INTRODUCTION

This report will be forwarded to the U.S. Middle East Partnership Initiative (MEPI), U.S. Department of State and the U.S. Agency for International Development (USAID). The information in the progress report forms the basis of ALO’s dissemination of partnership results to donor organizations and is communicated throughout the higher education community.

**Partnership Title:** Diploma in Information Technology and Entrepreneurship: “DITE” Creating Synergies Between IT and Business

**Discipline:** IT/Business

**Lead U.S. Institution:** University of Connecticut

**Host Country:** Egypt

**Lead Host Country Partner Institution(s):** Ain Shams University, Cairo

**U.S. Partnership Director(s):** Dr. Boris Bravo-Ureta and Dr. Reda Ammar

**Host Country Partnership Director(s):** Dr. Mohamed Fahmy Tolba

**Partnership Web Site:** (In Progress. We expect it will up and running by mid December.)

**Period Covered by this Report:** October 1, 2003 – September 30, 2004.

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1 Revised September 30, 2004
INSTRUCTIONS

• As feasible, ensure that both the U.S. and overseas partners are involved in the writing of this report. It is the lead U.S. institution’s responsibility to submit this report by the due date to ALO.
• Please include as much information as necessary to fully answer the questions. The boxes below expand.
• Mail or e-mail the completed report to your primary contact at ALO by October 31, 2004.

PARTNERSHIP PROFILE

In approximately 250 words, please provide an executive summary of your higher education partnership, describing the educational development need the partnership addresses and the most noteworthy educational development outcomes, successes, and challenges to date. The information you provide will be particularly valuable for us in our dissemination efforts to MEPI, the Department of State, USAID, and the higher education community through print and on-line publications.

The Egyptian government has embarked upon an ambitious program to develop the information technology industry. Of particular interest is the role this industry could play in bringing economic growth to Egypt. To contribute to this endeavor, the University of Connecticut (UConn) and Ain Shams University (ASU) will develop a post-graduate Diploma in Information Technology and Entrepreneurship (DITE) that integrates information and communication technology with business administration. This two-year program, to be taught completely in English, will be offered in Egypt by ASU. An important motivation underlying this project is to build a bridge between the university and the business community.

As a cross-disciplinary graduate degree program, DITE will pose new challenges for ASU. Key questions to be examined during faculty and administrator exchange visits include how the development of a cross-disciplinary program will affect the resources of the participating departments; how academic standards will be defined and monitored; protocols for forging linkages with private sector partners; development of materials to market the program; publicity plan; development of a consortium among participating faculty; incubator functions and administration; incentive structure for participating faculty; advisory board (objectives, members and functions) and administration structure. An important consideration is to devise a financial plan that will assure the sustainability of the DITE program. Issues to be examined include the structure of fees and tuition that the program will charge, the optimal number of students needed to make the program cost effective, and the means for integrating private sector support into DITE’s operation. The ultimate “product” of this collaboration will be the Diploma in Information Technology and Entrepreneurship at ASU: a U.S.-style graduate program that draws its resources from several units within ASU and from the Egyptian private IT sector.
QUALITATIVE ANALYSIS

1. In **one or two sentences**, state the overall objective of this higher education partnership and its intended educational development results.

   The partners will create a Diploma in Information Technology and Entrepreneurship program (DITE) that integrates study of information and communication technology and business administration. The DITE program will prepare individuals to lead the information technology industry in Egypt, the development of which is a key goal of the Egyptian government.

2. What activities have the partner institutions undertaken during this reporting period to achieve the stated partnership objectives and educational development outcomes?

   1. Collection and review of relevant syllabi at UConn and ASU.
   2. Meetings at UConn to formalize the role of its Center for International Business Education and Research (CIBER) in the project.
   3. Meetings between UConn and ASU project members in Egypt to establish the guidelines for developing the Diploma program.
   4. Meeting at UConn with Dr. Raafat Elflouly (Director of the incubator program of the Egyptian Ministry of Communications and Information Technology) to discuss the Ministry’s involvement in the project.
   5. In January, Dr. Reda Ammar, UConn project co-director, met in Cairo with Dr. El-Desouki, the external reviewer of the project, to review the progress of the project to date.
   6. In May, the Faculty of Computer Science and Information Technology approved the Diploma on principle.
   7. In July, UConn team members visited Cairo. During this visit:
      a. The curriculum was further developed and the Course Syllabi were detailed.
      b. Ms. Aceto gave a talk to the ASU team about the mission of CIBER.
      c. The UConn team visited the Ministry of Communications and Information Technology.
      d. The UConn team met with the U.S. cultural Attaché at the Embassy in Cairo to review the progress of the project.
   8. In September, the ASU team visited UConn. During this visit:
      a. The curriculum and the Course Syllabi were finalized
      b. Considerable progress was made with the administrative structure.
      c. The admission requirements and procedures along with an annual calendar were completed.
      d. A solid financial plan was prepared after studying different models available in other competing institutes.
      e. The role and the composition of the advisory board were discussed, but this item still needs to be developed in more detail.
3. How have these activities strengthened (or will they strengthen) the capacity of the lead host
country higher education institution(s)?

The Diploma degree being created focuses on a critical weakness in the Egyptian university
offerings. Not only does this collaboration address this weakness by creating such a needed degree,
but also the mutual collaboration will give the ASU team the experience of creating dual discipline
degrees. This experience can be used in creating similar degrees in other fields and/or other
Egyptian universities.

4. How have these activities benefited the local host country community?

The main benefit of creating the DITE degree is to supply the Egyptian market with personnel
knowledgeable in both information and computer sciences and business. Another important benefit
of this project is to build a bridge between the university and the business community.

5. How have these activities benefited (or will they ultimately benefit) the lead U.S. institution(s) and
the local U.S. community?

These activities helped develop a memorandum to establish joint collaborative research programs
and recruiting new Egyptian graduate students to join UConn.

6. List other collaborating U.S. institutions (NGOs, community based organizations, government
agencies, the private sector, other higher education institutions, etc.) and describe the extent and
nature of their involvement in partnership activities during this reporting period.

University of Connecticut Center for International Business Education and Research (CIBER)
participated in the review of ASU syllabi. CIBER Associate Director, Ms. Kelly Aceto, traveled to
Cairo in July 2004. She gave a talk about the mission of CIBER and how UConn’s School of
Business interfaces with private businesses.

7. Has your partnership been involved in relationship building with private sector and civil society
partners (other higher education institutions, businesses, NGOs, community organizations, and/or
other public/private agencies) in the host country during this reporting period? YES

If YES, fully describe:

1. UConn project co-directors (Bravo-Ureta and Ammar) met with officials at the Egyptian
Ministry of Communications and Information Technology regarding the Ministry’s
involvement in the project.

2. Dr. Ammar and Dr. S. Rajasekaran (Computer Science at UConn) participated in a
workshop in Cairo sponsored by the Electronic Research Institute and National Center for
Remote Sensing and Space Science. They were funded, respectively, by the Egyptian
Government and UNESCO.

3. Reda Ammar and project reviewer Dr. Ayman El Desouky received a two year NSF-Egypt
Fund research grant, which started Sept 2004.

4. Three faculty members from UConn CSE department were invited as keynote speakers at
the second International Conference on Intelligent Computing and Information Systems
(ICICIS) that will be held in Cairo, March 2005.
8. How have these activities contributed to (or do you anticipate will contribute to) educational development in the host country?

Meetings at the Ministry of Telecommunications and Information Technology laid the foundation for that agency’s participation in the development and implementation of the Diploma program, particularly with regard to incubator activities. The MCIT agreed in principal to support the new diploma by providing internship opportunities to students. We still need to develop a formal agreement between the MCIT and the ASU in this regard. Dr. Raafat El-Fouly, the current executive director of the incubator project, visited UConn at the end of April and discussed the details of this possibility.

9. What have been your partnership’s greatest successes during this reporting period? Has your partnership also experienced any unanticipated successes?

If YES, please fully describe:
1. Developing detailed curriculum including course syllabi.
2. Developing a financial plan for the program.
3. Laying out the administration structure.
4. Specifying the admission requirements for the program.

10. Has your partnership encountered any challenges during this reporting period?

If YES, please fully describe:

The primary challenge came from learning that our original plan to develop a professional Master of Science degree in Information Technology and Entrepreneurship was unfeasible because of the administrative structure of graduate education in Egypt. Working with our partners at ASU, we quite readily developed an alternative model for a Diploma program, which will meet most of the objectives of the original degree program we planned, except that at this time it will not be possible to introduce a professional Masters program into the Egyptian higher education system.

Another major problem we have found is getting visas for our collaborators. Most of our collaborators are administrators and several of them have multi-year multi-entry B-1 visas. We have had a difficult time conveying the need for a J-1 visa to them and of course the time and work that is required for processing the Js is a significant challenge.

11. Has your partnership informed policy at the institutional, community or national levels in the host country through policy relevant research consultations, analysis, advice and/or direct assistance? (e.g., helped increase the enrollment or participation of students from economically disadvantaged and/or rural communities, introduced internships and opportunities, etc.)

If YES, fully describe:
We proposed a financial structure for DITE to offer some scholarships for those whom are qualified but can not pay the fees.
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<tr>
<th>12.</th>
<th>Has your partnership consulted or collaborated with U.S. Embassy/State Department staff in the host country?</th>
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<td></td>
<td>If YES, fully describe:</td>
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<td></td>
<td>During their visit to Cairo in July 2004, the UConn team met with Ms. Elizabeth Thornhill, the Cultural Attaché of the USA at the Embassy in Cairo, and three of her assistants. Dr. Ammar, the project Co-PI, provided a briefing to the attendees describing the history of the cooperation, the current status of the project, and the expected outcome. They found the project status very encouraging and they were very supportive.</td>
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<th>13.</th>
<th>How has your partnership strengthened academic programs at Arab universities?</th>
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<td></td>
<td>The expected outcome is a U.S. style diploma that improves the quality of the Egyptian education and is compatible with the manpower needs is advanced technology.</td>
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<th>14.</th>
<th>Has your partnership conducted collaborative research during this reporting period to address a development problem in the host country and/or improved the quality of independent student research?</th>
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<td>If YES, fully describe:</td>
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<td></td>
<td>Reda Ammar reviewed a Master thesis for ASU. In addition, one student who finished a channel program defended her dissertation last December (Dong Guk Shin from CSE was her advisor). This student was the first one at ASU to do research in Bioinformatics.</td>
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<th>15.</th>
<th>Has your partnership adapted curricula and/or improved the quality of faculty instruction and materials available at Arab universities during this reporting period?</th>
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<td>If YES, fully describe:</td>
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<td></td>
<td>Rather than adapting an existing curriculum, this partnership developed a detailed curriculum for the new diploma program that is being created. The program can be used as a model for any similar curriculum of other future programs in Egypt and neighboring countries.</td>
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<th>16.</th>
<th>Has your partnership undertaken activities to prepare individuals for productive employment in the host country’s workforce, including the private sector marketplace? If YES, are some of these efforts targeted to economically disadvantaged and/or rural communities?</th>
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<td></td>
<td>Yes; this is the main objective of the diploma when it is implemented.</td>
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<td></td>
<td>Please fully describe:</td>
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<td></td>
<td>The main benefit of creating the DITE degree is to supply the Egyptian market with personnel knowledgeable in both information and computer sciences and business. The program will give them the missing skills to establish their own business instead of depending on the Government to hire them. The program is open to all students from any where in the country.</td>
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</table>
17. Have there been any synergies, serendipities, or human interest stories for the partnership during this reporting period?

If YES, fully describe:

Dr. Ammar has been told that business graduates are very interested in studying computer science but could not find any program that fits their background. The new diploma will be an excellent opportunity for them. The job market in Egypt needs graduates with a combination of business and computer background. MCIT is spending a lot of effort and resources to educate students at different levels information technologies. This Ministry has established many centers at different locations to train employees as well. DITE will complement MCIT’s effort and fill a missing gap in their activities.

18. How has information about your partnership been disseminated during this reporting period? As appropriate, please provide ALO with samples of the following as attachments to this report:

- Articles published in the campus, local, national, or international media
- Features in any other media (radio, television, Internet, etc.)
- Research papers published or presented
- Video or DVD productions
- Photographs that may be used in future ALO publications (enclose prints or a CD-ROM with high resolution images)

The Egyptian newspaper, "Al-Ahram" published as news item the approval of DITE by Ain Shams University.
We are in the process of finalizing the web site for DITE.

19. Outline your partnership’s planned activities for the next six months, paying particular attention to achieving stated objectives:

1. To get approval for the diploma from the Egyptian Higher Education Council.
2. Publicize the Degree.
3. Finalize the Advisory Board structure and function.
4. Open cooperative arrangements with the Egyptian private sector.
### QUANTITATIVE ANALYSIS

<table>
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<th>Question</th>
<th>This period (Execution of Subagreement - September 30, 2004)</th>
<th>Since beginning of ALO funding</th>
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<tr>
<td>1. How many degree programs has your partnership created or expanded?</td>
<td>1 (under way)</td>
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Please indicate the type of degree(s) (e.g., AAs, BAs, MAs, MSs, PhDs), the field(s), and describe the program(s): Diploma in Information Technology and Entrepreneurship

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<th>2. Approximately how many host country nationals have been trained through partnership activities (e.g., degree programs teacher training programs, etc.)?</th>
<th>Females: Males: Total: 50 (expected)</th>
<th>Females: Males: Total:</th>
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<tr>
<td>Describe the nature, location, and duration of the training:</td>
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<th>3. How many cultural and professional exchanges between students, faculty, and administrators has the partnership supported for host country participants?</th>
<th>Faculty: 4 Undergraduate Students: Graduate Students: Administrators: Others: Total: 4</th>
<th>Faculty: 4 Undergraduate Students: Graduate Students: Administrators: Others: Total: 4</th>
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<tr>
<td>Describe the nature and duration of the exchange(s): A team of three Faculty members from ASU visited UConn in early Sept. 2004, and stayed for a week. The team had several meetings with the UConn team to finalize many issues regarding the degree being created. Dr. Raafat El-Fouly, the executive director of the incubator project, visited UConn at the end of April 2004.</td>
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<tr>
<th>4. How many cultural and professional exchanges between students, faculty, and administrators has the partnership supported for U.S. participants?</th>
<th>Faculty: 4 Administrators: 1 Others: Total: 5</th>
<th>Faculty: 4 Administrators: 1 Others: Total: 5</th>
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<tr>
<td>Describe the nature, location, and duration of the exchange(s): UConn co-PIs, Dr. Boris Bravo-Ureta and Dr. Reda Ammar, visited Cairo from March 6-12 to confer with the ASU project staff and plan future activities. Dr. S. Rajasekaran (Computer Science at UConn) also visited ASU during this period. Dr. Ammar, Dr. Hasanein &amp; Ms. Aceto visited Cairo last July. During their visit they met with the ASU team, Ministry of Communication and Information Technology Officials and the Cultural Attaché at U.S. Embassy in Cairo.</td>
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<p>| 5. How many internship opportunities has the partnership supported? | Faculty: Undergraduate Students: Graduate Students: Administrators: Others: Total: | Faculty: Undergraduate Students: Graduate Students: Administrators: Others: Total: |</p>
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<tr>
<th></th>
<th>This period (Execution of Subagreement - September 30, 2004)</th>
<th>Since beginning of ALO funding</th>
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<td>5.</td>
<td>Describe the nature, location, and duration of the internship(s):</td>
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<td>6.</td>
<td>How many times has your partnership consulted/collaborated with Ministry of Education officials or with subunits of the Ministry?</td>
<td>Planned to be done</td>
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<td>List and describe the nature of these consultations/collaborations:</td>
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<td>7.</td>
<td>How many times has your partnership participated in host country government-sponsored panels and/or any other initiatives to inform policy within the host country?</td>
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<td>List and describe the nature of participation in the panels and/or initiatives:</td>
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<td>8.</td>
<td>Has your partnership contributed or leveraged contributions other than cost-share, beyond what was originally proposed, to strengthen the capacity of Arab universities?</td>
<td>Estimated total dollar amount: $8000</td>
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<td>Estimated total dollar amount: $8000</td>
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<td>Resources were obtained from UConn’s CIBER, UNESCO and the Egyptian Government to fund three trips from Connecticut to Cairo.</td>
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If you have any additional information or comments about your partnership that you would like to share, please do so here: