abroad office helps with placement in study abroad programs and provides an orientation program. While these services are free to students, the cost of participating in Study Abroad is not included in tuition.
- Career Center – The office, formerly known as the Office of Career Advising and Placement Services, provides services such as helping students choose majors, self-assessments, career planning, exploring career and graduate study options, customized counseling on writing resumes and preparing for interviews, an annual career day, semi-annual employment fairs, and information on job opportunities.

The quality of some of these offices has been recognized by USAID. For example, AUC's Career Center is a model that is being used to build the capacity of other universities' career centers through Career Development Centers, a USAID-funded program. Similarly, the English Language Institute's intensive English program is used by USAID's university partners in the LOTUS program.

Conclusion 5.1: AUC has the institutional capacity and commitment to sustain a LEAD-type scholarship program.

Finding 5.3: AUC offers high quality education with a high price tag.

The quality of AUC is recognized in the 2016 Quacquarelli Symonds World University Rankings, which once again rated AUC as one of the top 450 universities in the world.[31] It is the only university in Egypt in the top 450. 4International Colleges and Universities (4ICU) rates AUC as the top university in Egypt, followed by Cairo University, Alexandria University, Mansoura University, Ain Shams University, and German University in Cairo (GUC).[32] Other university rating systems rank AUC second behind Cairo University[33] and fourth behind Alexandria University, Cairo University, and Mansoura University.[34]

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[31] Quacquarelli Symonds is a London-based organization that rates universities worldwide according to academic reputation, student-to-faculty ratio, citations per faculty, employer reputation, international faculty ratio, and international student ratio. See http://www.topuniversities.com.

[32] See http://www.4icu.org/eg/.

[33] See http://answersafrica.com/best-universities-in-egypt.html/2.

[34] See http://webometrics.info/en/aw/Egypt.

AUC is unique in Egypt because of its liberal arts education. As a liberal arts institution, the university not only provides "knowledge and skills in particular fields but preparation for a life that reflects critical thinking, ethical principles, and self-directed lifelong learning. We do this not only—and perhaps not even principally—in the classroom but also in the wide array of co-curricular activities in which we encourage our students to participate. We are committed to educating the 'whole person' and to contributing to lives that are well-examined and well-lived."[35]

With its high quality also comes the highest tuition rate in Egypt. According to AUC's fee schedule for the 2016/2017 academic year, a student taking 15 credit hours per semester would pay US$18,992 per year in tuition and fees.[36] This is much higher than the annual tuition rates for other private universities in Egypt:[37]

- British University in Egypt (BUE): $12,500 (engineering program)
- German University in Cairo (GUC): $11,010 (Category C)
- Future University in Egypt (FUE): $ 9,773 (engineering program)
- Modern Sciences and Arts (MSA): $ 4,909 (engineering program)

Tuition at Egypt's public universities is subsidized by the government and therefore very low in comparison to that of private universities.

Conclusion 5.2: If donors wish to maximize the number of scholarships, AUC is not an appropriate option. However, if donors wish to fund liberal arts education at a top-ranked university, AUC is currently the only option in Egypt.

Finding 5.4: AUC uses internal resources to assist economically disadvantaged students.

Since 1990, AUC has offered full-tuition scholarships to 20 students each year under the Public School Scholarship Fund (PSSF). Scholarship recipients are graduates of public schools, financially disadvantaged, and come from a variety of governorates. AUC funds a majority of these scholarships, with additional support coming from individual and corporate donors.[38]

As the number of active LEAD cohorts phased down over the last few years, AUC redirected some of its LEAD cost share funds toward a new scholarship program called Empower. Empower is modeled after LEAD and aimed at diversity by funding scholarships for public and private school students from five governorates in Upper Egypt: Assiut, Beni Suef, Minya, Sohag, and Fayoum.[39]

Another initiative, which began in Fall 2015, is an effort to shift internal funding away from merit-based to needs-based financial assistance. As part of AUC's diversity targets, it "has already begun restructuring our financial aid policies to ensure that they better reflect University priorities, including our commitment to diversity and access for talented Egyptian students of limited means, international students from regions without substantial government funding for international study, and international study abroad experiences for our own local degree candidates. Thus, by 2019, all University-funded achievement awards will have

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[35] AUC. *Our Community of Learning: A Strategic Plan for AUC at its Centennial.* (Cairo, April 2015), p. 10.
[36] See http://www.aucegypt.edu/admissions/tuition-and-fees. Conversion of Egyptian pounds to US dollars was based on the Central Bank of Egypt's prevailing rate of 8.8 on 18 September 2016.
[37] BUE: http://www.bue.edu.eg/index.php/tuition-fees; GUC: http://www.guc.edu.eg/en/admission/undergraduate/tuition_fees/#fees; FUE: https://www.fue.edu.eg/tuitionfees; MSA: http://www.msa.edu.eg/msauniversity/admission/tuition-fees.
[38] See http://www.aucegypt.edu/admissions/scholarships/egyptian-public-schools.
[39] See http://www.aucegypt.edu/admissions/scholarships/empower.

been phased out (no such awards have been made for the incoming class in fall 2015); as students with achievement awards graduate, the funds will be reallocated to ensure that the University lives within a sustainable financial aid budget and provides aid only to those whom the University deems qualified."[40]

Finding 5.5: AUC has secured funds from foundations and corporations to fund LEAD and LEAD-type scholarships.

As part of its strategic plan, AUC aims to "…raise scholarships and fellowships, and many of these can be targeted at recruiting and retaining students with exceptional talent or achievement. Among the scholarship and fellowship opportunities identified for highlighting in our fundraising are: undergraduate scholarships for students from the Egyptian governorates and undergraduate public school scholarships..."[41]

AUC has had some success with this effort, securing funds in 2013 from the Misr El Kheir (MEK) Foundation for scholarships benefiting students from Assuit, Beni Suef, Sohag, and Fayoum. AUC is also partnering with Orascom Construction Industries on the OC-AUC scholarship program, which provides "five full-tuition annual scholarships to public or private high school graduates from eight governorates in Upper Egypt (Assiut, Beni Suef, Minya, Sohag, Fayoum, Qena, Luxor, and Aswan) to pursue an undergraduate degree in economics at AUC."[42]

In May 2016, AUC signed an agreement with Al-Ghurair Foundation for a LEAD-type program, targeting capable students from disadvantaged backgrounds. AUC is one of four universities in the region receiving funds from the Foundation. While 31 students are expected to benefit in the first year, AUC is hoping that the Al-Ghurair Foundation will be impressed and want to increase AUC's portion of funding. The program has the potential to scale to the size of LEAD, as the Foundation is committed to providing scholarships to a minimum of 15,000 students in the region over the next 10 years.[43]

It is important to note that AUC has shared the successes of LEAD with potential donors to help secure funding for LEAD-type programs, including, most recently, with the Al-Ghurair Foundation. The university has also integrated aspects of LEAD into AUC's Lazard Academy and the Leadership Academy, both of which provide leadership training to students and civic education sessions. These programs may also benefit from LEAD's database to access a wider variety of trainers for their programs.[44]

A member of the Board of Trustees noted that AUC has a budget for scholarships and since diversity is a huge part of their mission, LEAD-type programs will assume a high priority.

Conclusion 5.3: While AUC has limited internal funds for assisting disadvantaged students, they have the capacity to attract external funding for LEAD-type scholarship programs, though perhaps not at the same scale as LEAD.

Recommendation 5: Given that AUC has the commitment, institutional capacity, and potential resources to sustain funding for disadvantaged students, consideration should be given to the

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[40] AUC. *Our Community of Learning: A Strategic Plan for AUC at its Centennial.* (Cairo, April 2015), p. 15.
[41] Ibid., 15.
[42] See http://www.aucegypt.edu/admissions/scholarships/egyptian-students.
[43] See http://www.aucegypt.edu/media/media-releases/auc-signs-mou-al-ghurair-foundation-provide-scholarships-high-achieving-arab.
[44] LEAD. *Sustainability Plan.* (Cairo, no date).

extent to which additional funding to AUC is advantageous in advancing USAID/Egypt's long-term strategy.

ANNEXES

ANNEX I: EVALUATION STATEMENT OF WORK

**Leadership for Education and Development (LEAD) Undergraduate Scholarship Program
Final Performance Evaluation**

I. ACTIVITY BACKGROUND INFORMATION

A. Activity Identifying Information

Award Title: Leadership for Education and Development (LEAD) Undergraduate Scholarship Activity

Cooperative Agreement: 263-A-00-07-00023

Total Estimated USAID Amount: $39,906,506

Start date: March, 7, 2007

End Date: July 30, 2016

Program Manager: Nader Ayoub

Evaluation Program Manager: Seba Auda

Implementing Partner: The American University in Cairo

Governorates of Implementation: Nationwide

Universities: The American University in Cairo (AUC)

B. Background

The Egyptian higher education system continues to be challenged by inequitable access, poor quality and gross inefficiencies. It is plagued by its poor reputation for producing graduates lacking in expert thinking and complex communication skills much needed in a knowledge based economy. The Government of Egypt and Egyptian policymakers recognize that a serious reform effort is needed to improve the higher education system in order to stay competitive in this global society.

In support of the GOE's efforts to reform their education systems, USAID/Egypt has over the years provided significant support to primary and higher education in Egypt, in the areas of school based reform, institutional support and scholarships.

In Egypt, the quality of private education is reputed to be higher than public education, with the gap decreasing in the secondary stage and then increasing tremendously at the higher education stage. This results in increased gaps between the more economically advantaged youth and their poorer cohorts who cannot afford quality private education. These gaps are manifested in significant differences in graduates'

employment potential for more productive and profitable jobs, which favor the more economically advanced part of the student population.

Within this context, USAID/Egypt's past and present scholarship programs have aimed to address this gap and develop the potential of the economically disadvantaged to contribute to the development of Egypt.

The activity being evaluated under this Statement of Work (SOW), the American University in Cairo's (AUC's) Leadership for Education and Development (LEAD) Scholarship Program, has been implemented by AUC since July 2004. The most recent agreement with AUC for LEAD was awarded in 2007 and is scheduled to end in July 2016 (This is the award that is going to be evaluated). The activity was designed to facilitate access to the AUC for qualified graduates of public high schools in all Egyptian governorates who would not otherwise have had the means and opportunity to attend. LEAD enables 54 students per year, including female and male students from all 26 governorates in Egypt and Luxor City, to attend AUC under a full scholarship. Selected students must have demonstrated leadership and community participation qualities during their pre-university years. Students selected to participate in LEAD are encouraged to select from a broad range of majors that contribute to Egypt's development. Students are also expected to demonstrate leadership and engage in community service throughout the program. Select students attend semester abroad programs in the United States. LEAD also organizes a conference each year on a topics salient to Egypt, such as the development of civil society and entrepreneurship. The conference provides a venue for students to share their experiences and concerns, develop and practice leadership skills, and set future goals.

LEAD contributes to USAID/Egypt's Strategic Objective (SO) 22: "Improved Access to Quality Education in Selected Governorates" by expanding access to high quality higher education opportunities for excelling high school graduates from economically deprived backgrounds and from all Egyptian governorates. The program also contributes to Intermediate Result 22.1: "Access Expanded to Girls and Women" by equally targeting male and female students and providing comparable numbers of scholarships to males and females in each of the governorates.

C. **Development Hypothesis**

The activity's development hypothesis is that increased scholarship opportunities for targeted youth will contribute to a better educated workforce that responds to Egypt's labor market needs.

D. **Activity Objectives**

LEAD's objectives include:

1. To train and equip these students with the necessary skills to become leaders in their societies; and
2. To enable LEAD students to become change agents contributing to Egypt's development.

Through the below approaches:

1. To competitively award Egyptian public school students, who could not otherwise afford a quality education, full tuition scholarships to complete their undergraduate studies at AUC;

2. To provide equal opportunity for girls from underprivileged communities to complete their undergraduate education at AUC; and

3. To competitively award a select number of LEAD students for semester abroad study in the US.

E. Main Activities

The LEAD scholarship process has a number of stages, including: 1) recruitment, 2) screening, 3) selection and 4) award and implementation.

1. **Recruitment Process**—To recruit students, AUC, in collaboration with USAID, makes an announcement of the LEAD Scholarship program through the leading Egyptian newspapers and applicants send their applications to the AUC LEAD Program Office.

2. **Screening Process**—An AUC/LEAD committee that includes AUC faculty members, Egyptian Association for Education Resources (ERA) Director, AUC Career Services Manager, Director of Graduate Students Services, representative from the Office of Institutional Testing, and Academic Advisors from AMIDEAST, carries out the first screening of applications based on a scoring matrix. The Committee then nominates 20 potential scholars from each governorate, 10 males and 10 females, to be tested and interviewed and notifies them. Nominations are based on the fulfillment of the following criteria:
   - An active member in the public school Student Union body, or in the local community
   - A score of not less than 85% in Thanaweya Amma.
   - Adequate knowledge of the English language
   - Adequate written communication skills, as demonstrated by the essays
   - Orientation/commitment to public service
   - Potential for further leadership development

3. **Selection Criteria--**A rigorous selection process is carried out to evaluate each applicant's academic abilities and involvement in extracurricular and/or community service activities. Final selection is based on placement exam scores, essays, proof of activities and the outcomes of the interviews. Students are interviewed and tested on campus. Final interviews take place in either the select student's governorate or a neighboring governorate. In keeping with standard practice at the AUC, the ultimate decision to admit students to the University rest exclusively with the University.

4. **Award and Implementation**—The LEAD scholarship program has a number of components. The program offers a broad diversity of enrichment activities, including summer internships in NGOs, development agencies, and other social service organizations, and a semester abroad component for selected outstanding students (approximately one third of the scholarship recipients). During the semester students must participate in one or two special, one-day activities. These one-day activities allow for follow-up with students and provide students with some essential leadership skills and enrichment. Particular focus is given to topics related to development issues/challenges facing Egypt and the Arab region, such as illiteracy, women's and children's health, desert development, refugee and migration issues, etc. AUC draws widely from its own faculty and from outside experts (NGO leaders, public officials, business executives, etc.) to carry out these one-day workshops. Through the semester students have opportunities in intensive English Language training; computer training; cohort development and teambuilding; and other pre-academic preparation (e.g., library and research skills, study skills, etc.).

Students must meet the following criteria in order to retain their scholarships:

- Student is able to satisfactorily fulfill the requirements of his/her chosen degree program with a GPA not less than 2.00.
- Student engages in at least one extracurricular or community service activity each academic year during the course of his/her study.
- Attending the orientation program, scholarship meetings, and the annual mid-year conference.
- Student must work towards graduating within six years from initial enrollment.

F. Results to Date

LEAD has achieved the following results to date:

- The total number of students in 2004 and 2007 award is approximately 200 males and 200 females from public school students with full scholarships to AUC.
- To date, 282 LEAD students (140 males and 142 females) have successfully graduated, including with degrees in economics, mass communication, business, engineering, and other specializations.
- 82% of LEAD graduates have gained employment in major national and multinational organizations and local and international NGOs.
- Of the employed LEAD graduates, 47% are working in the services sector; 34% in the industrial sector; and 13% in the development sector.
- From the LEAD graduates who were successful to find jobs, 25% are also pursuing a master's degree, or are enrolled in PhD programs in Egypt and abroad.
- Many LEAD graduates are contributing to their communities through active voluntary endeavors in their home governorates.

G. Gender Considerations

The program also targets a gender balance as it aims to select, equally, male and female students from all 26 governorates. The program has succeeded in developing and sustaining a gender balance among program recipients.

H. Sustainability Considerations

The issue of sustainability is an important and, in the case of the LEAD, complex issue. In order to determine sustainability the Evaluation Team is to look for indicators that the AUC valued LEAD and—separate from this—is prepared to increasingly take on the costs of the program. LEAD greatly contributes to the educational environment at the AUC. Leadership at AUC and the AUC mission statement clearly value and are striving to increase diversity on campus and, absent of LEAD, most governorates would be without any representation at the AUC. Overall, USAID has funded approximately 83 percent of the LEAD program and AUC contributes the remaining 17 percent. USAID's intention was that AUC—a major beneficiary of the program— would increase its funding commitment over the life of the project.

To promote sustainability of the LEAD program vision in offering exceptional academic opportunities to underprivileged students from different governorates, AUC currently offers a number of LEAD-like scholarships, like the Empower, MEK-AUC and OCI-AUC scholarships. These scholarships follow the LEAD model in recruitment and selection, residence in AUC dorms, a monthly stipend in addition to leadership and community development training and retreats and support by a Student Life Coordinator.

Empower scholarship offers five annual scholarships to disadvantaged Thanaweya Amma students with leadership potential from five Upper Egyptian governorates: Assiut, Beni Suef, Minya, Sohag, and Fayoum.

In fall 13, AUC admitted five MEK students from Assiut, Beni Suef, Sohag and Fayoum governorates to complete their undergraduate non-science degree at AUC. The Misr El Kheir (MEK) Foundation is an Egyptian not-for-profit foundation committed to developing Egyptian citizens and communities. The Foundation shares the costs of the MEK scholarship program with AUC to provide students with full tuition scholarships in addition to leadership training, books, stipends, transportation and housing. MEK Scholarship does not currently accept new applications.

AUC also partnered with Orascom Construction Industries to offer a new OCI-AUC scholarship program. The scholarship provides five full-tuition annual scholarships to public/private high school graduates from eight governorates in Upper Egypt: Assiut, Beni Suef, Minya, Sohag, Fayoum, Qena, Luxor and Aswan to pursue an undergraduate degree in "Economics" at AUC.

I. **Linkage with USAID/Egypt Assistance Objectives**

LEAD contributes to USAID/Egypt's Strategic Objective (SO) 22: "Improved Access to Quality Education in Selected Governorates" by expanding access to high quality higher education opportunities for excelling high school graduates from economically deprived backgrounds and from all Egyptian governorates. The program also contributes to Intermediate Result 22.1: "Access Expanded to Girls and Women" by equally targeting male and female students and providing comparable numbers of scholarships to males and females in each of the governorates.

J. **Modifications**

A number of modifications have occurred over the course of the agreement, including:

- MOD#1 (1/28/2008): to fully fund and obligate this Cooperative Agreement by $7,437,185+ L.E 24,007. This brought the total to $13,350,185+ L.E 155,228.
- MOD#2 (3/3/2008): to delete the following: Attachment A, SCHEDULE, A.2 PERIOD OF COOPERATIVE AGREEMENT, No.2 page 4 "Funds obligated hereunder are available for program expenditures for the estimated period March 7, 2007 to March 6, 2008".
- MOD#3 (2/8/2009): to increase the total estimated amount by $8,458,100 and L.E 106,267 from "$13,350,185 and L.E 155,228"; to incrementally fund the obligated amount by $8,458,100 and L.E 106,267 thereby increasing the total obligation from "$13,350,185 and L.E 155,228" to "$21,808,285 and L.E 261,495"; to increase the Total Cost –Sharing amount to "$4,946,497" and to extend the completion date by one year from "July 31,2013" to "July 31, 2014".
- MOD#4 (4/1/2009): to incorporate the budget breakdown and correct the cost share amount.
- MOD#5 (10/26/2009): to increase the Total Estimated Amount by $9,000,000 and L.E 110,248 from $21,808,285 and L.E 261,495 to $30,808,285 and L.E 371,743; to increase the Total Obligated Amount by $9,000,000 and L.E 110,248 from $21,808,285 and L.E 261,495 to $30,808,285 and L.E 371,743; to increase the Total Cost-Sharing Amount by $2,699,493 from $4,925,290,43 to $7,624,783,43; and extend the completion date by one year from July 31,2014 to July 31,2015.
- MOD#6 (2/21/2010): to replace the reporting section with the following: the recipient must submit the federal Financial form (SF 425) on quarterly base via electronic format to the U.S. Department of Health and Human Services (http//www.dpm.pac.gov). The recipient must submit a copy of the FFR at the same time to the Agreement Officer's Technical Representative (AOTR)
- MOD#7: to re-align the budget of Cohort 3 & 4, 5 and 6; and to revise the amount allocated for social insurance to re-state the amount in USD instead of L.E. Social Insurance amount will be

$27,236,25 instead of L.E 155,228.00 for cohort 3 & 4, $18,791.69 instead of L.E 106,267.00 for Cohort 5, and $20,136.62 instead of L.E 110,248.00 for Cohort 6.

- MOD#8 (9/8/2010): to add a new cohort to this agreement to be names as cohort VII for the period 2010-2016; Revise the agreement budget by adding a separate budget for cohort VII; Revise the Program Description by including cohort VII; Increase the Total Estimated Amount by $9,750,000 and $15,856 (FT800) from $30,808,285 and $66,165 (FT800) to $40,558,285 and $82,021 (FT800); Increase the Total Obligated Amount by $9,750,000 and $ 15,856 (FT800) from $30,808,285 and $66,165 (FT800) to $40,558,285 and $82,021 (FT800); Increase the Total Cost-Sharing Amount by $3,248,330 from $7,231,299 to $10,479,629; Add Corporate Cost Sharing for cohort VII for $ 75,000; and Extend the completion date by one year from July 31, 2015 to July 31, 2016.
- MOD#9 (3/21/2011): 1. Revise Section A.5 Reporting and Evaluation; Revise Section A. 10 Substantial involvement; and Revise Section A.6 indirect Cost Rate as per AUC's latest NICRA 2010 approved by DHHS.
- MOD#10: Revise the agreement budget by adding a separate budget for an outreach, recruitment, screening and selection Plan nationwide in anticipation of adding cohort VIII of 30 additional students from 27 governorates, subject to funds availability; Revise the Program Description by including an outreach, recruitment, screening and selection Plan nationwide for the anticipated addition of cohort VIII of 30 additional students from 27 governorates, subject to funds availability; increase the Total Estimated Amount by $107,685 from $40,558,285 and $82,021 (FT800) to $40,665,970 and $82,021 (FT800); and increase the Total Obligated Amount by $107,685 from $40,558,285 and $82,021 (FT800) to $40,665,970 and $82,021 (FT800).
- MOD#11: Add a new cohort to this agreement to be named as cohort VIII for the period 2011-2016; Revise the agreement budget by adding a separate budget for cohort VII ;Revise the Program Description by including cohort VII; increase the Total Estimated Amount by $4,392,000 and $4,087 (TA-X) from $40,665,970 and $82,021 (TA-X) to $45,057,970 and $86,108 (TAX);increase the Total Obligated Amount by $1,000,000 and $4,087 (TA-X) from $40,665,970 and $82,021 (TA-X) to $41,665,970 and $86,108 (TA-X); increase the Total Cost-Sharing Amount by $1,558,215 from $10,479,629 to $12,037,844; Add 1 new clause.
- MOD#12 (2/5/2013): to fully fund the balance of the subject Cooperative Agreement thus raising the obligated amount by $3,392,000 from $41,665,970 to $45,057,970.
- MOD#13: to de-obligate a total amount of $5,151,463 to decrease the total budget from $45,056,970 to $ 39,906,506; to realign the budgets for cohorts VI, VII and VIII; to apply new NICRA effective 7/1/2014 on the re-aligned budget; to decrease cost share amount by $1,129,044 to decrease cost share amount from $12,037,844 to $10,908,800; and to incorporate the revised program description.

II. EVALUATION RATIONALE

A. <u>Purpose</u>

The purpose of this final performance evaluation of the LEAD Undergraduate Scholarship Program is to provide USAID /Egypt with information to make decisions about the program's efficacy and relative importance in the higher education portfolio. It will provide findings to be taken into consideration in the design of future scholarships programs. The lessons learned of the LEAD final evaluation will benefit decision makers in similar scholarships programs; for example, Local Scholarship Program (LSP) and Leadership Opportunity Transforming University Students (LOTUS) Scholarship Program.

B. <u>Audience and Intended Uses</u>

The audience for the evaluation will be the Ministry of Higher Education and Scientific Research (MOHESR), the USAID/Egypt Mission, specifically the education team, the implementing partner (AUC), and USAID/Washington. The evaluation results will be shared with MOHESR, as well as other stakeholders, and education NGOs in a workshop setting. The final evaluation report should be made accessible to the public via USAID's Development Experience Clearinghouse (DEC) within three months of report completion.

III. EVALUATION QUESTIONS

This section presents the fundamental questions that the evaluation will answer. The evaluation will produce a comprehensive analysis of the outcomes and the causal contributors to those outcomes. The specific evaluation questions are:

1. To what extent are the students and alumni of the LEAD equipped with the skills to potentially assume positions of leadership in academia, government, industry and business?
2. To what extent are the students and alumni satisfied with the program services (English Language training, computer training, team building, and library and research skills)?
3. To what extent has the LEAD succeeded to achieve gender balance with the program services (English Language training; computer training; cohort development, team-building, library and research skills, study skills, etc.)?
4. What is the Return on Investment of the LEAD? (That will be left to the Evaluation Team to propose the methodology to answer that question)
5. To what extent does AUC have the institutional capacity and resources to achieve sustainable results?

IV. EVALUATION DESIGN AND METHODOLOGY

A. <u>Evaluation Design</u>

This is a final performance evaluation and is intended to focus on how LEAD is implemented, what it has achieved, and whether expected results were attained according to the project design. It will provide findings to be taken into consideration in the design of future scholarships programs. It will collect and evaluate the data and evidence necessary to address the fundamental evaluation questions.

The Evaluation Team will use a mix of quantitative and qualitative data collection and analysis methods to answer the questions in this evaluation. The evaluation must follow the principles and guidelines for high quality evaluations outlined in the *USAID Evaluation Policy* (January 2011).

The final report will be reviewed using the *Checklist for Assessing USAID Evaluation Reports* (http://www.usaid.gov/results-and-data/information-resources/program-evaluations).

Proposed data collection methods include document review, on-campus survey of current beneficiaries, group discussions of alumni and current beneficiaries, key informant interviews of employers and participating university.

To facilitate analysis, the data will, to the extent feasible, be collected and reported in a way that enables disaggregation across multiple dimensions. These dimensions include, but are not limited to, gender, academic discipline, degree type, geographic area and sector of employment.

B. Data Collection Methods

The Evaluation Team should consider a range of possible methods and approaches for collecting and analyzing the information which is required to address the evaluation questions. The evaluation team shall share data collection tools with USAID for review, feedback and/or discussion with sufficient time for USAID's review before they are applied in the field.

The data collection methodology will include a mix of tools appropriate to the evaluation's questions. These tools will include a combination of document review, key informant interviews and focus group discussions with key informants. The methods are expected to be a mix of qualitative and quantitative approaches. The evaluation team will specify the percentage of the sample size.

The selection of beneficiaries to be interviewed will be based on the diversity of different academic programs, gender, and geographic location, as well as practical considerations for completion of the evaluation.

As for the return on investment question, the "investment" per student is simply USAID's fully loaded costs, including overhead, of attaining the degree. However, it is much more difficult to reliably and credibly monetize the return to education programs. So, it is expected that the Evaluation Team will propose a methodology to collect the data. They will then discuss it with the USAID for approval.

The team will conduct a desk review of all resources sent to them prior to coming to Egypt and during the Team Planning meeting.

Document Review – The Evaluation Team will collect and review all relevant project documents from USAID, AUC and other sources identified during the evaluation.

USAID and the implementing partner will provide the Evaluation Team with relevant soft copies of a package of briefing materials, including: program agreement and amendments, quarterly and annual reports, budget information as relevant and appropriate to be shared, Performance Monitoring Plan, and as appropriate, other documents requested by the Evaluation Team such as evaluation, audit and assessment reports.

Key Informant Interviews– The Evaluation Team will conduct key informant interviews with the officials of AUC, USAID and recipient universities' administration to collect information necessary for answering the evaluation questions.

Online and On-campus Surveys – USAID expects to base the quantitative portion of the evaluation on a large-scale online survey, to be sent to all graduates of the universe of LEAD alumni and on-campus survey of current recipients. The acceptable response rate is assumed to be not less than 50 percent. The AUC maintains a database of LEAD alumni and current students. The Evaluation Team will access these lists; it will include all alumni in an on-line survey, and a random sample of students in an on-campus survey that the Evaluation Team will specify its percentage.

Focus Group Discussions – The Evaluation Team will conduct group discussions with samples of LEAD alumni and current beneficiary students. If possible, the team will recruit participants randomly from lists of alumni. The qualitative interviews will provide evidence of the effect of the LEAD program on the graduates' employment.

C. <u>Relevant Documentation</u>

USAID and the implementing partner will provide the Evaluation Team with soft copies of a package of briefing materials, including:

- Activity's agreement and modifications
- Project's design documents and modifications
- Activity's quarterly and annual reports
- Budget information as relevant and appropriate to be shared
- Activity's Performance Monitoring Plan
- Audit findings of the USAID/Egypt's LEAD Activity
- LEAD midterm evaluation report
- Contact information for key informants
- Current student and alumni database

The Evaluation Team should complete the document review prior to arriving in Egypt. The Evaluation Team may also request and review additional resources to the extent necessary to perform its work.

D. <u>Data Quality Standards</u>

The Evaluation Team must ensure that the data they collect clearly and adequately represents answers to the evaluation questions, is sufficiently precise to present a fair picture of performance, and is at an appropriate level of detail.

E. <u>Data Analysis Plan</u>

Prior to the start of data collection, the Evaluation Team will develop and present, for USAID/Egypt review and approval, a data analysis plan which will emphasize the unit of analysis; for example, the students receiving the scholarship. The unit of analysis will also be disaggregated by gender and geographic area. The Evaluation Team will explain how focus group interviews will be transcribed and analyzed, how the qualitative data from the focus group discussions and in-depth interviews with the key informants and other stakeholders will be integrated with quantitative data from the different relevant documents to reach conclusions about the effectiveness of the LEAD program.

F. <u>Data Limitation</u>

USAID recognizes that it takes several years after graduation and entry into the workforce to achieve the ultimate objective of producing citizens who contribute to Egypt's economic and social development. Therefore, the evaluation will collect the best available data and make evidence-based inferences while recognizing the limits of the analysis.

USAID expects that all issues affecting validity be discussed and documented during evaluation planning. Measures to mitigate these issues will be addressed with all team members and USAID in the implementation phase and detailed in the final report.

V. EVALUATION PRODUCTS

A. <u>Deliverables</u>

Evaluation Team Planning Meeting: A team planning meeting must be held in Egypt at the onset of the evaluation. This meeting will allow USAID/Egypt to discuss the purpose, expectations, and work plan of the assignment with the Evaluation Team. In addition, USAID/Egypt and the Evaluation Team must:

- Finalize team members' roles and responsibilities;
- Review and finalize evaluation questions;
- Review and finalize the evaluation timeline;
- Present and discuss data collection methods, instruments and tools, analysis, and guidelines; and
- Review and clarify any logistical and administrative procedures for the assignment.

A well-written, detailed methodology and data analysis plan (including an evaluation design matrix, data analysis plan, and evaluation work plan) must be prepared by the Evaluation Team, discussed, and approved by USAID during the planning meeting.

USAID will provide the Evaluation Team with a stakeholder analysis that includes an initial list of interviewees, from which the Evaluation Team can work to create a more comprehensive list. The Evaluation Team will construct a preliminary interview schedule that includes different stakeholders, and then share with USAID the updated lists of interviewees and schedule as meetings/interviews take place and informants are added to/deleted from the schedule. The finalized list must be sent to USAID no later than five working days after submission of the preliminary interviewees' schedule.

Debriefing with the USAID and Implementing Partner: After five (5) working days of conducting the field work, the Evaluation Team must present its preliminary findings to USAID/Egypt and to the implementing partner. The Contractor will prepare a power point presentation in English and to present first to the USAID/Egypt team and then to key stakeholders, in a debriefing meeting, the key findings and draft recommendations from the evaluation. The debriefing must include a discussion of findings, including project achievements and challenges, as well as preliminary recommendations for the future activity designs and implementation. All recommendations should be presented as actionable recommendations and shall identify the recommended institution and or office responsible. The Contractor shall collect comments and recommendations expressed in the debriefing meeting and shall incorporate them in the Draft Report. The team must consider any USAID/Egypt comments, as appropriate, when revising the draft evaluation report.

Draft Evaluation Report: After one (1) week of the debriefing presentation and prior to departing Egypt, the Evaluation Team must submit a draft report of the findings and recommendations to the USAID Evaluation Manager. The written report must clearly describe findings, conclusions and recommendations for future programming. USAID will provide written comments on the draft report within seven (7) to ten (10) working days of receiving the document.

Final Evaluation Report: The final evaluation report must be submitted within seven (7) working days of receiving USAID's comments. The final report must not exceed 30 pages in length (not including appendices, lists of contacts, etc.). The format must include an executive summary, table of contents, glossary, methodology, findings, and conclusions. The report must be submitted initially in English, electronically, and later, the executive summary will be translated into Arabic.

At the time of submission of the final English language report, the survey instruments, interviews, and data sets must be submitted on a flash drive to the Evaluation Program Manager.

All data instruments, data sets, presentations, meeting notes, and final report for this evaluation will be presented to USAID/Egypt's Evaluation Program Manager. All data on the flash drive will be in an unlocked and editable format.   All quantitative data collected by the Evaluation Team must be provided in machine-readable, non-proprietary formats as required by USAID's Open Data policy (see ADS 579). The data should be organized and fully documented for use by those not fully familiar with the project or the evaluation. USAID will retain ownership of the survey and all datasets developed.

The Evaluation Team must submit an executive summary to accompany the final report. The executive summary should be 3–5 pages in length and summarize the purpose, background of the project being evaluated, main evaluation questions, methods, findings, conclusions, and recommendations and lessons learned (if applicable). The executive summary must be easy to read for wide distribution to local audiences. The executive summary must be submitted in English and Arabic in hard copy and electronically.

USAID/Egypt intends to disseminate the evaluation report and expanded executive summary within USAID, the implementing partner and the Ministry of Higher Education.

Payment. In consideration for the work to be performed by the Contractor, the Government intends to pay the Contractor an agreed upon firm fixed price upon the following conditions: (1) 70% of the fixed price upon acceptance of the final evaluation report in English in accordance with Section V.B., Evaluation Report Requirements; and (2) the remaining 30% of the fixed price upon acceptance of the final evaluation report translated into Arabic.

B. Evaluation Report Requirements

The format for the evaluation report is as follows:

1. **Executive Summary**—concisely state the most significant findings and recommendations (2 pp);
2. **Table of Contents** (1 pp);
3. **Introduction**—purpose, audience, and summary of task (1 pp);
4. **Background**—brief overview of LEAD project in Egypt, USAID project strategy and activities implemented in response to the problem, brief description of LEAD, purpose of the evaluation (2 pp);
5. **Methodology**—describe evaluation methods, including threats to validity, constraints and gaps (1 pp);
6. **Findings/Conclusions/Recommendations**—for each evaluation question, the report will state findings, conclusions and recommendations in clearly demarcated sub-sections; also clear distinctions will be made between findings, conclusions, and recommendations *(15–20 pp);*
7. **References** (including bibliographical documentation, meetings, interviews and focus group discussions);
8. **Annexes**—annexes that document evaluation scope of work, evaluation methods and limitations, copies of the actual data collection tools, documents reviewed, schedules, interview lists and tables— should be concise, relevant and readable. Annexes should also include a disclosure of any conflict of interest by evaluation team members.

The final report will be reviewed using the *Checklist for Assessing USAID Evaluation Reports* (http://www.usaid.gov/results-and-data/information-resources/program-evaluations).

The final evaluation report must conform to the Criteria to Ensure the Quality of the Evaluation Report found in Appendix I of the USAID *Evaluation Policy*. The Evaluation Program Manager will determine if the criteria are met. This evaluation will not be considered "final" until the Evaluation Program Manager has confirmed, in writing, that the report has met all of the quality criteria.

General evaluation report guidelines include:

- The evaluation report must represent a thoughtful, well-researched and well organized effort to objectively evaluate what worked in the project, what did not, and why;

- The report must include the evaluation Scope of Work as an annex. All modifications, whether in technical requirements, evaluation questions, evaluation team composition, methodology, budget, or timeline must be agreed upon in writing by the AO.

- Evaluation methodology must be explained in detail and all tools used in conducting the evaluation such as questionnaires, checklists and discussion guides must be included in an Annex in the final report;

- Limitations to the evaluation must be disclosed in the report, with particular attention to the limitations associated with the evaluation methodology (selection bias, recall bias, unobservable differences between comparison groups, etc.) and what is being done to mitigate the threats to validity;

- Evaluation findings must be presented as analyzed facts, evidence, and data and not based on anecdotes, hearsay or the compilation of people's opinions. Findings must be specific, concise and supported by strong quantitative or qualitative evidence;

- Sources of information must be properly identified and listed in an annex;

- Recommendations must be supported by a specific set of findings; and
- Recommendations must be action-oriented – organized according to whether recommendations are short-term or long-term, practical, and specific, with defined responsibility for the action.

The final evaluation report must be submitted to USAID/Egypt's Evaluation Program Manager in electronic format (Microsoft Word) as well as printed and bound copies (five copies in English and five in Arabic for the expanded executive summary. The entire report must be no longer than 30 pages, single-spaced in Times New Roman font, size 12 type fonts.

In accordance with AIDAR 752.7005, the contractor will make the final evaluation reports publicly available through the Development Experience Clearinghouse within 30 calendar days of final approval of the formatted report.

VI. EVALUATION MANAGEMENT

A. <u>Logistics</u>

USAID will provide overall direction to the Evaluation Team, identify key documents, and assist in facilitating a work plan. USAID will assist in arranging meetings with key stakeholders identified by USAID prior to the initiation of field-work. The Evaluation Team is responsible for arranging other meetings as

identified during the course of this evaluation and advising USAID/Egypt prior to each of those meetings. The Evaluation Team is also responsible for arranging transportation as needed for site visits in and around Cairo.

B. Team Composition and Roles

USAID envisions that the Evaluation Team will be composed of a team leader (key personnel position), three (3) team members and a logistics coordinator, although the bidder can propose alternative staffing. All attempts should be made for the Evaluation Team to be comprised of male and female members. Per USAID Evaluation Policy, all team members will be required to provide a written disclosure of conflicts of interest. The Team members' qualifications are as follows:

Key Personnel—Team Leader: A senior international consultant with 10 years' experience in conducting evaluations for higher education scholarships programs. S/he should be familiar with evaluating higher education programs, particularly student support programs (i.e. scholarship and fellowship programs) and be knowledgeable about the higher education sector and development needs in Egypt. S/he should also have a minimum of 5 years in leading evaluation teams, interpersonal relations and writing skills. The Evaluation Team leader will be responsible for designing and implementing the evaluation and for writing the evaluation report.

The Team Leader will:
- Finalize and negotiate with USAID/Egypt the evaluation work plan;
- Design the evaluation plan.
- Establish evaluation team roles, responsibilities, and tasks;
- Facilitate the Team Planning Meeting (TPM)
- Ensure that the logistics arrangements in the field are complete;
- Manage team coordination meetings in-country and ensure that team members are working to schedule;
- Coordinate the process of assembling individual input/findings for the evaluation report and finalizing the evaluation report;
- Lead the preparation and presentation of key evaluation findings and recommendations to USAID/Egypt team prior to departing Egypt.
- Design the Evaluation Plan.

Recommended Team Members:

Senior-level Economist/Evaluator: A senior international Economist with at least 10 years' experience in evidence based policy research and in conducting quantitative analyses including assessing returns on investment for higher education programs, particularly student support programs (i.e. scholarship and fellowship programs) and be knowledgeable about the higher education sector and development needs in Egypt.

Two mid-level local Evaluation Specialists: An mid-level evaluation specialist with minimum 5 years' experience in monitoring and evaluating and designing education projects, with strong writing skills, excellent understanding of the higher education system in Egypt, as well as familiarity with USAID programs. They should also have proven experience in conducting evaluations in Middle Eastern countries, in the areas of employment, vocational training, labor market and gender. They should have experience in drafting high quality reports. They will participate in different evaluation activities and may be assigned specific tasks by the Team Leader as appropriate. These individuals will be responsible for focus group interviews with LEAD alumni and current students and interviews with AUC and relevant officials and

recipient universities. They will also design the online questionnaire and all interview guides and analyzing survey data. Team members will also write specific sections of the report.

The Team Members will coordinate in:
- Designing the evaluation plan.
- Developing a data collection plan.
- Conducting field visits, surveys, and interviews.
- Collecting the data.
- Recording and summarizing the data.
- Analyzing the data collected.
- Preparing reports and presentations for discussing the findings.

Logistics coordinator: Three (3) to five (5) years' experience in handling travel related logistics and providing administrative support. The person should be fluent in written and spoken Arabic.

The Logistics Coordinator will:
- Provide administrative support to Evaluation Team members.
- Be responsible for setting up meetings with USAID and stakeholders.

C. <u>Period of Performance</u>

The evaluation is envisioned to be carried out over a 13-week period, beginning on June 6, 2016 and final report and close out concluding by August 28, 2016.

Please note the AUC staff will not be available after July 31st. Therefore, all data collection and any interaction with the AUC staff must be completed by that date.

[END OF RFTOP]

ANNEX II: EVALUATION METHODS AND LIMITATIONS

The mixed methods approach to data collection and analysis draws upon multiple sources of information to address the evaluation questions. Multiple sources of information are used to corroborate the findings, enrich the analysis, and minimize the effect of biases inherent in any single source. Table II.1 summarizes data sources, data collection methods, sampling or selection approach, and data analysis methods used for each evaluation question.

The LEAD final performance evaluation utilized four categories of information and data sources: (a) program documents, (b) quantitative data from primary (survey) and secondary sources (LEAD administrative records), (c) qualitative data from key informant interviews and individual and group interviews, and (d) return on investment data. Each source and its limitations are discussed below.

1. Program Documents

A review of program documents preceded the development of primary data collection tools to provide contextual and programmatic information about the LEAD program as a whole. LEAD provided the documents for the team to review upon initiating the assignment (refer to Annex IV for the list of documents).

The documents included in the desk review were culled from a much larger pool of reports for the nine years of the LEAD program. They oriented the team and provided a sense of the scope and depth of the activity at the start of the evaluation and helped ground the findings after data collection.

2. Quantitative Data Sources

The evaluation team used two quantitative datasets in the analysis: secondary datasets on students and component tracking provided by LEAD; and an online survey of LEAD alumni (n=104) designed by the evaluation team and administered via Survey Monkey.

2.1. Secondary Data Sources

The following databases were received from LEAD:

1. A folder with three Excel files. The 'Graduated Students GPAs.xlxs' file included the cumulative GPAs of graduated students for Cohorts 4-8 (n=220). The 'Dismissed-Withdrawn-Inactive Students GPA.xlxs' file included the names of dismissed, withdrawn, and inactive students (n=26). Finally, the 'Current Students GPAs.xlxs' file had the current students' names for Cohorts 4-8 (n=9).
2. Files of LPI scores per semester and cumulative; one file for each cohort (from Cohorts 4-8), i.e., the LPI folder.

TABLE II.1: Evaluation Methods, Data Collection, and Analysis

Evaluation Question	Answer & Evidence Needed			Data Information			
	Description	Comparison	Explanation	Data Sources	Data Collection Methods	Sampling or Selection Approach	Data Analysis Methods
EQ1: To what extent are the students and alumni of the LEAD equipped with the skills to potentially assume positions of leadership in academia, government, industry, and business?	x	x	x	Project relevant documents as listed in Annex IV	Document review	Selected program documents provided by USAID and LEAD (e.g., cooperative agreement, annual reports, quarterly reports, etc.)	Content analysis
				LEAD databases with GPAs and LPI scores	Secondary data	Total population of Cohorts 4-8 (data not available to evaluation team for Cohort 3)	Cross tabulations
				Graduates, LEAD program staff, and AUC faculty and staff. In addition, partnering NGOs that offered internships, direct supervisors and HR managers, and host US universities that participated in the study abroad component	Key informant interviews, group interviews/ discussions, telephone interviews	Total population of scholarship recipients, and purposive sample of stakeholder	Content analysis, coding of qualitative data, tally sheets, cross tabulations
				Graduates	Online survey	Total population of scholarship recipients	Descriptive and statistical analysis

Evaluation Question	Answer & Evidence Needed			Data Information			
	Description	Comparison	Explanation	Data Sources	Data Collection Methods	Sampling or Selection Approach	Data Analysis Methods
EQ2: To what extent are the students and alumni satisfied with the program services (English Language training, computer training, team building, and library and research skills)?	x	x	x	Project relevant documents	Document review	Selected program documents provided by USAID and LEAD (e.g., annual surveys, periodic reports)	Content analysis
				Graduates	Group discussions	Total population of scholarship recipients	Content analysis, coding of qualitative data, tally sheets, cross tabulations, descriptive analysis
				Graduates	Online survey	Total population of scholarship recipients	Descriptive and statistical analysis
EQ3: To what extent has the LEAD succeeded to achieve gender balance with the program services (English Language training; computer training; cohort development, team-building, library and research skills, study skills, etc.)?	x	x	x	Project relevant documents	Document review	Selected program documents provided by USAID and AUC (e.g., annual periodic reports)	Content analysis
				LEAD program staff	Key informant and group interviews	Purposive sample	Content analysis, coding of qualitative data, tally sheets, cross tabulations
				Graduates	Group discussions	Total population of scholarship recipients	Content analysis, coding of qualitative data, tally sheets
				Graduates	Online survey	Total population of scholarship recipients	Descriptive and statistical analysis, cross tabulations

Evaluation Question	Answer & Evidence Needed			Data Information			
	Description	Comparison	Explanation	Data Sources	Data Collection Methods	Sampling or Selection Approach	Data Analysis Methods
EQ4: What is the Return on Investment of the LEAD?[6]	x	x	x	LEAD program staff	Key informant and group interviews	Purposive sample	Content analysis, coding of qualitative data, tally sheets, cross tabulations
				Project relevant documents	Document review	Selected program documents provided by USAID and AUC (e.g., budgets)	Content analysis, cost benefit analysis
				Other documents	Literature review	Selected studies and publications (e.g., Egypt's Sustainable Development Strategy, 2015)	Content analysis
				Graduates	Online survey	Total population of scholarship recipients	Descriptive and statistical analysis
EQ5: To what extent does AUC have the institutional capacity and resources to achieve sustainable results?	x	No	x	LEAD program staff; AUC faculty, staff, administration and Board of Trustees; donor (MEK)	Key informant interviews, group interviews/ discussions	Purposive sample of stakeholders	Content analysis, coding of qualitative data, tally sheets, cross tabulations
				Project relevant documents	Document review	Selected program documents provided, AUC documents, and information available on AUC and other websites	Content analysis

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[6] The statement of work states that "the return on investment methodology will be determined by the evaluation team." Refer also to Evaluation Question No. 4.

3. The 'Alumni Tracking - New Database March 31 FINAL.xlxs' file contained geographic information for all graduated students for Cohorts 1-8, including names, gender, major, and contact information. The total number of observations was 365, of which 220 were from Cohorts 4-8 and 46 from Cohort 3.
4. The 'LEAD IV - VIII Study Abroad Students. Xlxs' file which included the contact information for students who travelled abroad from Cohorts 4-8, sponsored by USAID (n=126) and Orascom Construction Industries (n=14).

The four databases were merged, using the names given in the files, by cohort and gender to conduct correlations on GPA, LPI, and US Study Abroad. The names were deleted from the final file to preserve the anonymity of the data.

2.2. Limitations in the Secondary Data Sources

Unfortunately, the team did not have access to the full set of documents and they were difficult to obtain since the program had already ended. The biggest challenge was not having full data for Cohort 3, except for the alumni tracking file, which provided only gender, major, and contact information, but not GPA, LPI, or travel abroad.

A second limitation was data inconsistency among the databases in terms of spelling and reporting. Graduates' names were spelled differently across databases, which caused extra effort to avoid duplication and elimination while merging the files. In addition, various databases recorded the status of graduates differently. For example, some students were reported as being sponsored simultaneously by USAID and Orascom Construction Industries for US Study Abroad, without further clarification. Moreover, the content of annual and quarterly reports was not systematic and often mixed data with the previous cooperative agreement pertaining to Cohorts 1 and 2.

A third limitation was the lack of digitized information on the background characteristics of LEAD applicants and selected students. This information would have allowed the team to analyze the gender and geographic balance in applications to the program and, hence, the admission rates.

2.3. Primary Data Sources: Online Survey of LEAD Program Graduates

The evaluation team developed an online survey that included 39 questions in all: five on LEAD program services, seven on leadership development, five on general topics, and twenty-two on demographics. The response options included yes/no, multiple choice, single choice from a drop down menu, open-ended, and scale. The scales were from one to seven, starting from extremely negative responses to extremely positive. For example, in the questions related to satisfaction, one equaled "extremely unsatisfied" and seven equaled "extremely satisfied." When reporting the number of alumni who were satisfied or extremely satisfied, ratings of 6 and 7 were counted.

The online survey was sent to all LEAD graduates, as well as withdrawn and dismissed students, but not to inactive or continuing students (n=297). The survey was developed by the evaluation team and reviewed and tested internally. Finally, it was posted on Survey Monkey – an online survey development cloud-based software – on August 15, 2016 and disabled on September 4, 2016.

An e-mail was sent to all LEAD beneficiaries in Cohorts 3-8 for whom an e-mail address was available (n=297). This included 266 graduates, eight continuing students, 15 dismissed students, six withdrawn students, and two inactive students. Three e-mails were incorrect and one was missing for one of the

students. Follow-up e-mails were sent on August 22, 28, and 31, and telephone calls made to all beneficiaries with working numbers on August 16, 17, 23, 24, 30, and 31 to confirm receipt of e-mails.

The total number of respondents was 104, which represented 35 percent of targeted students. Table II.2 shows a summary of the respondents by gender and cohort.

Table II.2: Distribution of Survey Respondents by Cohort and Gender

Cohort	Male	Female	Missing Gender	Total
3	5	11	0	16
4	4	7	0	11
5	6	5	0	11
6	8	10	0	18
7a	4	8	0	12
7b	5	4	0	9
8	1	4	0	5
Missing Cohort	0	0	22	22
Total	**33**	**49**	**22**	**104**

2.4. Limitations Encountered with Online Survey

A total of 104 alumni responded to the survey, but not all answered every question. Moreover, not all questions were relevant to each person. Therefore, in the analysis of the survey data, the calculations were based upon only the actual responses, subtracting non-responses and "not-applicable" responses from the 104.

An important limitation of the online survey was the high number of missing values on the demographic questions (Questions 18-34) (i.e., name, e-mail address, cohort, major, year of graduation, field of work, etc.). Of the 104 respondents, 22 did not answer these questions (21.2 percent of all respondents). Such omissions limited the ability of the statistician to merge survey responses with secondary historical data made available by LEAD.

A second limitation was that only a few graduates shared the contact information of their work supervisors. Seventeen out of 59 employed graduates gave the name of their supervisors and only 12 (20 percent of those employed) provided the needed contact information. Moreover, only eight employers were available for interviews.

Finally, only 40 respondents (63.5 percent of all working students) answered the net monthly income question (Question 39).

a. Analysis of Quantitative Data

The team mainly used descriptive analysis for the quantitative data. For much of the data, this meant simply summing numerical data or describing the number or percentage of a distribution that shared a particular characteristic, e.g., 32% of survey respondents were male and 68% was female. Frequency distributions were also used to analyze the data, e.g., 54% of respondents were "satisfied" or "extremely satisfied."

Using the Stata 11 statistical software package, the team also looked for significant correlations. The two main demographic characteristics for the correlations were gender and cohort. The statement of work

also suggested analysis by geographic area, which was done using alumni's current geographic location rather than their home governorates. The strength of the correlations was tested and the team reported only those that showed a significant difference between males and females, and among the six cohorts.

3. Qualitative Data Sources

To answer evaluation questions 1, 2, 3, and 5, the team used three methods to collect qualitative data: (a) group discussions with LEAD graduates, (b) face-to-face individual and group interviews with LEAD staff and faculty, partner NGOs, and USAID managers, (c) phone interviews with employers, including direct supervisors and human resource managers, US universities that hosted Study Abroad students, and members of AUC's Board of Trustees.

3.1. Group Discussions

The team held five group discussions with a total of 29 LEAD graduates. Originally, the team targeted a random sample of beneficiaries, but there were very few commitments to attend a group discussion. Hence, the total population was targeted and multiple dates and locations were offered to increase the options. Despite these and multiple follow-up efforts, the response rate was low. Some of the possible explanations include timing (data collection took place during the summer holidays), graduates' fatigue with completing surveys, and the fact that some alumni had graduated long ago and/or are living abroad. There was also a number of graduates who stated their commitment to attend, but did not show up. Tables II.3 and II.4 show the distribution of participants in the group discussions by gender and cohort.

TABLE II.3: Distribution of Participants in Group Discussions by Gender

Group Discussion	Gender	Participants
1	Female	3
	Male	5
2	Female	2
	Male	1
3	Female	2
	Male	0
4	Female	4
	Male	3
5	Female	7
	Male	2
TOTAL		29

TABLE II.4: Distribution of Participants in Group Discussions by Cohort

Cohort	Participants
3	3
4	3
5	4
6	7
7	7
8	5
TOTAL	29

The protocol for the discussions focused on program services, leadership, and overall challenges and recommendations, all of which were linked to the evaluation questions (refer to data collection protocols and survey instruments in Annex III). Group discussions ran from an hour (abbreviated due to alumni time constraints) to two hours, about an hour and 30 minutes on average. In each, one evaluator facilitated the discussion while the second took notes. All group discussions were conducted in English, and held either on AUC's new or old campuses at a venue provided by the university. The evaluation team contacted students via e-mail to inform them of the time, place, and purpose of the group discussions, as well as the importance of their participation, and followed up with phone calls. No LEAD staff was present during the discussions.

3.2. Key Informant Individual and Group Interviews

The evaluation team prepared tailored interview protocols for each category of key informant and group interviews and focused the questions directly on the informants' roles within the LEAD program. The interviews were constructed to elicit factual information as well as perceptions, opinions, and recommendations.

A total of 54 key informants were interviewed either in a group or individually, and included former LEAD staff, AUC faculty and staff, members of the AUC Board of Trustees, NGOs that hosted interns, employers such as direct supervisors and human resource managers, and US universities that hosted study abroad students (refer to Annex IV for the list of key informants). Once again, the main limitations were incomplete or out-of-date contact information and data collection in August when the university was not in session and many people were on vacation.

As with the group discussions, the team typed and coded notes from each interview according to the key themes and used a separate Excel tally sheet for NGOs representatives, AUC faculty, human resource managers, and supervisors.

3.3. Analysis of Qualitative Data

The team typed up notes from discussion groups and interviews. Using a deductive approach to content analysis, the team grouped the data in the notes according to evaluation question, then identified recurrent themes and patterns. The themes were recorded on an Excel "tally sheet" with separate worksheets for each of the following groups: alumni, NGO representatives, AUC faculty, human resource managers, and supervisors. For each group, themes were coded as follows: 0=not mentioned, 1=negative, 2=neutral, and 3=positive. Qualitative analysis was used to explain and supplement the quantitative analysis.

4. Return on Investment

4.1. Methodology

The Cost-Benefit Analysis (CBA) methodology was used to assess the social profitability of investments in the LEAD program for Cohorts 3-8. The methodology is based on the comparison of the program's lifetime costs and benefits, using the appropriate social discount rate. The CBA was conducted from the perspective of the national economy of Egypt, rather than that of the program's beneficiaries (i.e., LEAD's alumni and their households). As a human capital social investment, costs and benefits of LEAD are not limited to the direct monetary costs and benefits. Rather, they extend to indirect (monetary and non-monetary) costs and benefits, as well as intangible, non-quantifiable impacts of the investments.

Costs and benefits are based on constant prices. No adjustments for inflation were made to the future stream of benefits. The indicators used for assessing the program's social profitability are the internal rate of return on total investments (IRR) and the Benefit/Cost ratio (BCR). To calculate the latter, the team also derived the Net Present Value (NPV).

The CBA was further applied on a counterfactual basis in order to compare the LEAD program with other possible scenarios, namely: (a) enrollment in public or private universities in Egypt other than AUC, and (b) enrollment in AUC, with the absence of LEAD-specific extracurricular activities and other relevant services.

Below are the bases and assumptions underlying the estimation of the program's lifetime streams of costs and benefits.

4.2 Costs

The costs of the program are represented by the investment expenditure incurred by USAID throughout the period 2007/2008-2015/2016, as well as the cost share provided by AUC throughout the same period. Based on the program's budget and final modifications on September 19, 2016 (Modification No. 14), total investments (including AUC cost share) amounted to US$48.7 million.

The evaluation team classified annual costs by school of study, based on the numbers of credit hours per school. Also, gender-based classifications of costs were conducted for the purpose of evaluating the social profitability achieved for males and females, respectively. Refer to Annex V for details of the costs' line items and classifications.

Non-monetary costs for the LEAD program could qualify on one or both of the two categories: (a) program-related expenditure by LEAD students and their households, and/or (b) foregone earnings due to student enrollment in the program rather than joining the labor market. Actually, neither case was presumed to have taken place. Firstly, the program's full cost was borne by USAID and AUC, and secondly, the universal alternative scenario for LEAD students was to join another higher education institution and not the labor market. As high school graduates with high scores, it is unlikely those students would have missed the opportunity to proceed with higher education.

4.3 Benefits

Benefits of the program are reflected in the stream of lifetime earnings of LEAD alumni. To estimate those earnings, the evaluation team constructed age-earnings profiles for the program graduates. Salary surveys of private sector businesses and international organizations operating in Egypt were documented, reviewed, cross checked, and classified. Classification of the salary surveys data was based on occupation and years of experience. Annex V Tables V-50-V.60 show sources and findings of the salary surveys.

In addition to the local job opportunities, provision was made for a percentage of the alumni working abroad. The percentage – assumed at 15-20% – was based on findings of the online survey of the alumni.

Data of the age-earnings profiles were used to project the future stream of the program's benefits. The assumptions underlying such a stream are: (a) duration of the lifetime earnings is 30 years for males and 25 years for females (to account for maternity and other family-related interruption of the career life); and (b) unemployment duration prior to joining the labor market is one year for females (for job search) and 18 months for males (for military services and job search).

4.4. Social Discount Rate (SDR)

The evaluation team consulted officials of the Egyptian Ministry of Planning about the social discount rate used in the context of the recently published (2015) Sustainable Development Strategy of Egypt. The rate was reported at an average of 8%. Accordingly, 8% was used to discount the streams of the program's costs and benefits. Tables V.40-V.47 in Annex V show detailed calculations of the costs and benefits, classified by school and gender. Summary findings of the calculations are presented below.

4.5 Limitations

There were certain limitations with respect to estimating the program's return on investment, particularly on the assessment of future streams of benefits. These limitations are outlined below.

4.5.1. Costs

In comparison with the assessment of LEAD investment costs, which are documented and classified by type of expenditure, comparable costs of counterfactual scenarios were based on the best estimates of the evaluation team. For example, the costs of education in public and private universities in Egypt had a major constraint, i.e., the absence of reliable data on the households' expenditure on higher education. Given the subsidized tuition fees of public universities, the team relied on the corresponding tuition fees of private universities as proxy for higher education costs. The rationale was the fact that such fees are set in a free-market, with no subsidies included.

4.5.2. Benefits

A major limitation is that non-monetary benefits of LEAD were not included in the numerical analysis of the program's benefits. This results in an underestimation of the actual levels of the social profitability indicators. Literature on the spillovers of higher education reveals a wide range of impacts on graduates' communities and workplaces: productivity, revenues generated for other workers, as well as other intangible socio-economic development and value-related benefits at the community and national levels (community service development, pro-democracy activities, etc.). Also, monetary lifetime earnings exclude civil service employment and entrepreneurial incomes. Data about these two fields of work are not reliable.

In addition, estimates of lifetime earnings are based on current facts and figures of the labor market in Egypt. This entails the fact that analysis refers to a static, rather than a dynamic case. A dynamic analysis of labor markets forces need to consider projected labor-market imperfections (information constraints, geographical disparities, gender-related differentials, employer's power in the market - monopsony, trade unions, etc.).

4.3.   Social Discount Rate

The 8% social discount rate is applied to all sectors of development in Egypt, i.e., it is not specific to the education sector. Accordingly, the evaluation team considered this rate to be overestimated. As a human capital, priority field of investment in Egypt, higher education is worth a lower discount rate, which would result in more realistic – not underestimated - figures of the present value of benefits. In other terms, a lower discount rate would be conducive to higher present values of the benefits generated through education investments, hence, the higher social profitability of those investments, under which the LEAD program is classified.

ANNEX III: DATA COLLECTION INSTRUMENTS

Table III.1: List of Data Collection Instruments

	Type of Instrument	Targeted Subjects
1	Online survey	LEAD Alumni
2	Group Discussion Guide	LEAD Alumni
3	Group Interview Guides	LEAD Staff
		AUC Faculty
		NGO Internship Hosts
4	Key Informant Interview Guides	LEAD Program Director
		LEAD M&E Manager
		AUC President
		AUC Board of Trustee Members
		Sponsors of LEAD Scholarships
		US University Study Abroad Hosts
		Employers
		Human Resources Managers
		Terminated/Voluntary Withdrawn Students

Online Survey – LEAD Alumni

Welcome!

This survey is shared with you because you received a LEAD Scholarship. USAID/Egypt has contracted our project, Services to Improve Performance Management, Enhance Learning and Evaluation (SIMPLE) to conduct an evaluation of the LEAD Scholarship Program and AUC's management of it. Your answers will provide guidance for future USAID scholarship programs.

It should take only 5-10 minutes to complete the survey.

A few things to note:

- There are four sections: satisfaction with LEAD, effectiveness of the leadership activities and leadership experience post-LEAD, overall comments, and the survey ends with demographic questions that will help us analyze the data.
- To protect your confidentiality, reports and data sets will not contain information that will personally identify you. The results of this study will be used ONLY for evaluation purposes.
- You may navigate between the pages by using the arrows at the bottom of each page.
- If you need to take a break from the survey, your responses will be saved. Once you hit the "submit" button you cannot return to the survey.

Thanks!

A. LEAD Program

1. Using the scale below, please rate your level of satisfaction with the following activities provided through the LEAD program. If you did not participate in the activity, check "N/A" (not applicable).
(matrix box 1=very unsatisfied, 7=very satisfied, not applicable)
   a. LEAD orientation
   b. Student-led orientation
   c. Cohort development/team building
   d. Retreats
   e. Annual leadership conferences
   f. International and regional conferences
   g. Other LEAD activities (workshops, expert sessions, book reviews, movies, etc.)
   h. Other (please specify) (open text)

2. Using the scale below, please rate the services provided by AUC that are provided to all students, including LEAD students. Check N/A if you did not use the service.
(matrix box 1=very unsatisfied, 7=very satisfied, not applicable)
   a. First Year Experience (FYE) orientation
   b. English language courses
   c. Computer support/UACT
   d. Library and research skill development
   e. Study skill sessions by mentoring office
   f. Academic courses
   g. Semester abroad/ISSA
   h. Internships

      i.   Career counseling
      j.   Extracurricular activities (student union, clubs, assistantships, volunteer service, etc.)
      k.   Other (please specify) (open text)

3. Which of the above services were you most satisfied with and why? (optional)? (single text)
4. Did LEAD staff seek your opinion about how their services should be delivered or improved? (y/n)
5. If LEAD sought your opinion, to what extent were your opinions considered? (scale from never to always)

B. Leadership Development

6. Please rate the degree to which each of the following services offered by AUC or LEAD contributed to development of your leadership skills. The scale ranges from "no contribution" to "full contribution." If you did not use the service, check "N/A". (scale of 1-7, with 1=no contribution, 7=full contribution, n/a)
    a.   Support from LEAD student life coordinators
    b.   LEAD mini-activities (i.e., workshops, expert sessions, book reviews, movies, etc.)
    c.   Annual conferences
    d.   International or regional conferences
    e.   Leadership training
    f.   Retreats
    g.   Internships
    h.   US Study Abroad
    i.   Academic courses in your program
    j.   AUC Career Advising and Placement Services (CAPS)
    k.   Extracurricular activities (student union, clubs, assistantships, work, etc.)
    l.   Work (paid or unpaid)
    m. Other (please specify) (open text)

7. What is the activity that benefited you most and why? (Optional) (open text)

8. How would you rate the effectiveness of Leadership Performance Index (LPI) used in measuring leadership development? (rating 1=completely ineffective, 7=fully effective)

9. In addition to evaluating LEAD, we'd like to know if you have made use of your leadership skills in any of the following ways since graduating from the program. (check all that apply)
Work related (if currently or previously employed since graduation)
    a.   Participated in strategic planning
    b.   Led a project
    c.   Developed new ideas
    d.   Taught/trained others
    e.   Organized activities, events, etc.
    f.   Gained new expertise
    g.   Accepted a leadership role
    h.   Applied leadership practices (e.g., teamwork, time management, delegation, etc.)
    i.   None of the above
    j.   Other (specify)

10. Not work related (check all that apply)

a. Volunteer efforts
b. Advocacy for social issues
c. Research
d. Knowledge sharing
e. None of the above
f. Other (specify)

11. Approximately how many days did you spend over the past 12 months participating in community service/civic activities? (drop down menu with <6, 6-12, 13-24, 25-36, 37-48, >48)
12. Approximately how many days do you anticipate spending in community service/civic activities over the next year? (drop down menu with <6, 6-12, 13-24, 25-36, 37-48, >48)

C. Other

13. If given the opportunity, would you be willing to advocate for scholarship funding with potential sponsors? (yes/no)
14. In what ways do you think you would be a model to inspire a potential sponsor to fund scholarships? (Optional) (open)
15. Overall, how would you rate your experience with LEAD?
    (1=extremely negative, 7=extremely positive)
16. Are you likely to recommend a scholarship program like LEAD to others? (y/n)
17. If you have suggestions for future scholarships programs, please share. (Optional) (comment box)

D. Demographics

18. Full name (open)
19. Email address (open)
20. Cohort (drop down menu: cohort numbers)
21. Major during LEAD (drop down menu)
22. Year graduated (drop down menu: 2007-2016)
23. Highest level of education (drop down menu: bachelors, masters, PhD)
24. Gender (drop down menu: male/female)
25. Home governorate (drop down menu: all governorates)
26. Current residence (drop down menu: all governorates, "outside Egypt")
27. Date of first job post LEAD (drop down menu: months and years)
28. Currently job status (drop down menu: employed, consultant, self-employed, unemployed) \
29. If not currently working, why not: (drop down menu with the following options:
    a. Military
    b. Own illness or disability
    c. Maternity/paternity leave
    d. Personal or family responsibilities
    e. Pursuing post-graduate studies
    f. Currently looking for a job
    g. Waiting for new job to start
    h. Layoff, expecting to return to work

   i. No suitable work available
   j. Not applicable
   k. Other (please specify)

30. Have you worked since LEAD? (yes/no)
31. In what sector are you working (if not currently employed, refer to most recent jobs since graduation) (drop down menu: public/government, NGO, international/multinational organizations, private [Egyptian], private [multinational], other: specify]
32. In what area of economic activity are you currently working (if not currently employed, refer to most recent jobs since graduation) (drop down menu: service, industrial, development, education, oil/gas/energy, other: specify)
33. What is your occupation (if currently unemployed, refer to most recent job since graduation) (drop down menu: manager, professional, technician/assistant professional, clerical, services/sales, agricultural/fishery, craft/trades, plant/machine operator)?
34. Are you working in a field related to your major in the LEAD program? (if currently unemployed, refer to most recent job since graduation) (yes/no)
35. Would you be comfortable with us interviewing your supervisor? (yes/no)
36. Supervisor's name (open text)
37. Supervisor's email address and/or telephone number (open text)
38. Company/organization's name (open text)
39. Approximate net monthly income (optional) (drop down menu: <2K, 2000-3999, 4000-5999…10000-14999, 15000-19999, 20000-25000, >25K)

Group Discussion Guide – LEAD Alumni

Program Services

Introduction: USAID has funded many scholarship programs over the years, but LEAD was unique because it brought students from throughout Egypt to study at an American university in Egypt.

1. From your perspective, what was unique about LEAD compared to other scholarship programs?
2. What do you think was the best thing about LEAD? (Ask each person to give a brief answer.)
3. What were the challenges you faced when you started at AUC that perhaps were different from non-LEAD students?
4. Did LEAD help you with these challenges? What kinds of services did LEAD provide to help you adjust and support you throughout the program?
   What services did you get that other AUC students didn't get?
   How well do you think LEAD did in addressing your challenges?
   What could they have done better/differently to help you? What else could they have done?
5. What services did AUC provide that were especially helpful or unhelpful?
6. How would your experience have been different if you would have traveled abroad for your entire degree program?
7. How long did it take you until you felt like you fit in and was able to function at full capacity in the AUC environment?

A. Leadership (45 minutes)

Introduction: As you were aware, an objective of the LEAD program was to equip you to become leaders in your fields.

1. To what extent do you think LEAD succeeded in that?
2. What were some of the most useful things LEAD did to help strengthen your leadership potential? Least useful?
3. How are you different as a result of these efforts to help develop your leadership potential?
4. How do others perceive you differently as a result of LEAD? Family? Friends?
5. Are there any specific experiences or skills from the LEAD program that have made a difference in getting your first job or getting into graduate school?
6. In what ways does your LEAD experience distinguish you from other AUC graduates? From graduates from other universities?

Another objective was to help you become change agents to contribute to Egypt's development…

7. What kinds of contributions do you see yourself making in the future? What are your dreams?
8. What additional support would be helpful in developing your leadership potential?

B. Overall (15 minutes)

1. What changes, if any, would you recommend for future scholarship programs?
2. Is there anything you came expecting to talk about that we have not asked about?

Group Interview Guides

Group Interview - LEAD Staff

1. When you were working on LEAD, how did you describe it to friends and family?
    a. How would you describe the LEAD students?
    b. What do you consider the main components of the program?
    c. In what ways is LEAD different from other AUC scholarship programs?
    d. What do you consider LEAD's greatest successes?
        i. In terms of benefits to the students?
        ii. In terms of benefits to the university?

2. How did the program change over time?
    a. What was the basis for making changes?
    b. How did you address feedback from USAID? Students? Colleagues?

3. Tell us about the services of AUC that were used by LEAD students.
    a. Over time, were changes made in what services were offered?
    b. Were you aware of how often LEAD students used the various services?
        i. Were some services used more by women? By men?
        ii. Were there any services especially designed for women? Men?
        iii. Was there a disproportionate use of some services by LEAD students?
    c. Was there a way to know if LEAD students were satisfied with the services?
        i. How did this differ among cohorts, fields of study and gender?
        ii. Was this information tracked?
    d. When you became aware of students' dissatisfaction with any of the services, how were you able to communicate this to those responsible for the services? (How was your working relationship with the service centers?)
    e. Were changes ever made as a result of feedback from LEAD students?

4. What efforts did LEAD make to help students develop their leadership capacity?
    a. How were the students expected to engage with LEAD in terms of leadership development?
        i. How were the expectations communicated?
        ii. How was their participation measured? (how was LPI used, what were opportunities and constraints of using LPI)
        iii. What were the rewards for high participation? Consequences of low participation?
    b. What activities were the most popular among students?
        i. Where can we get data about attendance at activities?
        ii. Did you collect feedback on satisfaction?
    c. Which activities do you think had the biggest impact on the students?
    d. How are LEAD graduates different than other AUC graduates? What is the reason for the difference?
    e. Are there some that would make especially good models for convincing potential sponsors to fund LEAD-like programs?

5. If you could design another LEAD-like program,
    a. What aspects of LEAD would you replicate?
    b. Which would you change?

6. Is there anything else you would like to share?

Group Interview - AUC Faculty

1. In addition to teaching, in what ways have you been involved in LEAD activities?

2. Were you informed before starting classes, which students were on the LEAD scholarship?

3. In class, were LEAD students distinguishable from other students?
    a. Any specific examples?
    b. Any female students' examples?

4. The LEAD program focused on leadership skills development. Did you notice changes in the LEAD students over time?

5. What extra support would have enhanced LEAD students' chances for success while at AUC?

6. How did having LEAD students affect the dynamics of the AUC community?

7. Would you like to see more LEAD-like students in your classes?

8. Are you following the progress of any of the LEAD students in their career or community services?

9. Anything else you think we should know about the LEAD program or students?

Group Interview - NGO Internship Hosts

1. Have you been hosting interns from the LEAD program? If yes,
    a. How many LEAD interns have you had?
    b. When was that?
    c. How long does each intern typically stay? Is that an appropriate amount of time?

2. Have you hosted other non-LEAD interns i.e., AUC or other universities? If yes, have you noticed any differences between LEAD and non-LEAD interns?

3. Before receiving LEAD interns:
    a. How were you expected to manage the internship? (number of hours, types of tasks, reporting, etc.)
    b. Was it expected that you include a variety of experiences (e.g., technical skills development, soft skills development, work-related learning, etc.)?
    c. What were your expectations of the LEAD interns? i.e., knowledge, experience, skills, competencies, attitudes, attributes, and behaviors are you looking for?
    d. What types of tasks were you planning to assign to LEAD interns? And are there different assignments for female and male interns?

4. After receiving the LEAD interns:
    a. To what extent have you been satisfied with the LEAD intern(s) you have hosted?
    b. How would you rate their skills? (communication skills, numeracy, information technology, learning how to learn/personal development planning, problem solving, team working, etc.)?
    c. Did LEAD interns bring any special perspectives, experiences, or skills? Any differences between the male and female interns?

d. Did they have any unique challenges? Any gender differences with challenges?
　　　　e. Did you have a system for tracking and measuring their contributions? Did you report this evaluation back to the LEAD office?

5. In what ways has your NGO benefited from your association with AUC?

6. If given the opportunity, would you host any other interns from LEAD-like scholarship programs?

7. Do you have any recommendations for how to make the internship a better experience for you and/or the interns?

Key Informant Interview Guides

Key Informant Interview – LEAD Program Director

1. How would you describe LEAD in terms of:
   a. The overall goal?
   b. The key components or most important aspects?
   c. How it benefited LEAD students?
   d. What difference it will make for Egypt's development?

2. Tell us about the progression of LEAD over time.
   a. What were the biggest challenges the program faced when you started?
   b. What are some of the significant changes that have been made?
   c. How did LEAD decide what changes would need to be made?
   d. In what ways is the program different from when you started?
   e. What changes did you wish you could have made before the program ended?

3. How would you describe the LEAD students?
   a. What unique traits do they have?
   b. Were there significant variations by cohort? Governorate? Gender?
   c. To what extent do you think that LEAD students stood out?
   d. What special needs did they have?
   e. What did LEAD do to address those needs?

4. In terms of the LEAD objective "to train and equip these students with the necessary skills to become leaders in their societies"
   a. To what extent did LEAD students come with this potential?
   b. Where there any noticeable difference in the potential of male and female students?
   c. In what ways did LEAD help students develop their leadership potential?
   d. Did students take full advantage of LEAD's efforts to develop students' leadership potential?
   e. Were there opportunities to seek and incorporate feedback from the students to improve the leadership development activities?

5. How did LEAD work with other parts of AUC? (CAPS, UACT, etc.)?
   a. Were the general services of AUC offered any differently to LEAD students?
   b. Which services were particularly important to LEAD students' success?

6. What were the benefits of having LEAD at AUC?
   a. How did having LEAD students on campus change the dynamics?
   b. How do the benefits of the LEAD experience compare to the costs (financial and non-financial) AUC incurred in implementing it?
   c. Did AUC learn any lessons that can be applied to other scholarship programs?

7. What is the likelihood that AUC will manage more LEAD-like scholarship programs?
   a. Does AUC appear interested in continuing scholarships for disadvantaged students from throughout Egypt?

     b.   Does AUC have the institutional and financial capacities to implement other similar scholarship programs?

     c.   What other factors would be considered?

8.   Is there anything else you would like to share with us about LEAD?

Key Informant Interview – LEAD M&E Manager

1.   Please give us an overview of the LEAD M&E system.
     a.   What were the main ways you monitored LEAD's performance indicators?
     b.   What was your role in monitoring students' progress?
     c.   How did other team members contribute to the M&E effort?
     d.   What were the strengths of the system? Weaknesses?

2.   What efforts were made to measure LEAD students' satisfaction with program services (ELT, computer training, team building, library and research skills)?
     a.   How were they measured? How frequently?
     b.   How were these data tracked and reported?
     c.   What data are available to us?
     d.   Do you recall if there were any differences in satisfaction levels by gender?
     e.   To your knowledge, were the data ever used for decision making? How?

3.   How were you involved in measuring the extent to which LEAD helped students develop leadership skills?
     a.   What efforts were made to track inputs?
     b.   To track outputs?
     c.   Did you have any responsibilities related to LPI? If so, what?
          i.   How was it administered?
          ii.   What was the students' level of engagement in developing/modifying the LPI?
          iii.   Was there any self-assessment involved?
          iv.   How were the scores measured? Tracked?
          v.   Were any changes made during the program period?
              In the evaluation report of 2008, it was mentioned that, *"the LPI must capture student participation in a variety of areas and students focusing their time and talent intensively in one area must be credited on the LPI in a way comparable with students that are participating less deeply in a number of areas"* (p. 21). To what extent was this issue considered?
          vi.   Who was responsible for taking action when scores dropped below the threshold?

4.   To your knowledge, were M&E data used in making decisions regarding any aspect of LEAD?
     a.   Who was your primary client in terms of M&E data?
     b.   What changes in the system might have made the data more useful?

5.   Is there anything else you would like to share with us about LEAD?

Key Informant Interview – AUC President

1. How much are you involved in AUC's scholarship programs? How much do you know about LEAD?

2. Do you have any sense of AUC's overall experience with LEAD?
    a. Greatest successes? What about LEAD is AUC most proud?
    b. Did any of the challenges/issues of the program surface to your level?

3. AUC was required to cover 21% of the cost of the program (30% tuition discount, 30% housing discount, portion of project director's salary).
    a. Was this a reasonable expectation?
    b. What issues do cost-sharing requirements cause AUC?
    c. What other costs does AUC absorb when administering a program like this? Monetary? Non-tangible?

4. Is AUC interested in continuing with a LEAD-like scholarship program?
    a. If so, how would you rate (on scale from 1-10, with 10 being the highest) AUC's institutional capacity to implement similar programs in terms of:
        i. Infrastructure (brick-and-mortar)
        ii. Organizational structure (current offices that handle needs)
        iii. Human resources (skills of staff, number of staff)
        iv. Financial
    b. If not, why not?

5. Does AUC have the financial capacity to take on something like this without USAID assistance?
    a. What other sources does AUC rely on for such programs?
    b. What are the key factors AUC considers when making decisions about whether to sponsor such programs and the level of contributions?
    c. In the case of LEAD, what would need to change with the program to make it more sustainable?

6. Using a scale of 1-10, how would you rate AUC's level of interest in continuing with a LEAD-like program? Level of commitment?

Key Informant Interview – AUC Board of Trustee Members

1. How much are you involved in AUC's scholarship programs? How much do you know about LEAD? (be prepared to provide a brief summary)

2. Do you have any sense of AUC's overall experience with LEAD?
    a. Greatest successes? What about LEAD is AUC most proud?
    b. Any challenges?

3. Would you like to see AUC continue scholarship programs for disadvantaged youth from throughout Egypt?
    a. If so, why? What are the benefits?
    b. If not, why not?

4. To what extent is this sort of scholarship program a priority for AUC?

5. What are the key factors AUC considers when making decisions about whether to sponsor such programs?
    a. Is this something AUC could handle on its own? (covered 21% of LEAD costs)
    b. What other sources would be pursued for co-funding this sort of program?

Key Informant Interview – Sponsors of LEAD Scholarships

1. Tell me about your experience with LEAD:
    a. What is your relationship with LEAD?
    b. How do you communicate with LEAD?
    c. What is your expectation in terms of their reporting on the scholars you fund?

2. What have been your contributions to the program so far:
    a. Non-financial: Design input? Selection of scholarship recipients? Other?
    b. Financial: Number of scholarships? What expenses do scholarships cover?

3. What is the likelihood these contributions will continue?
    a. Do you anticipate any increases or decreases in funding?
    b. What factors affect your decisions about funding?

4. On a scale of 1-10 (10=highest), how would you rate your organization's commitment to funding scholarships at AUC for disadvantaged youth?

5. Is there anything else you would like to share with me about LEAD or similar scholarship programs?

Key Informant Interview – US University Study Abroad Hosts

1. Can you give me a brief overview of your experience with the LEAD program?
    a. What did you like/not like about it?
    b. How were LEAD students compared to other students from AUC, other students from Egypt, other international students?

2. What were the unique challenges of hosting LEAD students?
    a. Successes? Greatest satisfaction?
    b. Is a semester the right amount of time? 2 semesters? 1 year?

3. Two key components of LEAD are leadership development and community service.
    a. Did AUC communicate this to you?
    b. What were AUC's expectations of your university in terms of leadership development and community engagement for the students you hosted?
    c. Did your program include any efforts to develop their leadership skills/do community service?
    d. Did the LEAD student(s) take advantage of the opportunities?
    e. What successes or challenges did your LEAD student(s) experience with this?

4. What was the impact the program had on the Egyptian students? On your university?
    a. In what ways were the students different at the end of the semester compared to when they arrived?

b. Were there any noticeable differences between the male and female students you hosted?

c. In what ways did your university benefit from having LEAD students on your campus?

5. Would you be interested in hosting more Egyptian students who come from disadvantaged backgrounds? Why or why not?

6. Do you have any recommendations on how to make the experience smoother or more meaningful for the Egyptian students?

Key Informant Interview – Employers

1. How long have you supervised Mr./Ms. _____?

2. Non-AUCians that you supervise?

3. Were you involved in hiring _____?
    a. If yes, what are the most important factors that influenced your decision? (academic qualifications, work experience, interview, recommendations, etc.)
        - When looking at resumes, to what extent is the university a factor?
        - How might you consider AUC resumes differently?
        - What you looking for during an interview?
        - How are AUCians different? LEAD?
        - How did the LEAD scholarship factor in?

    b. What characteristics does ____ have that set him/her apart from others that applied for the job?
        - compared to other AUCians
        - compared to other universities – public, private

4. Among your staff, how would you compare ____ to other workers?
    - other AUCians
    - other universities – public, private
    - specific leadership characteristics and potential
    - Have you noticed any change in the quality of AUCians over time?

5. Has _____ met/exceeded the expectations you had when your hired him/her? Why/Why not?

6. What do you consider to be the most important characteristics for succeeding in your field?
    a. Does _____ have them?
    b. Do you sense that ____ has the potential to excel in your field? Why/Why not?

7. Do you recall _____ ever mentioning anything about their experience at AUC or with LEAD? If yes, what impression did you have about their experience?

Key Informant Interview – Human Resources Managers

1. What are the most important factors that influence your hiring decisions? (academic qualifications, work experience, interview, recommendations, etc.)

2. When looking at resumes and conducting interviews, to what extent is the university a factor?
   - Do you consider AUC candidates differently from candidates from other universities?
   - Would having a scholarship like LEAD on their resume make a difference? (FYI – LEAD is a scholarship for individuals from all governorates who meet the admission requirements for AUC and have demonstrated their commitment to leadership and community participation.)
   - What are you looking for during an interview?
   - Do AUCians interview differently? If so, how?

3. What characteristics or skills do AUCians have that set them apart from other candidates?
   - Have you noticed any differences in the quality of AUC candidates over time?

4. In terms of advancement/promotion in your organization, how do AUCians compare to non-AUCians?

5. Are there salary differences between AUC and non-AUC graduates?

Key Informant Interview –Terminated/Voluntary Withdrawn Students

1. Would you be willing to tell me a little about your departure from LEAD?
   a. After how many semesters?

2. What special support did you receive from LEAD staff to help you succeed?
   a. Which of AUC's services were helpful? Not helpful enough?
   b. What additional services might have helped you stay in the program?

3. What did you do after you left the LEAD program?
   a. [*If studying*] What are your plans on the professional and personal levels after graduation?
   b. [*If working*] Is you career developing in the path you thought it would be?

4. Despite leaving the program, have you benefited from your time with LEAD? How?

5. Are you in contact with any of the LEAD alumni? How?

6. If you had another chance at the scholarship, what would you do differently?

7. Would you recommend a scholarship like LEAD to your family and friends at home? Why/why not?

8. Are there any other comments you would like to add about your experience with the LEAD program?

ANNEX IV: SOURCES OF INFORMATION

Table IV.1: List of Project Documents Reviewed

Annual Reports	
1	Year End Progress Report LEAD, June 2007
2	Annual Technical Progress Reports:
	October 1, 2008 - September 30, 2009
	October 1, 2009 – September 30, 2010
	October 1, 2010 – September 30, 2011
	October 1, 2011 – September 30, 2012
	October 1, 2012 – September 30, 2013
	October 1, 2013 – September 30, 2014
	October 1, 2014 – September 30, 2015
Quarterly Reports	
3	LEAD Quarterly Reports:
	January- March 2007
	April- June 2007
	July- September 2007
	October- December 2007
4	Quarterly Narrative Progress Reports:
	January 2008 - March 2008
	April 2008 - June 2008
	July 1 - September 30, 2008
	October 1 - December 31, 2008
5	Quarterly Technical Progress Reports:
	January 1 - March 31, 2009
	April 1 - June 30, 2009
	July 1 - September 30, 2009
6	Technical Progress Quarterly Reports:
	October 1- December 31, 2009
	January 1 – March 31, 2010
	April 1 – June 30, 2010
	July 1 – September 30, 2010
	Oct 1 – Dec 31, 2010
	January 1 – March 31, 2011
	April 1 – June 30, 2011
	July 1 – September 30, 2011
	January 1 – March 31, 2012
	April 1 – June 30, 2012
	July 1 – September 30, 2012
	October 1 - December 31, 2012
	January 1 – March 31, 2013
	July 1 – September 30, 2013
	April 1 – June 30, 2013
	October 1 - December 31, 2013
	January 1 – March 31, 2014
	July 1 – September 30, 2014
	April 1 – June 30, 2014

	October 1 - December 31, 2014
	January 1 – March 31, 2015
	April 1 – June 30, 2015
	July 1 – September 30, 2015
	October 1- December 31, 2015
	January 1 – March 31, 2016
	April 1 – June 30, 2016
Audit Reports	
7	Audit of USAID/Egypt Leadership for Education and Development Scholarship Initiative Program, Audit Report No. 6-263-11-002-P, November 10, 2010, Cairo, Egypt
8	Evaluation of the American University in Cairo (AUC) Leadership for Education and Development (LEAD) Scholarship Program, Final Report, 2008
Miscellaneous Project Documents	
9	List of LEAD Stakeholder groups
10	LEAD Thematic Activities (Sept 2013 - August 2014)
11	Leadership for Education and Development (LEAD) Fall 2014 Handbook
12	Alumni Tracking - New Database March 31, 2016 Final
13	List of US Study Abroad Universities
14	Sample of US Universities Hosting LEAD Students
Sustainability Reports	
15	Academic Strategic Priorities 2015-2018: "A Community of Learning: Enhancing the Academic Enterprise"
16	Our Community of Learning: A Strategic Plan for AUC at its Centennial, April 2015
17	Leadership for Education and Development Program, 11 Successive Years, 2004-2015
18	LEAD Sustainability Plan
Monitoring and Evaluation	
19	USAID/LEAD Monitoring and Evaluation Framework
20	A Tentative M&E Framework for The Leadership for Education & Development (LEAD) Program
21	Guidelines for M&E Tools
LPI and GPA Scores	
22	LEAD LPI Scores Cohort 4-8
23	Current Students GPAs
24	Graduate Students GPAs
25	Dismissed and Withdrawn Students
Alumni Surveys	
26	2013-2014 Alumni Survey
27	2014-2015 Alumni Survey
28	2015-2016 Alumni Survey
29	LEAD Alumni Fall 2012 – Report
30	LEAD Alumni Survey Report, Fall 2012
Cooperative Agreements	
31	Cooperative Agreement No. 263-A-00-07-00023-00
32	Agreement Modification #1, 2008
33	Agreement Modification #2, 2008
34	Agreement Modification #3, 2009
35	Agreement Modification #4, 2009
36	Agreement Modification #5, 2009

37	Agreement Modification #6, 2008
38	Agreement Modification #7, 2008
39	Agreement Modification #8, 2010
40	Agreement Modification #9, 2011
41	Agreement Modification #10, 2011
42	Agreement Modification #11, 2011
43	Agreement Modification #12. 2011
44	Agreement Modification #13, 2015

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Table IV.2: List of Key Informants Interviewed

Date Interviewed	Key Informant /Institution
August 10, 2016	SIMPLE Finance Officer
August 16, 2016	USAID Activity Manager
August 16, 2016	USAID M&E Manager for Education
August 16, 2016	USAID Deputy Director of Education
August 17, 2016	Eight representatives from the LEAD Office
August 18, 2016	M&E Consultant, LEAD
August 18, 2016	LEAD, Former M&E Manager
August 22, 2016	Five AUC Faculty Members
August 22, 2016	AUC Director of International Students and Study Abroad
August 22, 2016	AUC Director of Student Development
August 23, 2016	Representative from Egyptian Association for Comprehensive Development-Cairo
August 23, 2016	Representative from Egyptian Initiative for Personal Rights
August 23, 2016	Manager, Misr El Kheir
August 25, 2016	Representative from Hope Village
August 26, 2016	Dean of International Studies, Bard College
August 27, 2016	Human Resources Manager (Peugeot)
August 28, 2016	Alumni Supervisor (Media Production Company)
August 28, 2016	Alumni Supervisor (AUC/ISSA)
August 28, 2016	Alumni Supervisor (Doehler)
August 28, 2016	Alumni Job Supervisor (IIE)
August 28, 2016	Alumni Job Supervisor (AMIDEAST)
August 28, 2016	Alumni Job Supervisor (USAID)
August 28, 2016	Alumni Job Supervisor (HarassMap)
August 28, 2016	Representative from Human Resources (Population Council)
August 28, 2016	Alumni Job Supervisor (Barclays)
August 28, 2016	Member, AUC Board of Trustees
August 29, 2016	Representative from AUC Office of Residential Life
August 29, 2016	Member, AUC- Board of Trustees
August 29, 2016	Representative from AUC Career Center
August 29, 2016	Director of Development, AUC Institutional Advancement Office
August 29, 2016	Representative from AUC Empower Scholarship
August 29, 2016	Representative from AUC Career Center
August 30, 2016	AUC Vice President for Student Affairs
August 30, 2016	Representative from Human Resources (Ledico)
August 30, 2016	Representative from Human Resources (Microsoft)
August 30, 2016	Representative from Wellesley College
August 31, 2016	Representative from Human Resources (Groupe Scholaire Oasis)
August 31, 2016	AUC - Director of SOS
August 31, 2016	Phone KII (MSS) - Representative from SUNY at New Paltz
August 31, 2016	Representative from Human Resources (Al Futtaim)
August 31, 2016	Representative from Human Resources (Thomas Cook)
September 1, 2016	Executive Director, AUC Career Center
September 1, 2016	Representative from American University

Table IV.3: Interview Schedule

Date	Key Informants	Time From	Time To	Venue
10-Aug.	KII - SIMPLE Finance Officer	1:00	3:00	Meeting held at NSCE office
16-Aug.	KII - USAID Activity Manager	10:00	11:00	At USAID
16-Aug.	KII - USAID M&E Manager for Education	11:00	12:00	At USAID
16-Aug.	KII - USAID Deputy Director of Education Office	1:30	2:30	At USAID
17-Aug.	GI - LEAD team	1:00	2:00	AUC New Campus
	GI - LEAD senior management	3:00	5:00	AUC New Campus
	GI - LEAD finance team	3:00	5:00	Meeting with ROI researchers at AUC New Campus
	Group meeting #1 with alumni	6:00	7:30	AUC New Campus
18-Aug.	KII - LEAD staff	2:30	3:30	Phone Interview
	KII - LEAD Staff	10:30	11:30	Meeting held at NSCE office
20-Aug.	Group meetings #2 and #3 with alumni	1:00	5:00	AUC Old Campus
22-Aug.	GI - AUC Faculty Members	10:00	12:00	AUC New Campus
	KII - Faculty Member	12:30	1:30	AUC New Campus
	KII - Faculty Member	12:30	1:30	AUC New Campus
	KII - AUC Director of International Students and Study Abroad	2:00	3:00	AUC New Campus
	KII - AUC Director of Student Development	3:00	4:00	AUC New Campus
23-Aug.	KII - NGO - Egyptian Association for Comprehensive Development- Cairo	10:30	11:30	EACD Office
	KII - NGO - Egyptian Initiative for Personal Rights (EIPR)	12:00	1:00	EIPR Office
	KII - Sponsor - Misr el Kheir Association (MEK)	1:30	2:30	MEK Office
	Group meetings #4 and #5 with alumni	6:00	8:00	AUC Old Campus
25-Aug.	KII - NGO Hope Village	11:00	12:00	At Hope Village office
28-Aug.	KII - Supervisor (Barclays)	9:52	10:10	Phone Interview
	KII - Supervisor (Media Production Company)			Phone Interview
	KII - Supervisor (AUC/ISSA)	2:05	2:15	Phone Interview
	KII - Supervisor (Doehler)	3:00	3:10	Phone Interview
	KII - Supervisor (IIE)	1:00	1:15	Phone Interview
	KII - Supervisor (AMIDEAST)	11:00	11:13	Phone Interview
	KII - Supervisor (USAID)	12:20	12:25	Phone Interview
	KII - Supervisor (HarassMap)	3:50	4:10	Phone Interview
	KII - NGO (New Women	1:00	2:00	Phone Interview

	Foundation)			
	KII - AUC Board of Trustees	6:00	6:30	Phone Interview
29-Aug.	KII - AUC Office of Residential Life	10:00	11:00	At AUC
	KII - AUC Career Center	11:00	12:00	At AUC
	KII - AUC - Institutional Advancement Office	12:00	1:00	At AUC
	KII - AUC Empower Scholarship	1:00	2:00	At AUC
	KII - AUC Career Center	2:00	3:00	At AUC
	KII - AUC Board of Trustees	6:00	6:30	Phone Interview
30-Aug.	KII - AUC Vice President for Student Affairs	2:00	3:00	At AUC
	KII - Wellesley College	9:00	9:30	Phone Interview
31-Aug.	KII - AUC Director of SOS	10:00	10:30	Phone Interview
	KII - SUNY at New Paltz	3:00	3:30	Phone Interview
1-Sept.	KII - Executive Director, Career Center	1:00	2:00	Phone Interview

ANNEX V: QUANTITATIVE DATA

A. Analysis of the Secondary Data

Part I: General Descriptive Statistics of LEAD Students

Table V.1: Students Graduated by Cohort and Gender

	Cohort 3	Cohort 4	Cohort 5	Cohort 6	Cohort 7a	Cohort 7b	Cohort 8	Total
Male	25	20	22	25	16	7	14	**129**
Female	23	24	23	27	14	13	13	**137**
Total	**48**	**44**	**45**	**52**	**30**	**20**	**27**	**266**

Table V.2a: US Study Abroad Status for Males, by Cohort
(Ref: LEAD IV - VIII Study Abroad Students.xlxs)

Cohort	Percentage of Males who Travelled Abroad			
	Didn't travel	Sponsored by USAID	Not Sponsored by USAID	Total Number of Students
4	45.0	55.0	0.0	20
5	40.91	59.09	0.0	22
6	56.0	40.0	4.0	25
7A	50.0	50.0	0.0	16
7B	28.6	71.4	0.0	7
8	28.6	71.4	0.0	14
Total	**44.23**	**54.81**	**0.98**	**104**

Table V.2b: US Study Abroad Status for Females, by Cohort
(Ref: LEAD IV - VIII Study Abroad Students.xlxs)

Cohort	Percentage of Females who Travelled Abroad			
	Didn't travel	Sponsored by USAID	Not Sponsored by USAID	Total Number of Students
4	29.2	58.3	12.5	24
5	39.1	60.9	0.0	23
6	55.6	37.0	7.4	27
7A	21.4	64.3	14.3	14
7B	15.4	76.9	7.7	13
8	7.7	76.9	15.4	13
Total	**32.5**	**58.8**	**8.8**	**114**

Graph V.1a and V.1b: Percentage of Students Travelling Abroad, by Cohort and Gender
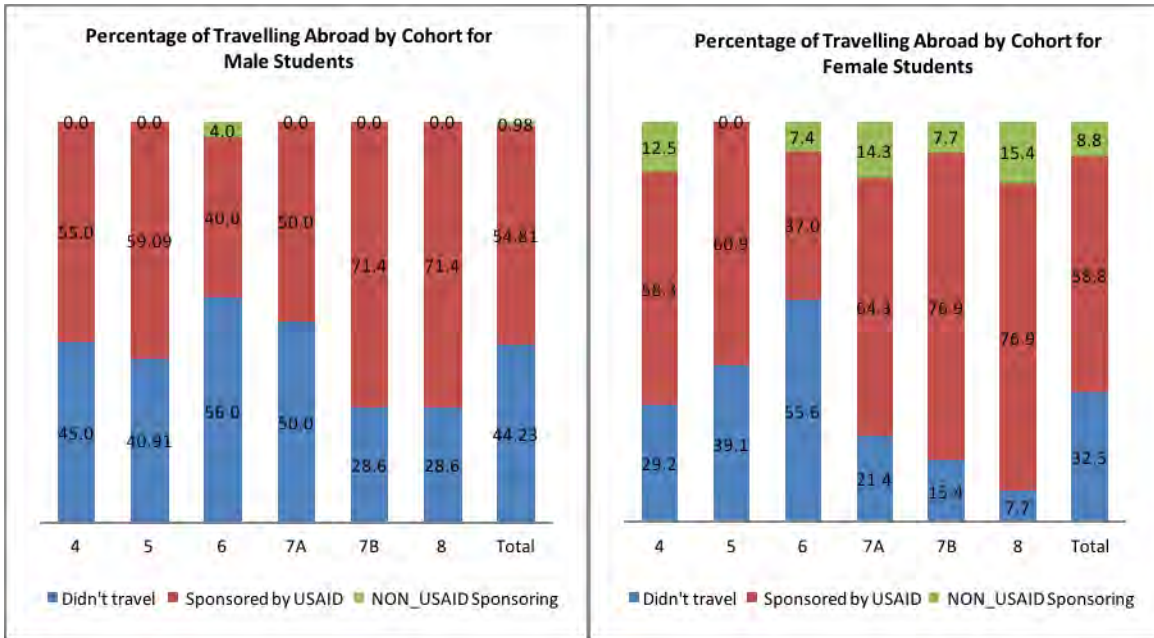
Part II: Analysis of Gender Differences

Cumulative GPAs and LPIs of Graduated Students

Here, the differences in GPAs and LPIs by cohort and gender are investigated for only students who graduated using USAID funds. Applying the t-test to compare the means of the cumulative GPAs for females and males shows a weak insignificant indication that females perform better than males.[7] Likewise, a t-test comparison between the cumulative LPI means for females and males shows that the differences are significant at a very low p-value (0.000). The relationship between the cumulative GPA and LPI also shows a weak positive correlation coefficient (significantly different from 0) among males, and a slightly stronger one among females (refer to Table V.6).

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[7] It must be noted that there were two male graduated students who had low GPAs and who were dismissed but were able to get financial aid to graduate. Including these two in the analysis results in a significant difference in GPAs in favor of females.

Graph V.2: Median Cumulative GPA and LPI, by Cohort and Gender
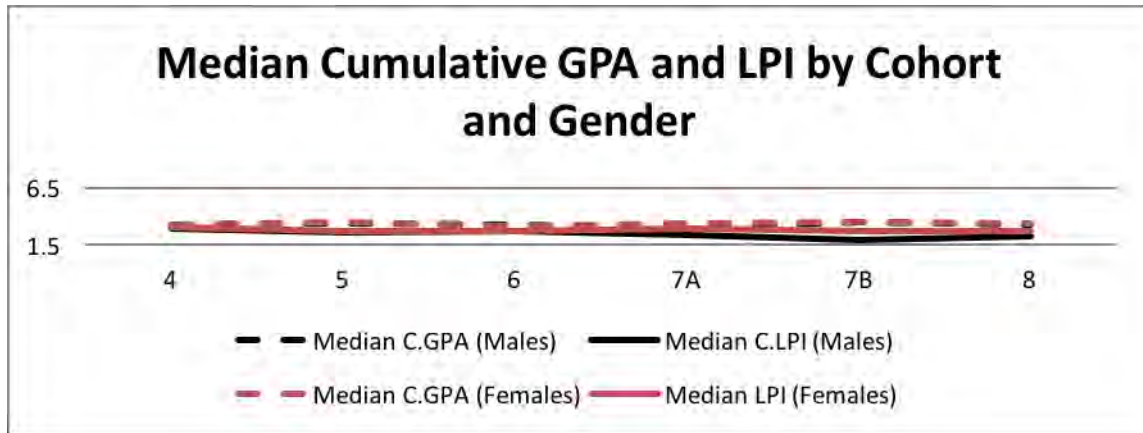
Table V.3: Median Cumulative GPA and LPI, by Cohort and Gender

Cohort	Median C.GPA (Males)	Median C.GPA (Females)	Median C.LPI (Males)	Median LPI (Females)
4	3.283	3.256	2.94	3.075
5	3.433	3.478	2.635	2.75
6	3.237	3.131	2.7	2.7
7A	2.9775	3.373	2.345	2.89
7B	3.483	3.452	1.94	2.68
8	3.2725	3.423	2.29	2.72
Total	**3.234**	**3.37**	**2.64**	**2.84**

Table V.4: Mean Cumulative GPA and LPI, by Cohort and Gender

Cohort		Male Mean	Male N	Female Mean	Female N
4	C.GPA	3.148	20	3.229	24
	C.LPI	2.942	20	3.042	24
5	C.GPA	3.389	23	3.312	23
	C.LPI	2.668	23	2.935	23
6	C.GPA	3.172	25	3.123	27
	C.LPI	2.705	19	2.550	23
7A	C.GPA	2.974	16	3.336	14
	C.LPI	2.573	16	2.952	13
7B	C.GPA	3.310	7	3.389	13
	C.LPI	2.057	6	2.578	9
8	C.GPA	3.277	14	3.442	13
	C.LPI	2.144	14	2.649	11
Total	**C.GPA**	**3.201**	**104**	**3.276**	**114**
	C.LPI	**2.602**	**97**	**2.814**	**103**

Table V.5: Testing the Differences of Mean Cumulative GPA and LPI, by Gender

Testing the Difference in Mean of	Male		Female		P-Value[8]
	Mean	N	Mean	N	
C.GPA	3.201	104	3.276	114	0.11
C.LPI***	2.602	97	2.814	103	0.003

Table V.6: Correlation Coefficient between Cumulative GPA and LPI for Males, Females, and Total

Gender	Correlation between C.GPA & C.LPI	P-Value for being different than 0
Males	0.202**	0.06
Females	0.385***	0.0001
Total	**0.295***	**0.0000**

Notes: *p-value <0.1; i.e., statistically significant at level 0.1, less than one in ten chance of being wrong.
**p-value <0.05; i.e., statistically significant at level 0.05, less than one in twenty chance of being wrong.
***p-value <0.01; i.e., statistically significant at level 0.01, less than one in one hundred chance of being wrong.

Gender Differences and Travelling Abroad

Travelling abroad required a minimum GPA of 2.8 and LPI of 3.0. Since the GPA and LPI prior to travel were unavailable, the analysis used the final cumulative GPA and LPI to compare females and males. As Table V.7 shows, a higher percentage of females (41.57%) were able to achieve both requirements to travel abroad than males (26.74%). A t-test was used to test this difference and shows that, although the percentage of females above the LPI criterion was significantly higher than that of males, the difference was not significant (p-value was 0.009). When both criteria were fulfilled, the difference was significant, as it was affected by females' higher performance in LPI.

Table V.7: Percent of those who Fulfilled the Travel Criteria, by Gender (%)

	Males	Females	P-Value
Above GPA Criterion	80.77	84.21	0.25
Above LPI Criterion***	27.91	44.94	0.009
Above Both Criteria***	26.74	41.57	0.019

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[8] The *p*-value is defined as the probability, under the assumption of the hypotheses being tested, of obtaining a result equal to *or more extreme than what was actually observed*. The smaller the *p*-value, the larger the significance because it tells the investigator that the hypothesis under consideration may not adequately explain the observation. For typical analysis, using the standard $\alpha = 0.05$ cutoff, the null hypothesis ("*null hypothesis*" usually refers to a general statement or default position that there is no relationship between two measured phenomena) is rejected when $p < .05$ and not rejected when $p > .05$.

B. Online Survey Data Analysis

EQ1: To what extent are students and alumni of LEAD equipped with the skills to potentially assume positions of leadership in academia, government, industry, and business?

Table V.8a: Level of Contribution of AUC or LEAD Activities to Development of Leadership Skills (%), by Gender

Activities	Male			Female			Total		
	Low (1-2)	Medium (3-5)	High (6-7)	Low (1-2)	Medium (3-5)	High (6-7)	Low (1-2)	Medium (3-5)	High (6-7)
Support from LEAD student life coordinators	3.13	43.75	53.13	20.41	32.65	46.94	12.12	43.43	44.44
LEAD mini-activities (i.e. workshops, expert sessions, book reviews, movies, etc.)	3.03	66.67	30.30	10.42	50.00	39.58	10.2	56.12	33.67
Annual conferences	15.15	66.67	18.18	22.92	56.25	20.83	20.2	60.61	19.19
International or regional conferences	40.00	40.00	20.00	30.77	38.46	30.77	36.73	36.73	26.53
Leadership training	6.06	57.58	36.36	2.13	51.06	46.81	5.15	56.7	38.14
Retreats	12.50	46.88	40.63	2.04	46.94	51.02	7.07	48.48	44.44
Internships	21.74	39.13	39.13	20.00	42.5	37.50	21.92	42.47	35.62
US Study Abroad	16.67	16.67	66.67	8.57	0	91.43	11.11	11.11	77.78
Academic courses in your program	6.67	43.33	50.00	2.08	29.17	68.75	4.17	36.46	59.38
AUC activities, e.g., student union, clubs, etc.	6.45	45.16	48.39	2.04	32.65	65.31	4.08	36.73	59.18
AUC's Career Advising and Placement Services (CAPS)	12.12	48.48	39.39	8.33	35.42	56.25	12.12	44.44	43.43
Extracurricular activities (student union, clubs, assistantship, volunteer work, etc.)	0	36.36	63.64	2.04	40.82	57.14	1.00	39.00	60.00
Work (paid or unpaid)	16.67	12.50	70.83	17.78	20.00	62.22	14.81	22.22	62.96

Table V.8b: Level of Contribution of AUC or LEAD Activities to Development of Leadership Skills (Number), by Gender

Activities	Male				Female			
	Low (1-2)	Medium (3-5)	High (6-7)	Total	Low (1-2)	Medium (3-5)	High (6-7)	Total
Support from LEAD student life coordinators	1	14	17	32	10	16	23	49
LEAD mini-activities (i.e. workshops, expert sessions, book reviews, movies, etc.)	1	22	10	33	5	24	19	48
Annual conferences	5	22	6	33	11	27	10	48
International or regional conferences	6	6	3	15	8	10	8	26
Leadership training	2	19	12	33	1	24	22	47
Retreats	4	15	13	32	1	23	25	49
Internships	5	9	9	23	8	17	15	40
US Study Abroad	4	4	16	24	3	0	32	35
Academic courses in your program	2	13	15	30	1	14	33	48
AUC activities, e.g., student union, clubs, etc.	2	14	15	31	1	16	32	49
AUC's Career Advising and Placement Services (CAPS)	4	16	13	33	4	17	27	48
Extracurricular activities (student union, clubs, assistantship, volunteer work, etc.)	0	12	21	33	1	20	28	49
Work (paid or unpaid)	4	3	17	24	8	9	28	45

Table V.9: Effectiveness of LPI in Measuring Leadership Development, by Gender

Level of LPI Effectiveness		Gender			
		Male	Female	Missing	Total
N/A	N	0	0	1	1
	%	0	0	4.55	0.96
1 Fully Ineffective	N	5	8	4	17
	%	15.15	16.33	18.18	16.35
2	N	9	9	4	22
	%	27.27	18.37	18.18	21.15
3	N	3	6	2	11
	%	9.09	12.24	9.09	10.58
4	N	6	6	5	17
	%	18.18	12.24	22.73	16.35
5	N	5	5	2	12
	%	15.15	10.2	9.09	11.54
6	N	3	12	0	15
	%	9.09	24.49	0	14.42
7 Fully Effective	N	1	2	0	3
	%	3.03	4.08	0	2.88
Missing	N	1	1	4	6
	%	3.03	2.04	18.18	5.77
Total	N	33	49	22	104
	%	100	100	100	100

Table V.10: Percentage of Alumni Using Leadership Skills in Work Related Activities, by Gender

Work Related Activities	Male	Female	Total
Participated in strategic planning	54.55	38.78	47.9
Led a project	57.58	48.98	55.2
Developed new ideas	54.55	38.78	55.2
Trained/taught others	54.55	38.78	51.0
Organized activities, events, etc.	54.55	38.78	51.0
Gained new expertise	54.55	63.27	59.4
Accepted leadership role	57.58	53.06	56.3
Applied leadership practices	60.61	65.31	65.6
None of the above	3.03	14.29	9.4
Total Number of Observations	33	49	96

Table V.11: Percentage of Alumni Using Leadership Skills in Non-Work Related Activities, by Gender

Activities	Male	Female	Total
Volunteer efforts	51.52	65.31	61.2
Advocacy for social issues	39.39	32.65	36.7
Research	54.55	51.02	49.0
Knowledge sharing	63.64	75.51	69.4
None of the above	12.12	2.04	8.2
Total Number of Observations	**33**	**49**	**98**

Table V.12: Current Residency by Gender

Current Governorate		Gender		Total
		Male	Female	Total
Outside Egypt	N	9	8	17
	%	27.27	16.33	20.73
Cairo	N	18	31	49
	%	54.55	63.27	59.76
Dakahlia	N	0	2	2
	%	0	4.08	2.44
Fayoum	N	0	1	1
	%	0	2.04	1.22
Gharbia	N	1	1	2
	%	3.03	2.04	2.44
Giza	N	4	3	7
	%	12.12	6.12	8.54
Luxor	N	1	0	1
	%	3.03	0	1.22
Monufia	N	0	1	1
	%	0	2.04	1.22
Qalyubia	N	0	1	1
	%	0	2.04	1.22
Red Sea	N	0	1	1
	%	0	2.04	1.22
Total	**N**	**33**	**49**	**82**
	%	**100**	**100**	**100**

Table V.13: Employment Sector by Gender

Sector of Employment		Gender		Total
		Male	Female	Total
Public/Government	N	0	4	4
	%	0	9.30	6.25
NGO	N	2	8	10
	%	6.45	18.60	15.63
International/Multinational Organizations	N	8	7	15
	%	25.81	16.28	23.44
Private Companies- Egyptian	N	9	13	22
	%	29.03	30.23	34.38
Private Companies - International	N	12	11	23
	%	38.71	25.58	35.94
Total	N	31	43	64
	%	100	100	100

Table V.14: Highest Level of Education, by Gender

Highest Degree		Male	Female	Total
Bachelors	N	24	41	65
	%	75	83.67	80.25
Masters	N	7	7	14
	%	21.88	14.29	17.28
PhD	N	1	1	2
	%	3.13	2.04	2.47
Total	N	32	49	81

EQ2: To what extent are students and alumni satisfied with the program services (English language training, computer training, team building, and library and research skills)?

Table V.15a: Level of Satisfaction with LEAD Program Activities (Total)

Level of Satisfaction with the Following Activities:		Low (1-2)	Medium (3-5)	High (6-7)	Total No. of Observations	Excluding N/A
LEAD orientation	N	16	43	38	104	97
	%	16.49	44.33	39.18		
Student-led orientation	N	12	45	33	104	90
	%	13.33	50.00	36.67		
Retreats	N	5	43	55	104	103
	%	4.85	41.75	53.40		
Annual leadership conferences	N	18	61	23	104	102
	%	17.65	59.80	22.55		
International and regional conferences	N	15	22	20	104	57
	%	26.32	38.60	35.09		
Other LEAD activities (workshops, expert sessions, book reviews, movies, etc.)	N	9	55	37	104	101
	%	8.91	54.46	36.63		

Table V.15b: Level of Satisfaction with LEAD Program Activities (Males)

Level of Satisfaction with the Following Activities:		Low (1-2)	Medium (3-5)	High (6-7)	Total Number of Observations
LEAD orientation	N	4	13	14	31
	%	12.9	41.94	45.16	100
Student-led orientation	N	4	12	12	28
	%	14.29	42.86	42.86	100
Retreats	N	1	15	17	33
	%	3.03	45.45	51.52	100
Annual leadership conferences	N	5	19	8	32
	%	15.63	59.38	25	100
International and regional conferences	N	4	8	6	18
	%	22.22	44.44	33.33	100
Other LEAD activities (workshops, expert sessions, book reviews, movies, etc.)	N		19	13	32
	%		59.38	40.63	100

Table V.15c: Level of Satisfaction with LEAD Program Activities (Females)

Level of Satisfaction with the Following activities:		Low (1-2)	Medium (3-5)	High (6-7)	Total Number
LEAD orientation	N	8	18	20	46
	%	17.39	39.13	43.48	100
Student-led orientation	N	6	21	18	45
	%	13.33	46.67	40	100
Cohort development/team building	N	8	16	25	49
	%	16.33	32.65	51.02	100
Retreats	N	4	17	28	49
	%	8.16	34.69	57.14	100
Annual leadership conferences	N	8	31	10	49
	%	16.33	63.27	20.41	100
International and regional conferences	N	6	9	12	27
	%	22.22	33.33	44.44	100
Other LEAD activities (workshops, expert sessions, book reviews, movies, etc.)	N	6	24	19	49
	%	12.24	48.98	38.78	100

Table V.16a: Level of Satisfaction with AUC Services and Activities (Total)

Level of satisfaction with the following activities		Low (1-2)	Medium (3-5)	High (6-7)	Total Observations
First Year Experience (FYE) orientation	N	18	35	48	101
	%	17.82	34.65	47.52	
English language courses	N	3	18	71	92
	%	3.26	19.57	77.17	
Computer support/UACT	N	5	29	68	102
	%	4.90	28.43	66.67	
Library and research skill development	N	3	19	80	102
	%	2.94	18.63	78.43	
Study skill sessions by mentoring office	N	7	32	36	75
	%	9.33	42.67	48.00	
Academic courses	N	1	29	72	102
	%	0.98	28.43	70.59	
Semester abroad	N	6	9	56	71
	%	8.45	12.68	78.87	
Internships	N	14	30	32	76
	%	18.42	39.47	42.11	
Career counseling	N	9	39	46	94
	%	9.57	41.49	48.94	
Extracurricular activities—student union, clubs, assistantships, volunteer service	N	5	29	65	99
	%	5.05	29.29	65.66	

Table V.16b: Level of Satisfaction with AUC Services and Activities (Males)

Level of Satisfaction with the Following Activities:		Low (1-2)	Medium (3-5)	High (6-7)	Total number of observations
First Year Experience (FYE) orientation	N	4	11	18	33
	%	12.12	33.33	54.55	100
English language courses	N	1	3	25	29
	%	3.45	10.34	86.21	100
Computer support/UACT	N	1	12	20	33
	%	3.03	36.36	60.61	100
Library and research skill development	N	2	5	26	33
	%	6.06	15.15	78.79	100
Study skill sessions by mentoring office	N	1	15	10	26
	%	3.85	57.69	38.46	100
Academic courses	N	1	10	21	32
	%	3.13	31.25	65.63	100
Semester abroad/international student office services	N	3	4	18	25
	%	12	16	72	100
Internships	N	7	9	10	26
	%	26.92	34.62	38.46	100
Career counseling	N	4	12	16	32
	%	12.5	37.5	50	100
Extracurricular activities (student union, clubs, assistantships, volunteer service, etc.)	N	2	8	22	32
	%	6.25	25	68.75	100

Table V.16c: Level of Satisfaction with AUC Services and Activities (Females)

Level of Satisfaction with the Following Activities:		Low (1-2)	Medium (3-5)	High (6-7)	Total Number of observations
First Year Experience (FYE) orientation	N	13	14	21	48
	%	27.08	29.17	43.75	100
English language courses	N	1	9	34	44
	%	2.27	20.45	77.27	100
Computer support/UACT	N	3	10	36	49
	%	6.12	20.41	73.47	100
Library and research skill development	N	1	6	42	49
	%	2.04	12.24	85.71	100
Study skill sessions by mentoring office	N	3	11	20	34
	%	8.82	32.35	58.82	100
Academic courses	N		11	38	49
	%		22.45	77.55	100
Semester abroad/international student office services	N	1	2	30	33
	%	3.03	6.06	90.91	100
Internships	N	6	12	18	36
	%	16.67	33.33	50	100
Career counseling	N	2	17	26	45
	%	4.44	37.78	57.78	100
Extracurricular activities (student union, clubs, assistantships, volunteer service, etc.)	N	3	13	32	48
	%	6.25	27.08	66.67	100

To further compare satisfaction with LEAD program activities versus satisfaction with AUC services and activities, two simple means for the satisfaction level of both LEAD and AUC activities were computed and compared using paired t-test[9] for all students and then for male and female students separately. Results show a significant increase in the satisfaction level with AUC services and activities over the LEAD activities among the three groups (refer to Table V.17).

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[9] Since each student is reporting the satisfaction level for both, paired t-test is used.

Table V.17: Testing the Differences in Mean Satisfaction Level for LEAD and AUC Activities, by Gender

	Variable	Observations	Mean	Std. Err.	95% Confidence Interval	
Total***	Mean Satisfaction level for LEAD	100	5.029	0.106	4.819	5.240
	Mean Satisfaction level for AUC	100	5.454	0.104	5.248	5.659
Male***	Mean Satisfaction level for LEAD	33	4.958	0.171	4.610	5.307
	Mean Satisfaction level for AUC	33	5.462	0.196	5.063	5.862
Female***	Mean Satisfaction level for LEAD	49	5.214	0.154	4.904	5.523
	Mean Satisfaction level for AUC	49	5.667	0.127	5.411	5.922

***P-Value<0.01

Table V.18: Number and Percent Who Reported that LEAD Staff Sought their Opinion, by Cohort

Cohort	3		4		5		6		7a		7b		8		Missing		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Yes	8	50	9	81.82	10	90.91	16	88.89	10	83.33	7	77.78	5	100	8	36.36	73	70.19
No	8	50	2	18.18	1	9.09	2	11.11	2	16.67	2	22.22	0	0	13	59.09	30	28.85
Missing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4.55	1	0.96
Total	16	100	11	100	11	100	18	100	12	100	9	100	5	100	22	100	104	100

Table V.19: Percent Who Reported that LEAD Staff Sought their Opinion, by Gender

Did LEAD Staff seek your Opinion?		Gender			Total
		Male	Female	.	Total
Yes	N	24	41	8	73
	%	72.73	83.67	36.36	70.19
No	N	9	8	13	30
	%	27.27	16.33	59.09	28.85
Missing	N	0	0	1	1
	%	0	0	4.55	0.96
Total	N	33	49	22	104
	%	100	100	100	100

Table V.20: Testing Differences in Satisfaction Level of Alumni by Whether LEAD Sought their Opinion

Did LEAD Seek your Opinion***	% Satisfied/Very Satisfied	Std. Err.	N	95% Conf. Interval	
Yes	77.14	0.050	70	67.31	86.98
No	33.33	0.096	24	14.47	52.19
P-Value	0.000				

Table V.21: Correlation Coefficient between Overall Experience with LEAD and the Extent their Opinions Were Considered

Correlation between Both (having N/A in Q5 as 0)	Correlation between Both excluding N/A
0.64***	0.59***

*** Significant at p-value 0.05

Table V.22: Overall Rating of LEAD Experience, by Gender

Overall Rate		Male	Female	Total
Extremely Negative	N	0	0	0
	%	0	0	0
2	N	0	2	3
	%	0	4.17	3.19
3	N	3	1	5
	%	9.09	2.08	5.32
4	N	2	5	9
	%	6.06	10.42	9.57
5	N	6	5	15
	%	18.18	10.42	15.96
6	N	13	13	30
	%	39.39	27.08	31.91
Extremely Positive	N	9	22	32
	%	27.27	45.83	34.04
Total	N	33	48	94
	%	100	100	100

Table V.23: Would Recommend LEAD Program, by Gender

Would you Recommend LEAD to Others?		Gender			
		Male	Female	Missing Gender	Total
Yes	N	1	2	2	5
	%	3.03	4.17	15.38	5.32
No	N	32	46	11	89
	%	96.97	95.83	84.62	94.68

EQ3: To what extent has LEAD succeeded to achieve gender balance with the program services (English language training, computer training, cohort development, team building, library and research skills, study skills, etc.)?

Table V.24: T-Test of Gender Differences in Rating of Activities' Contribution to Leadership Skills

Level of Contribution	Male	Female	P-Value
	% of High and Fully Contributed	% of High and Fully Contributed	Females have Higher Percentage
Retreats	40.63	51.02	0.18
US Study Abroad	66.67	91.43	0.04
Academic courses in your program	50	68.75	0.05
AUC activities, e.g., student union, clubs, etc.	48.39	65.31	0.10
AUC's Career Advising and Placement Services (CAPS)	39.39	56.25	0.08

Table V.25: Current Employment Status, by Gender

Current Employment Status		Gender			Total
		Male	Female	.	Total
Employed	N	24	35	0	59
	%	72.73	71.43	0	56.73
Consultant	N	1	0	0	1
	%	3.03	0	0	0.96
Self Employed	N	2	1	0	3
	%	6.06	2.04	0	2.88
Unemployed	N	6	13	0	19
	%	18.18	26.53	0	18.27
.	N	0	0	22	22
	%	0	0	100	21.15
Total	N	33	49	22	104
	%	100	100	100	100

Table V.26: Work History, by Gender

Have ever Worked?		Gender	
		Male	Female
Yes	N	31	44
	%	93.94	89.8
No	N	2	5
	%	6.06	10.2
Total	N	33	49
	%	100	100

Table V.27: Reasons for Not Working, by Gender (Count)

Reason Not Working	Gender		
	Male	Female	Total
Military	1	0	1
Maternity/paternity	0	1	1
Post Graduate Studies	2	4	6
Looking for a Job	1	7	8*
Waiting for new job to start	1	0	1
No suitable work available	0	1	1
Total	**5**	**13**	**18**

Note: *Of the eight, four graduated in 2014 (two of whom worked before) and four in 2016 (three worked before). No major stands out as having a higher percentage of unemployed.

Table V.28: Reasons Females Not Working, by Current Residency (Count)

Governorate	Maternity	Post Grad.	Looking	Not Suitable	Total
Outside Egypt	0	3	1	0	4
Cairo	0	1	3	1	5
Fayoum	0	0	1	0	1
Gharbia	0	0	1	0	1
Giza	0	0	1	0	1
Red Sea	1	0	0	0	1
Total	**1**	**4**	**7**	**1**	**13**

Time to work: (First Job)

Fourteen students (around 20.6%) started their first job while they were at school, with an average time of 3-4 months for graduates to start a new job. It took those who started their job after graduation roughly 5-6 months to start their first job.

Female students started their first job quicker after graduation, with about one month less than male students (5.5 months vs 6.4), but the difference is not significant given that some male students had to do their military service first.[10]

Table V.29: Average Time Starting First Job (in Years), by Gender

Gender	Average Time to Work in Years	Number of Observations
Male	0.530	23
Female	0.446	30
Total	**0.483**	**53**

Note: Although 104 answered the survey, only 82 filled out the demographic and work section. Of these, 71 reported ever working. Sixty-eight of that number gave the starting time: 14 started prior to graduation, 1 reported 0 time, and the remaining 53 students took 5-6 months.

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[10] There was no information as to whether male students served in the military or not.

EQ4: What is the Return on Investment of the LEAD?

Table V.30: LEAD Program
Present Value of Costs, Benefits, Benefit/Cost Ratio and IRR

Social Profitability Parameter/Indicator	Present Value of Costs (EGP)	Present Value of Benefits (EGP)	Net Present Value "NPV" (EGP)	Benefit/Cost Ratio	Internal Rate of Return (IRR)
All Graduates	203,691,701	700,507,336	496,815,635	344%	18%
Males	98,782,818	405,161,716	306,378,898	410%	17%
Females	104,908,884	295,345,621	190,436,737	282%	16%
School of Business	52,071,563	119,803,221	67,731,659	230%	15%
Males	15,315,166	41,807,809	26,492,644	273%	15%
Females	36,756,397	87,579,670	50,823,272	238%	15%
School of Science & Engineering	100,314,334	499,725,033	399,410,699	498%	19%
Males	65,855,212	337,522,708	271,667,496	513%	19%
Females	34,459,122	162,202,325	127,743,203	471%	19%
School of Humanities & Social Sciences	28,333,056	38,533,491	10,200,435	136%	11%
Males	12,252,132	17,540,044	5,287,912	143%	11%
Females	16,080,924	20,993,447	4,912,523	131%	11%
School of Global Affairs & Public Policy	22,972,748	32,861,333	9,888,585	143%	11%
Males	5,360,308	8,291,154	2,930,846	155%	11%
Females	17,612,440	24,570,179	6,957,739	140%	11%

Source: Computed by the researcher based upon the Salary Survey Database.

Table V.31: LEAD Students by School and Gender

	School of Business		School of Sciences and Engineering		School of Humanities and Social Sciences		School of Global Affairs and Public Policy		Total	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
3	6	3	13	10	1	3	3	7	23	23
4	1	11	19	7	2	1	0	4	22	23
5	3	7	19	11	0	4	1	1	23	23
6	2	9	15	8	7	5	0	6	24	28
7a/7b	3	12	14	6	4	5	2	4	23	27
8	5	6	6	3	2	3	1	1	14	13

Source: Computed by the researcher based upon the LEAD Database.

Table V.32: Incremental Annual Costs of LEAD, by USAID and AUC Shares (US$)

Year	USAID Share	AUC Share	Total
2007	11,932,441	2,745,104	14,677,545
2008	7,146,209	2,180,186	9,326,395
2009	7,368,006	1,176,965	8,544,972
2010	7,818,446	3,248,330	1,1066,776
2011	3,523,041	1,558,215	5,081,256
Total	**37,788,144**	**10,908,800**	**48,696,945**

Source: Computed by the researcher based upon the LEAD Budget.

Table V.33: Annual Costs of LEAD, by USAID and AUC Shares (US$)

Year	USAID Costs	AUC Cost Share	Total Costs
2007/2008	2,386,488	549,021	2,935,509
2008/2009	3,815,730	985,058	4,800,788
2009/2010	5,289,331	1,220,451	6,509,782
2010/2011	6,853,021	1,870,117	8,723,138
2011/2012	7,557,629	2,181,760	9,739,389
2012/2013	5,171,141	1,632,739	6,803,880
2013/2014	3,741,899	1,196,702	4,938,601
2014/2015	2,268,298	961,309	3,229,607
2015/2016	704,608	311,643	1,016,251
Total	**37,788,144**	**10,908,800**	**48,696,945**

Source: Computed by the researcher based upon the LEAD Budget.

Table V.34: Annual Costs of LEAD Males, by USAID and AUC Shares (US$)

Year	USAID Costs	AUC Cost Share	Total Costs
2007/2008	1,157,357	266,254	1,423,612
2008/2009	1,850,486	477,716	2,328,202
2009/2010	2,565,127	591,873	3,157,000
2010/2011	3,323,457	906,936	4,230,394
2011/2012	3,665,166	1,058,072	4,723,237
2012/2013	2,507,809	791,817	3,299,626
2013/2014	1,814,680	580,356	2,395,036
2014/2015	1,100,039	466,199	1,566,238
2015/2016	341,709	151,135	492,844
Total	**18,325,829**	**5,290,358**	**23,616,187**

Source: Computed by the researcher based upon the LEAD Budget.

Table V.35: Annual Costs of LEAD Females, by USAID and AUC Shares (US$)

Year	USAID Costs	AUC Cost Share	Total Costs
2007/2008	1,229,131	282,766	1,511,897
2008/2009	1,965,244	507,342	2,472,586
2009/2010	2,724,204	628,578	3,352,783
2010/2011	3,529,563	963,181	4,492,744
2011/2012	3,892,463	1,123,688	5,016,151
2012/2013	2,663,332	840,922	3,504,254
2013/2014	1,927,219	616,347	2,543,565
2014/2015	1,168,259	495,110	1,663,369
2015/2016	362,900	160,508	523,408
Total	**19,462,315**	**5,618,442**	**25,080,757**

Source: Computed by the researcher based upon the LEAD Budget.

Table V.36: Annual Costs of LEAD Graduates of School of Business (US$)

Year	USAID Costs	AUC Cost Share	Total Costs
2007/2008	610,080	140,351	750,431
2008/2009	975,450	251,819	1,227,269
2009/2010	1,352,160	311,995	1,664,155
2010/2011	1,751,900	478,075	2,229,975
2011/2012	1,932,025	557,743	2,489,769
2012/2013	1,321,946	417,392	1,739,338
2013/2014	956,576	305,924	1,262,499
2014/2015	579,866	245,748	825,614
2015/2016	180,125	79,668	259,794
Total	**9,660,127**	**2,788,716**	**12,448,843**

Source: Computed by the researcher based upon the LEAD Budget.

Table V.37: Annual Costs of LEAD Graduates of School of Sciences and Engineering (US$)

Year	USAID Costs	AUC Cost Share	Total Costs
2007/2008	1,175,301	270,382	1,445,683
2008/2009	1,879,175	485,123	2,364,298
2009/2010	2,604,896	601,049	3,205,945
2010/2011	3,374,984	920,998	4,295,981
2011/2012	3,721,990	1,074,476	4,796,466
2012/2013	2,546,690	804,093	3,350,783
2013/2014	1,842,815	589,353	2,432,168
2014/2015	1,117,094	473,427	1,590,521
2015/2016	347,006	153,478	500,485
Total	**18,609,951**	**5,372,379**	**23,982,330**

Source: Computed by the researcher based upon the LEAD Budget.

Table V.38: Annual Costs of LEAD Graduates of School of Humanities and Social Sciences (US$)

Year	USAID Costs	AUC Cost Share	Total Costs
2007/2008	331,955	76,368	408,323
2008/2009	530,759	137,019	667,779
2009/2010	735,734	169,762	905,496
2010/2011	953,240	260,129	1,213,369
2011/2012	1,051,249	303,478	1,354,727
2012/2013	719,294	227,110	946,404
2013/2014	520,490	166,459	686,948
2014/2015	315,515	133,716	449,231
2015/2016	98,009	43,349	141,358
Total	**5,256,246**	**1,517,390**	**6,773,635**

Source: Computed by the researcher based upon the LEAD Budget.

Table V.39: Annual Costs of LEAD Graduates of School of Global Affairs and Public Policy (US$)

Year	USAID Costs	AUC Cost Share	Total Costs
2007/2008	269,153	61,920	331,072
2008/2009	430,345	111,097	541,442
2009/2010	596,541	137,645	734,186
2010/2011	772,897	210,915	983,813
2011/2012	852,364	246,063	1,098,427
2012/2013	583,211	184,144	767,355
2013/2014	422,019	134,966	556,985
2014/2015	255,823	108,418	364,241
2015/2016	79,467	35,148	114,615
Total	**4,261,821**	**1,230,316**	**5,492,137**

Source: Computed by the researcher based upon the LEAD Budget.

Table V.40: Annual Costs of Male LEAD Graduates of School of Business (US$)

Year	USAID Costs	AUC Cost Share	Total Costs
2007/2008	179,435	41,280	220,715
2008/2009	286,897	74,065	360,962
2009/2010	397,694	91,763	489,457
2010/2011	515,265	140,610	655,875
2011/2012	568,243	164,042	732,285
2012/2013	388,808	122,762	511,570
2013/2014	281,346	89,978	371,323
2014/2015	170,549	72,279	242,828
2015/2016	52,978	23,432	76,410
Total	**2,841,214**	**820,211**	**3,661,424**

Source: Computed by the researcher based upon the LEAD Budget.

Table V.41: Annual Costs of Female LEAD Graduates of School of Business (US$)

Year	USAID Costs	AUC Cost Share	Total Costs
2007/2008	430,644	99,071	529,716
2008/2009	688,553	177,755	866,308
2009/2010	954,466	220,232	1,174,698
2010/2011	1,236,635	337,465	1,574,100
2011/2012	1,363,783	393,701	1,757,484
2012/2013	933,138	294,630	1,227,768
2013/2014	675,230	215,946	891,176
2014/2015	409,317	173,469	582,786
2015/2016	127,147	56,236	183,384
Total	**6,818,913**	**1,968,505**	**8,787,419**

Source: Computed by the researcher based upon the LEAD Budget.

Table V.42: Annual Costs of Male LEAD Graduates of School of Sciences and Engineering (US$)

Year	USAID Costs	AUC Cost Share	Total Costs
2007/2008	771,571	177,503	949,074
2008/2009	1,233,657	318,477	1,552,134
2009/2010	1,710,085	394,582	2,104,666
2010/2011	2,215,638	604,624	2,820,263
2011/2012	2,443,444	705,381	3,148,825
2012/2013	1,671,873	527,878	2,199,751
2013/2014	1,209,787	386,904	1,596,691
2014/2015	733,359	310,799	1,044,159
2015/2016	227,806	100,757	328,562
Total	**12,217,220**	**3,526,905**	**15,744,125**

Source: Computed by the researcher based upon the LEAD Budget.

Table V.43: Annual Costs of Female LEAD Graduates of School of Sciences and Engineering (US$)

Year	USAID Costs	AUC Cost Share	Total Costs
2007/2008	403,729	92,879	496,609
2008/2009	645,518	166,645	812,163
2009/2010	894,812	206,467	1,101,279
2010/2011	1,159,346	316,373	1,475,719
2011/2012	1,278,546	369,095	1,647,641
2012/2013	874,817	276,215	1,151,032
2013/2014	633,028	202,450	835,478
2014/2015	383,735	162,627	546,362
2015/2016	119,201	52,722	171,922
Total	**6,392,731**	**1,845,474**	**8,238,205**

Source: Computed by the researcher based upon the LEAD Budget.

Table V.44: Annual Costs of Male LEAD Graduates of School of Humanities/Social Sciences (US$)

Year	USAID Costs	AUC Cost Share	Total Costs
2007/2008	143,548	33,024	176,572
2008/2009	229,518	59,252	288,769
2009/2010	318,155	73,411	391,566
2010/2011	412,212	112,488	524,700
2011/2012	454,594	131,234	585,828
2012/2013	311,046	98,210	409,256
2013/2014	225,077	71,982	297,059
2014/2015	136,439	57,823	194,262
2015/2016	42,382	18,745	61,128
Total	**2,272,971**	**656,168**	**2,929,140**

Source: Computed by the researcher based upon the LEAD Budget.

Table V.45: Annual Costs of Female LEAD Graduates of School of Humanities/Social Sciences (US$)

Year	USAID Costs	AUC Cost Share	Total Costs
2007/2008	188,407	43,344	231,751
2008/2009	301,242	77,768	379,010
2009/2010	417,579	96,351	513,930
2010/2011	541,028	147,641	688,669
2011/2012	596,655	172,244	768,899
2012/2013	408,248	128,900	537,148
2013/2014	295,413	94,476	389,890
2014/2015	179,076	75,893	254,969
2015/2016	55,627	24,603	80,230
Total	**2,983,275**	**861,221**	**3,844,496**

Source: Computed by the researcher based upon the LEAD Budget.

Table V.46: Annual Costs of Male LEAD Graduates of School of Global Affairs/Public Policy (US$)

Year	USAID Costs	AUC Cost Share	Total Costs
2007/2008	62,802	14,448	77,250
2008/2009	100,414	25,923	126,337
2009/2010	139,193	32,117	171,310
2010/2011	180,343	49,214	229,556
2011/2012	198,885	57,415	256,300
2012/2013	136,083	42,967	179,049
2013/2014	98,471	31,492	129,963
2014/2015	59,692	25,298	84,990
2015/2016	18,542	8,201	26,743
Total	**994,425**	**287,074**	**1,281,499**

Source: Computed by the researcher based upon the LEAD Budget.

Table V.47: Annual Costs of Female LEAD Graduates of School of Global Affairs/Public Policy (US$)

Year	USAID Costs	AUC Cost Share	Total Costs
2007/2008	206,350	47,472	253,822
2008/2009	329,932	85,174	415,106
2009/2010	457,348	105,528	562,876
2010/2011	592,554	161,702	754,256
2011/2012	653,479	188,648	842,128
2012/2013	447,129	141,177	588,305
2013/2014	323,548	103,474	427,022
2014/2015	196,131	83,121	279,252
2015/2016	60,925	26,947	87,871
Total	**3,267,396**	**943,242**	**4,210,638**

Source: Computed by the researcher based upon the LEAD Budget.

Table V.48: Total Costs of LEAD Graduates, by LEAD and non-LEAD Activities (including both USAID and AUC Cost Shares) and Cohort (US$)

Cohort	Non-LEAD activities	LEAD activities	Total Costs
3 and 4	11,690,298	2,987,247	14,677,545
5	7,157,696	2,168,699	9,326,395
6	6,623,939	1,921,124	8,545,063
7a and 7b	8,943,298	2,123,479	11,066,776
8	4,054,322	1,026,935	5,081,256
Total	**38,433,985**	**10,263,051**	**48,697,036**

Source: Computed by the researcher based upon the LEAD Budget.

Table V.49: Annual Costs of LEAD Graduates, by LEAD and Non-LEAD Activities (including both USAID and AUC Cost Shares) (US$)

Year	Non-LEAD activities	LEAD activities	Total Costs
2007/2008	2,338,060	597,449	2,935,509
2008/2009	3,769,599	1,031,189	4,800,788
2009/2010	5,094,387	1,415,414	6,509,801
2010/2011	6,883,046	1,840,110	8,723,156
2011/2012	7,693,911	2,045,496	9,739,407
2012/2013	5,355,851	1,448,047	6,803,898
2013/2014	3,924,312	1,014,307	4,938,619
2014/2015	2,599,524	630,083	3,229,607
2015/2016	810,864	205,387	1,016,251
Total	**38,469,554**	**10,227,482**	**48,697,036**

Source: Computed by the researcher based upon the LEAD Budget.

Table V.50: Annual Salaries for Administration (Egyptian pounds)

Grade	Years of Experience	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
		Min.				Midpoint					Max.
1	0 - <2	22,440	23,562	24,740	25,977	26,756	27,559	28,386	29,237	30,115	31,018
2	2 - <5	29,400	30,870	32,414	34,034	35,055	36,808	38,648	40,581	42,610	44,740
3	5 - <8	42,000	44,100	46,305	48,620	50,079	51,581	53,129	54,723	56,364	58,055
4	8 - <11	54,480	57,204	60,064	63,067	66,221	69,532	73,008	76,659	80,492	84,516
5	11 - <14	81,600	85,680	89,964	94,462	97,296	100,215	103,221	106,318	109,508	112,793
6	14 - <17	108,000	113,400	119,070	125,024	128,774	132,637	136,617	140,715	144,937	149,285
7	17 - <20	144,000	151,200	158,760	166,698	171,699	176,850	182,155	187,620	193,249	199,046
8	20 - <25	178,800	187,740	197,127	206,983	213,193	219,589	226,176	232,962	239,950	247,149
9	25+	219,600	232,776	246,743	261,547	269,394	277,475	285,800	294,374	303,205	312,301

* Based on multi-sector salary surveys in Egypt (2014-2016).

** Gross salaries, exclusive of fringe benefits.

Table V.51: Annual Salaries for Human Resources (Egyptian pounds)

Grade	Years of Experience	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
		Min.				Midpoint					Max.
1	0 - <2	28,800	30,240	31,752	33,340	34,340	35,370	36,431	37,524	38,650	39,809
2	2 - <5	34,800	36,540	38,367	40,285	41,494	43,569	45,747	48,034	50,436	52,958
3	5 - <8	49,200	51,660	54,243	56,955	58,664	60,424	62,236	64,104	66,027	68,007
4	8 - <11	58,440	61,362	64,430	67,652	71,034	74,586	78,315	82,231	86,342	90,660
5	11 - <14	75,600	79,380	83,349	87,516	90,142	92,846	95,632	98,501	101,456	104,499
6	14 - <17	98,880	103,824	109,015	114,466	117,900	121,437	125,080	128,832	132,697	136,678
7	17 - <20	129,600	136,080	142,884	150,028	154,529	159,165	163,940	168,858	173,924	179,142
8	20 - <25	183,600	192,780	202,419	212,540	218,916	225,484	232,248	239,216	246,392	253,784
9	25+	248,400	263,304	279,102	295,848	304,724	313,866	323,282	332,980	342,969	353,258

* Based on multi-sector salary surveys in Egypt (2014-2016).

** Gross salaries, exclusive of fringe benefits.

Table V.52: Annual Salaries for Marketing (Egyptian pounds)

Grade	Years of Experience	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
		Minimum			Midpoint						Maximum
1	0 - <2	28,200	29,610	31,091	32,645	33,624	34,633	35,672	36,742	37,845	38,980
2	2 - <5	33,600	35,280	37,044	38,896	40,063	42,066	44,170	46,378	48,697	51,132
3	5 - <8	44,640	46,872	49,216	51,676	53,227	54,823	56,468	58,162	59,907	61,704
4	8 - <11	57,960	60,858	63,901	67,096	70,451	73,973	77,672	81,556	85,633	89,915
5	11 - <14	78,000	81,900	85,995	90,295	93,004	95,794	98,668	101,628	104,676	107,817
6	14 - <17	100,800	105,840	111,132	116,689	120,189	123,795	127,509	131,334	135,274	139,332
7	17 - <20	136,680	143,514	150,690	158,224	162,971	167,860	172,896	178,083	183,425	188,928
8	20 - <25	180,000	189,000	198,450	208,373	214,624	221,062	227,694	234,525	241,561	248,808
9	25+	242,400	256,944	272,361	288,702	297,363	306,284	315,473	324,937	334,685	344,726

* Based on multi-sector salary surveys in Egypt (2014-2016).
** Gross salaries, exclusive of fringe benefits.

Table V.53: Annual Salaries for Finance (Egyptian pounds)

Grade	Years of Experience	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
		Minimum			Midpoint						Maximum
1	0 - <2	31,680	33,264	34,927	36,674	37,774	38,907	40,074	41,276	42,515	43,790
2	2 - <5	37,200	39,060	41,013	43,064	44,356	46,573	48,902	51,347	53,914	56,610
3	5 - <8	54,960	57,708	60,593	63,623	65,532	67,498	69,523	71,608	73,757	75,969
4	8 - <11	69,840	73,332	76,999	80,849	84,891	89,136	93,592	98,272	103,185	108,345
5	11 - <14	100,860	105,903	111,198	116,758	120,261	123,869	127,585	131,412	135,355	139,415
6	14 - <17	125,700	131,985	138,584	145,513	149,879	154,375	159,006	163,777	168,690	173,751
7	17 - <20	166,260	174,573	183,302	192,467	198,241	204,188	210,314	216,623	223,122	229,815
8	20 - <25	213,840	224,532	235,759	247,547	254,973	262,622	270,501	278,616	286,974	295,584
9	25+	264,000	279,840	296,630	314,428	323,861	333,577	343,584	353,892	364,508	375,444

* Based on multi-sector salary surveys in Egypt (2014-2016).
** Gross salaries, exclusive of fringe benefits.

Table V.54: Annual Salaries for Business Studies (Egyptian pounds)

Grade	Years of Experience	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
		Minimum				Midpoint					Maximum
1	0 - <2	27,780	29,169	30,627	32,159	33,124	34,117	35,141	36,195	37,281	38,399
2	2 - <5	33,750	35,438	37,209	39,070	40,242	42,254	44,367	46,585	48,914	51,360
3	5 - <8	47,700	50,085	52,589	55,219	56,875	58,582	60,339	62,149	64,014	65,934
4	8 - <11	60,180	63,189	66,348	69,666	73,149	76,807	80,647	84,679	88,913	93,359
5	11 - <14	84,015	88,216	92,627	97,258	100,176	103,181	106,276	109,465	112,749	116,131
6	14 - <17	108,345	113,762	119,450	125,423	129,186	133,061	137,053	141,165	145,399	149,761
7	17 - <20	144,135	151,342	158,909	166,854	171,860	177,016	182,326	187,796	193,430	199,233
8	20 - <25	189,060	198,513	208,439	218,861	225,426	232,189	239,155	246,330	253,719	261,331
9	25+	243,600	258,216	273,709	290,131	298,835	307,801	317,035	326,546	336,342	346,432

* Based on multi-sector salary surveys in Egypt (2014-2016).

** Gross salaries, exclusive of fringe benefits.

Table V.55: Annual Salaries for Engineering (Egyptian pounds)

Grade	Years of Experience	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
		Minimum				Midpoint					Maximum
1	0 - <2	32,400	34,020	35,721	37,507	38,632	39,791	40,985	42,215	43,481	44,785
2	2 - <5	30,600	32,130	33,737	35,423	36,486	38,310	40,226	42,237	44,349	46,566
3	5 - <8	41,700	43,785	45,974	48,273	49,721	51,213	52,749	54,332	55,962	57,640
4	8 - <11	53,100	55,755	58,543	61,470	64,543	67,771	71,159	74,717	78,453	82,376
5	11 - <14	77,880	81,774	85,863	90,156	92,861	95,646	98,516	101,471	104,515	107,651
6	14 - <17	105,180	110,439	115,961	121,759	125,412	129,174	133,049	137,041	141,152	145,387
7	17 - <20	140,880	147,924	155,320	163,086	167,979	173,018	178,209	183,555	189,062	194,733
8	20 - <25	190,440	199,962	209,960	220,458	227,072	233,884	240,901	248,128	255,571	263,239
9	25+	233,820	247,849	262,720	278,483	286,838	295,443	304,306	313,435	322,839	332,524

* Based on multi-sector salary surveys in Egypt (2014-2016).

** Gross salaries, exclusive of fringe benefits.

Table V.56: Annual Salaries for Information and Communication Technology (Egyptian pounds)

Grade	Years of Experience	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
		Minimum				Midpoint					Maximum
1	0 - <2	28,560	29,988	31,487	33,062	34,054	35,075	36,127	37,211	38,328	39,477
2	2 - <5	35,700	37,485	39,359	41,327	42,567	44,695	46,930	49,277	51,740	54,328
3	5 - <8	44,880	47,124	49,480	51,954	53,513	55,118	56,772	58,475	60,229	62,036
4	8 - <11	62,400	65,520	68,796	72,236	75,848	79,640	83,622	87,803	92,193	96,803
5	11 - <14	89,760	94,248	98,960	103,908	107,026	110,236	113,544	116,950	120,458	124,072
6	14 - <17	111,840	117,432	123,304	129,469	133,353	137,353	141,474	145,718	150,090	154,592
7	17 - <20	144,000	151,200	158,760	166,698	171,699	176,850	182,155	187,620	193,249	199,046
8	20 - <25	196,380	206,199	216,509	227,334	234,154	241,179	248,414	255,867	263,543	271,449
9	25+	248,160	263,050	278,833	295,563	304,429	313,562	322,969	332,658	342,638	352,917

* Based on multi-sector salary surveys in Egypt (2014-2016).

** Gross salaries, exclusive of fringe benefits.

Table V.57: Annual Salaries for Average of Engineering and Information and Communication Technology (Egyptian pounds)

Grade	Years of Experience	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
		Minimum				Midpoint					Maximum
1	0 - <2	30,480	32,004	33,604	35,284	36,343	37,433	38,556	39,713	40,904	42,131
2	2 - <5	33,150	34,808	36,548	38,375	39,527	41,503	43,578	45,757	48,045	50,447
3	5 - <8	43,290	45,455	47,727	50,114	51,617	53,166	54,760	56,403	58,095	59,838
4	8 - <11	57,750	60,638	63,669	66,853	70,195	73,705	77,391	81,260	85,323	89,589
5	11 - <14	83,820	88,011	92,412	97,032	99,943	102,941	106,030	109,211	112,487	115,861
6	14 - <17	108,510	113,936	119,632	125,614	129,382	133,264	137,262	141,380	145,621	149,990
7	17 - <20	142,440	149,562	157,040	164,892	169,839	174,934	180,182	185,588	191,155	196,890
8	20 - <25	193,410	203,081	213,235	223,896	230,613	237,532	244,657	251,997	259,557	267,344
9	25+	240,990	255,449	270,776	287,023	295,634	304,503	313,638	323,047	332,738	342,720

* Based on multi-sector salary surveys in Egypt (2014-2016).

** Gross salaries, exclusive of fringe benefits.

Table V.58: Annual Salaries for Consulting (Social Sciences/ Management) (Egyptian pounds)

Grade	Years of Experience	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
		Minimum				Midpoint					Maximum
1	0 - <2	26,400	27,720	29,106	30,561	31,478	32,422	33,395	34,397	35,429	36,492
2	2 - <5	33,000	34,650	36,383	38,202	39,348	41,315	43,381	45,550	47,827	50,219
3	5 - <8	43,920	46,116	48,422	50,843	52,368	53,939	55,557	57,224	58,941	60,709
4	8 - <11	57,600	60,480	63,504	66,679	70,013	73,514	77,190	81,049	85,101	89,357
5	11 - <14	80,760	84,798	89,038	93,490	96,294	99,183	102,159	105,224	108,380	111,632
6	14 - <17	108,000	113,400	119,070	125,024	128,774	132,637	136,617	140,715	144,937	149,285
7	17 - <20	143,400	150,570	158,099	166,003	170,984	176,113	181,396	186,838	192,443	198,217
8	20 - <25	183,240	192,402	202,022	212,123	218,487	225,042	231,793	238,747	245,909	253,286
9	25+	250,440	265,466	281,394	298,278	307,226	316,443	325,936	335,715	345,786	356,160

* Based on multi-sector salary surveys in Egypt (2014-2016).
** Gross salaries, exclusive of fringe benefits.

Table V.59: Annual Salaries for Media and Culture (Egyptian pounds)

Grade	Years of Experience	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
		Minimum				Midpoint					Maximum
1	0 - <2	23,280	24,444	25,666	26,950	27,758	28,591	29,448	30,332	31,242	32,179
2	2 - <5	30,420	31,941	33,538	35,215	36,271	38,085	39,989	41,989	44,088	46,293
3	5 - <8	42,720	44,856	47,099	49,454	50,937	52,465	54,039	55,661	57,330	59,050
4	8 - <11	53,700	56,385	59,204	62,164	65,273	68,536	71,963	75,561	79,339	83,306
5	11 - <14	78,840	82,782	86,921	91,267	94,005	96,825	99,730	102,722	105,804	108,978
6	14 - <17	106,260	111,573	117,152	123,009	126,700	130,500	134,416	138,448	142,601	146,879
7	17 - <20	141,180	148,239	155,651	163,433	168,337	173,387	178,588	183,946	189,464	195,148
8	20 - <25	183,600	192,780	202,419	212,540	218,916	225,484	232,248	239,216	246,392	253,784
9	25+	237,060	251,284	266,361	282,342	290,813	299,537	308,523	317,779	327,312	337,131

* Based on multi-sector salary surveys in Egypt (2014-2016).
** Gross salaries, exclusive of fringe benefits.

Table V.60: Annual Salaries for Average of Consulting and Media/ Culture (Egyptian pounds)

Grade	Years of Experience	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8	Step 9	Step 10
		Minimum				Midpoint					Maximum
1	0 - <2	24,840	26,082	27,386	28,755	29,618	30,507	31,422	32,364	33,335	34,335
2	2 - <5	31,710	33,296	34,960	36,708	37,810	39,700	41,685	43,769	45,958	48,256
3	5 - <8	43,320	45,486	47,760	50,148	51,653	53,202	54,798	56,442	58,136	59,880
4	8 - <11	55,650	58,433	61,354	64,422	67,643	71,025	74,576	78,305	82,220	86,331
5	11 - <14	79,800	83,790	87,980	92,378	95,150	98,004	100,944	103,973	107,092	110,305
6	14 - <17	107,130	112,487	118,111	124,016	127,737	131,569	135,516	139,582	143,769	148,082
7	17 - <20	142,290	149,405	156,875	164,718	169,660	174,750	179,992	185,392	190,954	196,682
8	20 - <25	183,420	192,591	202,221	212,332	218,702	225,263	232,020	238,981	246,150	253,535
9	25+	243,750	258,375	273,878	290,310	299,019	307,990	317,230	326,747	336,549	346,646

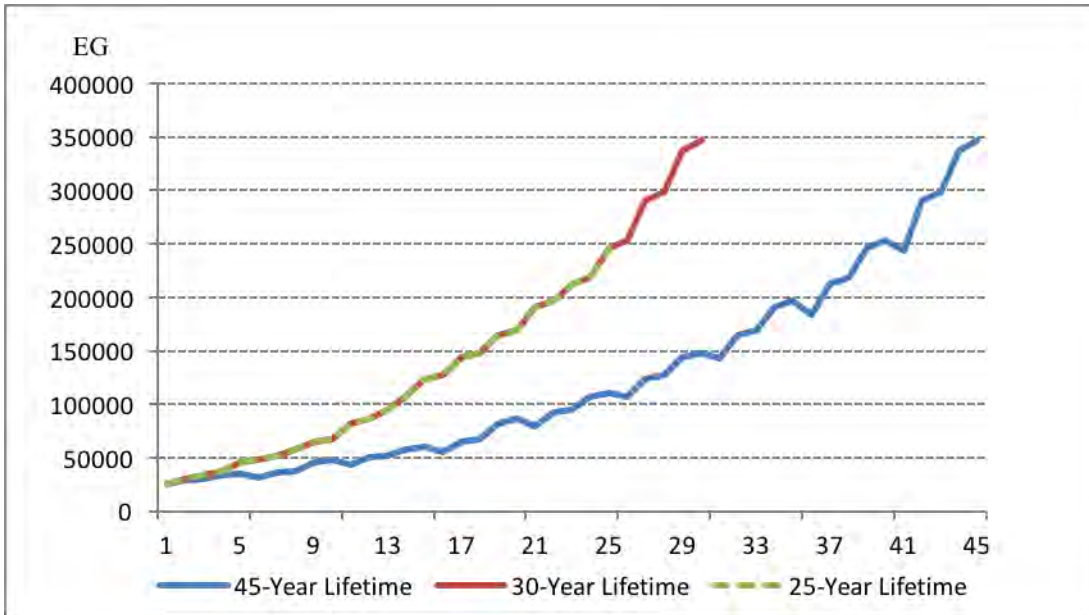* Based on multi-sector salary surveys in Egypt (2014-2016).

** Gross salaries, exclusive of fringe benefits.

Table V.61: National Currency per US Dollar, Period Average Rate (Annual)

Year	Exchange Rate US$/EGP
2007	5.64
2008	5.43
2009	5.54
2010	5.62
2011	5.93
2012	6.06
2013	6.87
2014	7.08
2015	7.69
2016	

Source: IMF Statistics

Graph V.1: Lifetime Earnings for Business Graduates

Graph V.2: Lifetime Earnings for Engineering and Information and Communication Technology Graduates

Graph V.3: Lifetime Earnings for Consulting and Media/Culture Graduates
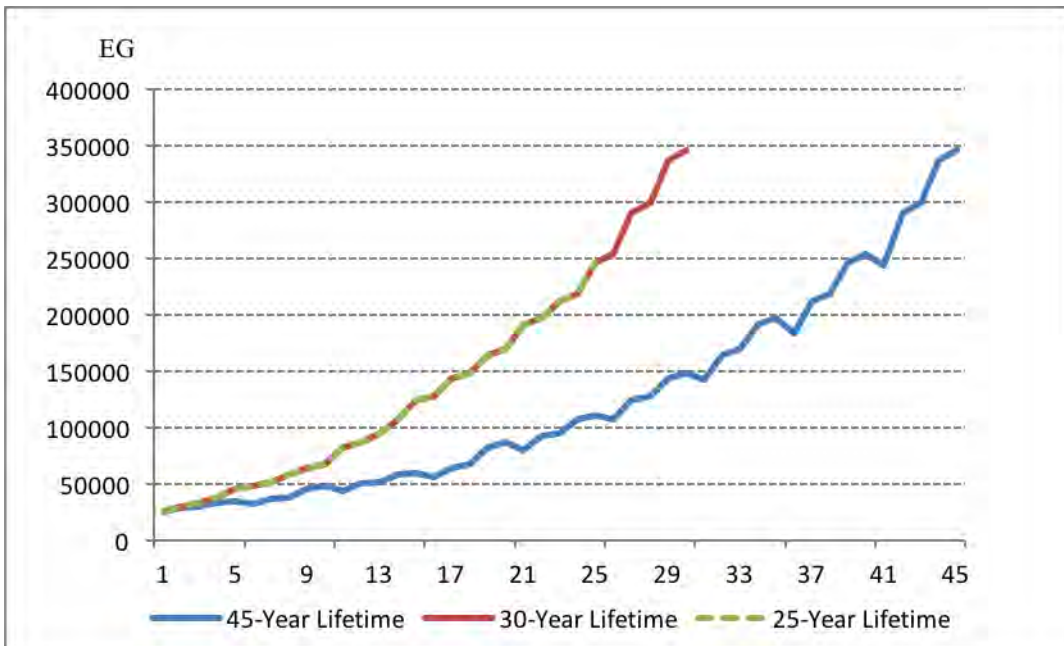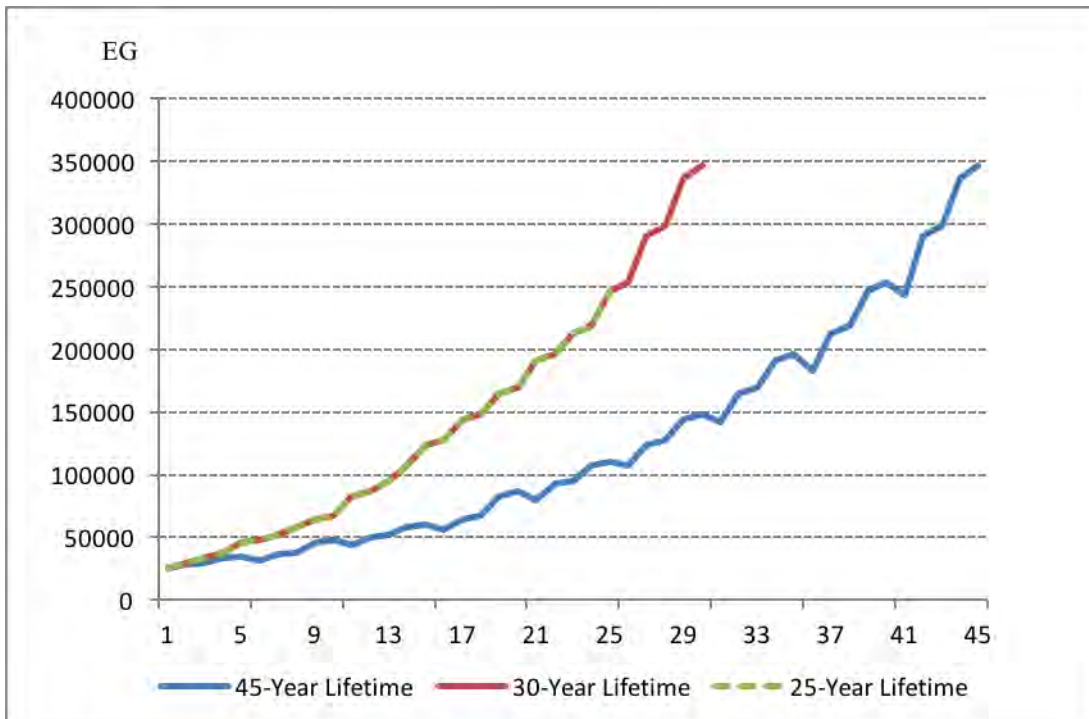
Source: Computed by the Researcher based upon the multi-sector salary surveys in Egypt.

ANNEX VI: DISCLOSURE OF ANY CONFLICTS OF INTEREST

The Disclosure of any Conflict of Interest can be found on file with the COR.

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