Document of
The World Bank

Report No: ICR00001154

IMPLEMENTATION COMPLETION AND RESULTS REPORT
(IBRD-46580)

ON A

CREDIT

IN THE AMOUNT OF US$ 50 MILLION

TO THE

ARAB REPUBLIC OF EGYPT

FOR A

HIGHER EDUCATION ENHANCEMENT PROJECT

June 5, 2009

Human Development
Middle East and North Africa Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective: 5/13/2009)

Currency Unit = Egyptian Pounds (EGP)
1.00 = US$ 0.1779
US$ 1.00 = 5.6185 EGP

FISCAL YEAR
January 1 - December 31

ABBREVIATIONS AND ACRONYMS

BOT	Board of Trustees
CAS	Country Assistance Strategy
CIQAP	Continuous Improvement and Qualifying for Accreditation Project
CQS	Consultant Qualification Selection
EDF	Education Development Fund
ERR	Economic Rate of Return
ETCP	Egyptian Technical Colleges Project
ETEP	Engineering and Technical Education Project
FLDP	Faculty-Leadership Development Project
FRR	Financial Rate of Return
GOE	Government of Egypt
HEEP	Higher Education Enhancement Project
HEEPF	Higher Education Enhancement Project Fund
HERS	Higher Education Reform Strategy
IBCT	International Board of Certified Trainers
IBRD	International Bank for Reconstruction and Development
ICR	Implementation Completion and Results Report
ICTP	Information & Communication Technology Project
IPR	Independent Procurement Review
IT	Information Technology
ITDL	Technology and Distributed Learning
LA	Loan Agreement
M&E	Monitoring and Evaluation
MIS	Management Information System
MOHE	Minister of Higher Education
MTI	Middle Technical Institutes
NAQAA	National Authority for Quality Assurance and Accreditation
NAQAAE	National Authority for Quality Assurance and Accreditation for Education
NCFLD	National Center for Faculty and Leadership Development
NQAC	National Quality Assurance Council
OECD	Organization for Economic Cooperation and Development
PAD	Project Appraisal Document
PCD	Project Concept Document

ABBREVIATIONS AND ACRONYMS

(Continued)

PDO	Project Development Objectives
PMU	Project Managing Unit
PPF	Project Preparation Facility
QAAP	Quality Assurance and Accreditation Project
QAG	Quality Assessment Group
QCBS	Quality and Cost Based Selection
QER	Quality Enhancement Review
ISR	Implementation Status and Results
SCTC	Supreme Council of Technical Colleges
SCU	Supreme Council of Universities
SSS	Single Source Selection
TA	Technical Assistance
TCs	Technical Colleges
USAID	United States Agency for International Development

EGYPT, ARAB REPUBLIC OF
Higher Education Enhancement Project

Contents

A. Basic Information

Country:	Egypt, Arab Republic of	Project Name:	Higher Education Enhancement Project
Project ID:	P056236	L/C/TF Number(s):	IBRD-46580
ICR Date:	06/05/2009	ICR Type:	Core ICR
Lending Instrument:	SIL	Borrower:	GOVERNMENT
Original Total Commitment:	USD 50.0M	Disbursed Amount:	USD 50.0M

Environmental Category: C

Implementing Agencies:
 Ministry of Higher Education

Cofinanciers and Other External Partners:

B. Key Dates

Process	Date	Process	Original Date	Revised / Actual Date(s)
Concept Review:	05/02/2000	Effectiveness:		07/29/2002
Appraisal:	12/17/2001	Restructuring(s):		
Approval:	04/16/2002	Mid-term Review:		06/18/2005
		Closing:	12/31/2007	12/31/2008

C. Ratings Summary

C.1 Performance Rating by ICR

Outcomes:	Satisfactory
Risk to Development Outcome:	Moderate
Bank Performance:	Moderately Satisfactory
Borrower Performance:	Satisfactory

C.2 Detailed Ratings of Bank and Borrower Performance (by ICR)

Bank	Ratings	Borrower	Ratings
Quality at Entry:	Moderately Satisfactory	Government:	Satisfactory
Quality of Supervision:	Moderately Satisfactory	Implementing Agency/Agencies:	Satisfactory
Overall Bank Performance:	Moderately Satisfactory	**Overall Borrower Performance:**	Satisfactory

C.3 Quality at Entry and Implementation Performance Indicators

Implementation Performance	Indicators	QAG Assessments (if any)	Rating
Potential Problem Project	Yes	Quality at Entry	None

at any time (Yes/No):		(QEA):	
Problem Project at any time (Yes/No):	Yes	Quality of Supervision (QSA):	None
DO rating before Closing/Inactive status:	Satisfactory		

D. Sector and Theme Codes

	Original	Actual
Sector Code (as % of total Bank financing)		
Central government administration	13	
Law and justice	20	
Tertiary education	49	
Vocational training	18	
Theme Code (as % of total Bank financing)		
Education for the knowledge economy	50	
Law reform	25	
Other financial and private sector development	25	

E. Bank Staff

Positions	At ICR	At Approval
Vice President:	Daniela Gressani	Jean-Louis Sarbib
Country Director:	Emmanuel Mbi	Mahmood A. Ayub
Sector Manager:	Mourad Ezzine	Jacques F. Baudouy
Project Team Leader:	Ernesto P. Cuadra	Mae Chu Chang
ICR Team Leader:	Ernesto P. Cuadra	
ICR Primary Author:	Kamel Braham	

F. Results Framework Analysis

Project Development Objectives (from Project Appraisal Document)
To create conditions fundamental to improved system quality and efficiency of the higher education system through legislative reform, institutional restructuring, and establishment of independent quality assurance mechanisms and monitoring systems.

Revised Project Development Objectives (as approved by original approving authority)

 (a) PDO Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Key legislative reforms enacted for the universities to become effective self-governing institutions			
Value quantitative or Qualitative)	N/A	Legislative reforms enacted		Draft law prepared by MOHE and submitted to the parliament.
Date achieved	07/29/2002	12/31/2008		12/31/2008
Comments (incl. % achievement)	Despite the MOHE commitment to the reform, the several drafts prepared faced resistance in the Parliament. Meanwhile, the MOHE passed a reform to link academic staff pay to performance			
Indicator 2 :	Legislative reform enacted to establish independent quality assurance mechanisms			
Value quantitative or Qualitative)	N/A	Legislative reform enacted		National Authority for Quality Assurance and Accreditation of Education (NAQAAE) established by Presidential Decree #82/2006
Date achieved	07/29/2002	12/31/2008		12/31/2006
Comments (incl. % achievement)				
Indicator 3 :	Legislative framework in place for the Technical Colleges to become self-governing institutions with linkages to the private sector			
Value quantitative or Qualitative)	N/A	Legislative framework for the Technical Colleges		Decrees for clustering the 45 MTIs into 8 TCs with BOTs including representatives of private sector
Date achieved	07/29/2002	12/31/2008		06/30/2003
Comments (incl. % achievement)				
Indicator 4 :	Consolidation of 47 Middle Technical Institutes (MTIs) into 8 Technical Colleges (TCs).			
Value quantitative or	N/A	45 MTIs consolidated into 8		45 MTIs consolidated into 8

Qualitative)		TCs		TCs. Directors of TCs appointed and bylaws adopted by Ministerial Decree
Date achieved	07/29/2002	12/31/2008		12/30/2007
Comments (incl. % achievement)				

Indicator 5 :	Management Information System (MIS) developed and operational for the post-secondary sector.			
Value quantitative or Qualitative)	No MIS	MIS developed and operational		Partially achieved
Date achieved	07/29/2002	12/31/2008		12/31/2008
Comments (incl. % achievement)	MIS centers established in 14 universities; MIS applications for student, graduate studies and staff administration deployed in 175 faculties			

(b) Intermediate Outcome Indicator(s)

Indicator	Baseline Value	Original Target Values (from approval documents)	Formally Revised Target Values	Actual Value Achieved at Completion or Target Years
Indicator 1 :	Legislation in place for greater fiscal & management autonomy			
Value (quantitative or Qualitative)	N/A	Legislation in place		Not achieved
Date achieved	07/29/2002	12/31/2008		
Comments (incl. % achievement)	Legislation drafted, but not adopted by the Parliament			
Indicator 2 :	Supreme Council of Universities (SCU) and Supreme Council of Technical Colleges (SCTC) in place & overseeing sector and institutional performance			
Value (quantitative or Qualitative)	N/A	SCTC established and functioning		SCTC established and functioning
Date achieved	07/29/2002	12/31/2008		12/31/2005
Comments (incl. % achievement)				
Indicator 3 :	MIS operating & guiding sector and institutional planning/management/budget			
Value (quantitative or Qualitative)	No MIS	MIS in place & used for management, planning and budgeting		Partially achieved
Date achieved	07/29/2002	12/31/2008		12/31/2008
Comments	MIS at sector level developed for SCU but not fully operational. MIS deployed in 14			

(incl. % achievement)	universities. No systematic use for planning and budgeting			
Indicator 4 :	SCU & SCTC publish annual reports on performance & quality using MIS			
Value (quantitative or Qualitative)	N/A	MIS used for reports on performance and quality		Not achieved
Date achieved				
Comments (incl. % achievement)	The MIS is not fully operational yet. However, the Strategic Planning Unit established within the SCU is doing some analytical work.			
Indicator 5 :	Competitive grant fund being utilized in 50% of universities			
Value (quantitative or Qualitative)	No Fund	HEEPF management in 50% of universities.		HEEPF implemented in all 17 public universities (100%)
Date achieved				12/31/2008
Comments (incl. % achievement)				
Indicator 6 :	All faculty & student have access to IT & new teaching methodologies			
Value (quantitative or Qualitative)	Not available	IT access provided in all universities		Achieved to a certain extent
Date achieved				12/31/2008
Comments (incl. % achievement)	All 17 universities connected to the unified fiber optic information network; establishment of e-earning centers in universities and training of staff;			
Indicator 7 :	2/3 of public university students utilizing internet facilities			
Value (quantitative or Qualitative)	Not available	67% of students of public universities utilizing internet		Over 60% of computers in the universities connected to the internet
Date achieved				12/31/2008
Comments (incl. % achievement)				
Indicator 8 :	5,000 instructors trained in integration of IT into teaching & into learning assessment and evaluation			
Value (quantitative or Qualitative)	N/A	5,000 instructors trained in integration of IT into teaching and into learning assessment and evaluation.		22,000 faculty and administrative staff received IT training at several levels; 600 academic staff trained on e-content
Date achieved				12/31/2008
Comments (incl. %				

| achievement)				
Indicator 9 :	Restructuring MTIs into autonomous TCs linked to the industry			
Value (quantitative or Qualitative)	N/A	Restructuring MTIs into autonomous TCs linked to industry		45 MTIs consolidated into 8 TCs. BOTs including representatives of private sector established. 8 TCs are operational.
Date achieved				12/31/2007
Comments (incl. % achievement)				
Indicator 10 :	Redesigned curriculum, reflecting private sector input, introduced in TCs, benchmarked against international standards;			
Value (quantitative or Qualitative)	Curricula below international standards	New benchmarked curricula developed with participation from private sector		26 academic programs reviewed and 6 new programs designed by expert committees
Date achieved				12/31/2008
Comments (incl. % achievement)	Although private sector representatives were not systematically involved in programs revision, two new programs in "Fast Food" and in "Refrigeration" were developed in collaboration with private companies			
Indicator 11 :	TCs generating 10% private revenues in public budget			
Value (quantitative or Qualitative)	0% private revenue generation	10% private revenue		No private revenue generation
Date achieved				
Comments (incl. % achievement)	The current legislation does not allow TCs to develop income generation activities			
Indicator 12 :	Enrolment in TCs raises by 5%			
Value (quantitative or Qualitative)	Number of students enrolled in MTIs: 131,173	Number of students enrolled in TCs: 138,000		Number of students enrolled in MTIs: 144,480
Date achieved				06/30/2008
Comments (incl. % achievement)				

G. Ratings of Project Performance in ISRs

No.	Date ISR Archived	DO	IP	Actual Disbursements (USD millions)
1	06/27/2002	Satisfactory	Satisfactory	0.00
2	12/27/2002	Satisfactory	Satisfactory	0.50
3	04/18/2003	Satisfactory	Unsatisfactory	2.00
4	06/13/2003	Satisfactory	Satisfactory	2.00
5	12/15/2003	Satisfactory	Satisfactory	2.03
6	05/13/2004	Satisfactory	Satisfactory	2.09
7	12/16/2004	Satisfactory	Satisfactory	4.72
8	04/25/2005	Satisfactory	Satisfactory	7.19
9	07/26/2005	Satisfactory	Moderately Satisfactory	13.16
10	01/26/2006	Satisfactory	Satisfactory	18.74
11	07/31/2006	Satisfactory	Satisfactory	23.69
12	12/22/2006	Satisfactory	Satisfactory	27.92
13	06/28/2007	Satisfactory	Satisfactory	34.73
14	11/21/2007	Satisfactory	Satisfactory	40.99
15	05/17/2008	Satisfactory	Satisfactory	46.80

H. Restructuring (if any)
Not Applicable

I. Disbursement Profile
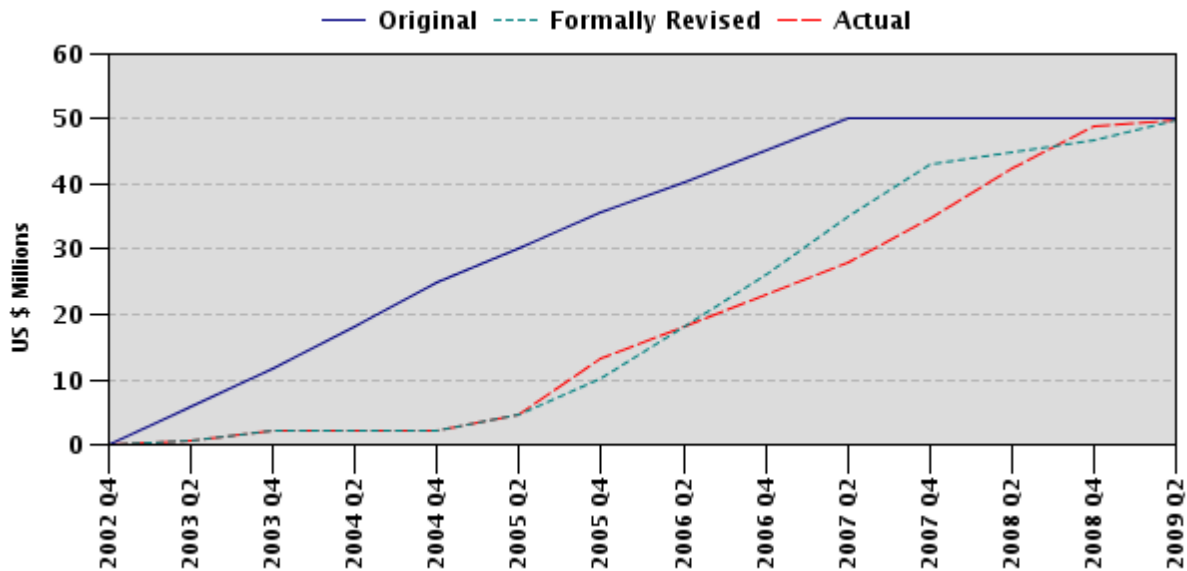
1. Project Context, Development Objectives and Design
(this section is descriptive, taken from other documents, e.g., PAD/ISR, not evaluative)

1.1 Context at Appraisal
(brief summary of country and sector background, rationale for Bank assistance)

The 2001 CAS for Egypt recognized that the expansion of access at lower levels combined with a higher growth rate in the 18-24 years age cohort, has placed severe pressure on the higher education system, resulting in a decline in the per student expenditure by 40 percent in real terms in five years (1993-98) and, subsequently, in a drop in quality. The CAS also mentioned the need for reforms to facilitate greater involvement of the private sector, more use of information technology and greater cost-efficiency. It identifies the development of higher education and skills development, as being critical to ensuring adequate and balanced social development in Egypt.

The Government of Egypt (GOE) prepared a Higher Education Reform Strategy (HERS) discussed during a National Conference on Higher Education held in February 2000. The conference declaration, which identified 25 reform initiatives, was endorsed by the President and the Prime Minister. The key issues addressed by the HERS were:

Centralized governance and system inefficiencies. The overly centralized higher education system was governed by an outdated legislative framework and suffering from excessive control. Budget allocations were not informed by sector policy or need-based criteria. Employment policies, following general public sector rules and practices, were producing overstaffing and low productivity.

Low quality of university education. Despite shortage of data to assess the quality of university education, there was a general acknowledgement that university graduates skills were below what is needed to improve Egypt's economic competitiveness, and that employers prefer foreign skilled graduates. University education was heavily lecture/textbook reliant with memorization-based assessment systems, no emphasis on creative thinking, problem solving and collaborative work, and insufficient use of IT.

Poor relevance of mid-level technical education. The training offered by the Middle Technical Institutes (MTI) network was of poor quality and had little relevance to the needs of the industry. Only 50% of the MTI students complete their degree, and about 60% of graduates remain unemployed two years after graduation. The system suffered from outdated curricula, inadequately qualified instructors and poorly equipped laboratories.

The GOE's reform agenda to address these key issues was shaped into 25 specific initiatives to be implemented over a fifteen-year period. The Government sought donor financing to fill the funding gap. The Bank committed to support the reform through: (i) a US$13 million IDA credit to support quality improvement in the faculties of Education; and (ii) a US$50 million IBRD loan complemented by a US$10 million funding from the GOE to finance 11 out of the 25 initiatives under the HERS. The initiatives to be supported by the IBRD under the Higher Education Enhancement Project (HEEP) were selected based on the priority given to improve: (i) system governance and efficiency; and (ii) quality and relevance of higher education.

1.2 Original Project Development Objectives (PDO) and Key Indicators (as approved)

The Project Development Objective, as described in the PAD, was to *create the conditions fundamental to improving the quality and efficiency of the higher education system in Egypt through legislative reform, institutional restructuring, and establishment of independent quality assurance mechanisms and monitoring systems*. The wording used in the Loan Agreement (LA) was similar but not exactly the same as the word "*fundamental*" was replaced by "*conducive*". The key indicators retained to monitor and assess project outcomes were as follows:

* Key legislative reforms enacted for the universities to become effective self-governing institutions;
* Legislative reform enacted to establish independent quality assurance mechanisms;
* Legislative framework in place for the Technical Colleges to become self-governing institutions with linkages to the private sector;
* Consolidation of 47 Middle Technical Institutes into 8 Technical Colleges accomplished;
* Management Information System developed and operational for the post-secondary sector.

1.3 Revised PDO (as approved by original approving authority) and Key Indicators, and reasons/justification

The Project Development Objectives were not revised.

1.4 Main Beneficiaries
(original and revised, briefly describe the "primary target group" identified in the PAD and as captured in the PDO, as well as any other individuals and organizations expected to benefit from the project)

The project expected outcome was to facilitate quality and efficiency improvements in higher education. The primary target group expected to benefit from project outcomes were higher education students who would receive a better quality education and be better prepared for a rapidly changing economy. Improvements in the quality and relevance of higher education, and expanded access to IT and related skills and knowledge, were expected to ensure that graduates gain higher-levels skills, better matched to market needs. Other beneficiaries mentioned in the PAD were: (i) public and private sector employers who would recruit better-trained workers from the local market, and invest less in initial on-the-job training; and (ii) faculty and instructors in higher education institutions who would have access to additional resources and professional development opportunities.

1.5 Original Components (as approved)

Component 1: **Improve efficiency through the reform of governance and management**

This Component was to support five groups of activities aimed at improving system governance, management and efficiency:

(i) Reform legislation governing higher education: TA to support legislative reform to allow universities more autonomy and the development of legislative framework for the new Technical Colleges (TCs) which will replace the MTIs.

(ii) Rationalize funding allocation mechanisms: TA and training to support the move to a more rationale resource allocation mechanism favoring a transparent, equitable, and formula-driven approach. Planned activities include: (a) a social assessment of parent and student perceptions of cost recovery in

higher education; (b) international and local technical assistance to help design and implement a new system for allocating sector resources; (c) stakeholder consultation and consensus building during development of the funding formula; and (d) related staff training and equipment.

(iii) Establish a National Quality Assurance Council (NQAC): TA to guide the establishment of an autonomous NQAC. The NQAC was expected to establish performance standards and a benchmarking system for both universities and TCs, and ultimately, to work towards development of an accreditation system for higher education institutions.

(iv) Build capacity, Develop MIS system, and train management: TA, training and equipment for the establishment of a Management Information System (MIS) and building institutional capacity to support changes in the legislative framework and in funding allocation mechanisms. The project was specifically expected to: (a) support the design and implementation of the MIS in universities; and (b) develop capacity of governing board members and institutional managers in basic planning, management and budgeting.

(v) Establish a Higher Education Enhancement Project Fund (HEEPF): The HEEPF was expected to fund competitive proposals submitted by institutions (universities and TCs) through 3 windows: (a) an academic window to support teaching and learning improvements in academic departments through program and course innovations; (b) an entrepreneurial window to support collaboration between universities, TCs and the private sector; and (c) a management window which will support projects intended to enhance management and administration in the higher education sector.

Component 2: Improve the quality and relevance of university education

This component, supporting efforts to improve the quality and relevance of university education through facilitating the use of new learning technologies and human resource development, included two activities.

(i) Establishing an integrated computer and network infrastructure: Hardware, software, connectivity and training to support the establishment of a high-speed university infrastructure. The activity was also expected to finance TA to support the establishment of two pilot Instructional Technology and Distributed Learning (ITDL) centers in Cairo University and Suez Canal University.

(ii) Training for faculty and staff: In-service training for about 5,000 university faculty and instructors to develop their competencies in the use and application of computer technology, particularly in terms of integrating IT into their teaching methodologies. Training will consist of instruction in computer software operation, Internet operation, distributed learning methods, instructional design processes, course administration, and learning assessment and evaluation.

(iii) Installation and operationalization of an inter-university library system: This sub-component was in the Loan Agreement, but not in the PAD. There was no mention in the agreed minutes of negotiation of this change.

Component 3: Improve quality and relevance of mid-level technical education

The objective of this component was to support the restructuring of mid-level technical education for improved quality and relevance. Activities financed through this component include:

(i) Consolidation of the MTIs into TCs: Civil work, equipment, TA and training to support the consolidation of the 47 MTIs into 8 TCs. The project was expected to finance refurbishment of old facilities to acceptable international standards; generic equipment for basic laboratories and workshops;

computers and associated equipment; networked library; and management and IT training for TC governors, administrators and instructors.

(ii) Curriculum design and instructor training: TA and training to support the development of a new, more relevant curriculum, to be prepared in consultation with employers. This component was also expected to finance the establishment of new units in the TCs to provide customized in-service employee training programs for industry on a cost-recovery basis.

(iii) Strengthened academic administration and management: Training to TC key administrators on competency-based student evaluation and records system and on the utilization of IT and MIS systems.

1.6 Revised Components

Although the original components were not formally revised, since the project was not restructured, project components and activities were significantly changed from what was originally stated in the PAD. (see 2.2)

1.7 Other significant changes
(in design, scope and scale, implementation arrangements and schedule, and funding allocations)

The closing date of the project was extended by one year to December 31, 2008, to complete project ongoing activities. Loan resources were reallocated in December 2005 to adjust to actual component costs.

Reallocation of funds and actual loan disbursements by category ($US million)

Category	Original Programming	Reprogramming	Disbursed
Civil works	4.5	2.0	1.7
Goods	11.0	18.5	15.2
Consultant services and training	16.0	14.5	17.6
HEEPF Grants	12.0	13.0	13.3
Incremental Operating costs	1.5	1.5	1.7
Front-end fee	0.5	0.5	0.5
Unallocated	4.5	-	-
Total	50.0	50.0	50.0

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design and Quality at Entry
(including whether lessons of earlier operations were taken into account, risks and their mitigations identified, and adequacy of participatory processes, as applicable)

- Consultation - A long process of consultations preceded project preparation. The Bank contributed to this process by providing technical assistance and sharing international experience.

In addition, The Minister of Higher Education established a Higher Education Enhancement Commission in 1997 which involved a wide range of stakeholders in the preparation of the reform adopted by the 2000 National Conference on Higher Education Reform.

- Use of lessons learned - Project preparation benefited from the experience and some of the lessons learned from similar projects in Tunisia, Indonesia, Brazil and Argentina. This was reflected in: (i) the decentralized approach to build up higher education institutions' ownership and support to the reform; (ii) the involvement of industry representatives in the TCs through the Board of Trustees (BOT); (iii) the stress on strengthening of general skills in the TCs curricula reform; and (iv) the HEEPF design which was built on the successful model used in the Engineering and Technical Education Project (ETEP, Ln.3137-EGT).

- Use of a Quality Enhancement Review (QER) - Project team also requested a pre-PCD review to be conducted by QAG, and has followed some of the QAG recommendations by putting more emphasis on institutional and system reforms as the first Concept Note was mainly focused on quality aspects.

- Soundness of background analysis - Sector analysis is presented in the PAD in very broad terms, with little evidence and no specifics regarding the main issues of centralized governance/inefficiencies, low quality of university education and poor quality and relevance of mid-level technical education. Although, there is a consensus on these issues, the lack of specifics made it difficult to identify the bottlenecks and to target project measures and activities. Issues critical to the institutional reforms supported by the project, such as student admission policy, higher education financing and the role of private sector, were not mentioned in the PAD. As a result, project design suffered from a lack of clarity and consistency.

- Project Development Objectives - The Project Development Objective was not clearly stated in the PAD and Loan Agreement. Although the project obviously aimed at addressing quality and efficiency issues, the stated objective of creating *conditions fundamental to improving the quality and efficiency* was insufficiently clear as these conditions were not defined. The wording used in the LA was probably more realistic and will be used in this ICR to evaluate project performance.

- Project Results Framework- The results framework lacked clarity and consistency: (i) There was no reference to sector funding and resource allocation system in the set of outcome indicators (see 1.2. above) despite the fact that there were planned project activities related to this aspect; (ii) There were project outputs such as the competitive grant mechanism to be established through HEEPF that were not reflected in project outcomes; (iii) there were subcomponents such as subcomponent 1.2 (Rationalizing funding allocation mechanisms) for which there were no related output measurements.

- Design of the project components - At the component level, two major institutional reforms expected to be supported by the project (institutional autonomy and funding mechanisms) were supposed to be supported through TA but no specific approach to such critical and sensitive issues was spelled out in the project. Neither were these expected reforms clearly articulated in other project components. Questions such as how would the support to TCs translate into resource allocation, or how the competitive funding mechanism introduced through HEEPF will be sustained through the new funding scheme were not addressed.

- Readiness for implementation - The implementation arrangements were not well developed in the PAD. The main assumption made was that the PMU experience with ETEP and its knowledge of Bank procedures would ensure smooth implementation of the project. The scope and complexity of HEEP would have required more detailed arrangements within the sector and the strengthening of the PMU. The delay in implementation experienced during the early years of the project was to a large extent due to the time taken by the MOHE and the PMU to fill the gaps in project activities planning. It actually took several months for the MOHE to appoint five directors who had to plan for and then manage sub-component activities.

- Consideration of alternative designs - A number of alternatives were considered during project design. One was considering limiting project intervention to universities, and was rightly rejected. Another alternative considering limiting project intervention to fewer reform initiatives would have deserved a more in-depth exploration. In particular, the option of putting a stronger focus on middle level technical education was worth considering given the potential this sub-sector has to improve young Egyptians employability and to compete with traditional, more costly university programs. Additional resources would have been used to upgrade workshops and labs in more TCs (only 3 pilots out of 8 were covered by the project) and to deliver additional- and much needed training to TCs instructors.
- Assessment of risks - Although most critical risks were identified, the rating was not fully accurate. In particular, the opposition to legislative reforms for more autonomy and criteria-based resource allocation was underestimated (M) as experienced during implementation. On the other hand, the risk of institutions not buying into the quality assurance system was highlighted while the real risk was that the resources for them to upgrade to the required standards would not be available.

2.2 Implementation
(including any project changes/restructuring, mid-term review, Project at Risk status, and actions taken, as applicable)

The project has experienced substantial delays in its early implementation phases. Part of the delay was due to the lack of clarity and complexity in project design, and to insufficient implementation arrangements. The delay was also due to the time taken by the Government to appoint component directors and to release its contribution. Some components (ICTP, FLDP, ETCP) suffered additional delays because of change of director. By the mid-term review more than half of loan funds were committed, and about one-third were disbursed. While recognizing that considerable progress was made in various sub-components of the project, the mid-term review mission acknowledged the delays and challenges facing the reform of the higher education legal framework.

The MOHE actually re-organized the project, from the start, into five sub-projects, each of them managed by a project director within the PMU:

- Quality Assurance and Accreditation Project (QAAP)
- Higher Education Enhancement Project Fund (HEEPF)
- Information & Communication Technology Project (ICTP)
- Faculty-Leadership Development Project (FLDP)
- Egyptian Technical Colleges Project (ETCP)

This re-organization, which was not properly documented in project AMs and ISRs, did de-facto overshadow the two sub-components related to governance reform and to funding allocation mechanism. It also introduced substantial changes to two other sub-components:
  (i)   Quality Assurance: QAAP went beyond the establishment of the NQAC and the development of an accreditation system. The sub-project actually supported a process by which faculties and schools were engaged in an internal evaluation exercise, visits by peer reviewers and preparation of strategic plans.
  (ii) Faculty Development: The scope of the sub-project went beyond its original target of training faculty and staff on IT and instructional technologies to cover a broader of skills related to professional development.

Activities within sub-components have also been re-organized. The ICTP sub-project inherited from the MIS and the IT training for both faculty and staff. Although these substantial changes were justified and demonstrated the capacity of the PMU to make the changes necessary to improve project performance and achieve results, they were not clearly documented and explained by the project team. Moreover, a restructuring of the project could have been considered in order to correct the deficiencies in project design by refining the PDO, adjusting project components and improving performance indicators.

2.3 Monitoring and Evaluation (M&E) Design, Implementation and Utilization

M&E design: The PMU was expected to develop and maintain a project information system, produce quarterly FMRs and annual progress reports, and contract independent technical auditors to undertake technical review of each component. The set of performance indicators to measure progress against project objectives included five outcome indicators and 12 output indicators (see Annex 2). Indicators used to measure outcomes were actually related to either outputs (consolidation of MITs, implementation of MIS) or processes (legislative reforms). Output indicators identified in the PAD were often vague and lacking baseline and/or target values. One example is "All faculty & student have access to IT & new teaching methodologies" where "access" is not defined and no baseline value is provided. Better indicators could have been: "ratio students/computer"; "number or percentage of students taking IT classes" or "number of e-courses offered".

M&E implementation: Although the PMU has made substantial effort to document HEEP activities and achievements through quarterly progress reports, several publications and its website, the lack of robust monitoring mechanisms has been one weakness of the project. From 2005 to 2007, the project team had repeatedly stressed the need for an adequate M&E system to track and report progress made towards the developmental objectives and the problems facing implementation, and recommended the appointment of an M&E specialist. The M&E rating was downgraded to MS in April 2005 and to MU in July 2006, before being upgraded to MS upon the appointment of an M&E specialist within the PMU. The independent technical audits did not take place. However, the PMU initiated an impact assessment study, and the first results were shared with the Bank.

M&E utilization: Despite the lack of a well documented M&E system at the project level, sub-projects such as HEEPF and FLDP had built-in monitoring systems that allowed them to take some corrective actions such as adjusting geographical and sectoral coverage or training content. The impact evaluation study was used as an input to the ICR and is expected to inform the next phase of HEEP.

2.4 Safeguard and Fiduciary Compliance
(focusing on issues and their resolution, as applicable)

Procurement: The PMU has managed an important number of procurement tasks, handling the procurement of goods and selection of consultants, and providing support to Implementation Teams at the university level. The PMU comprised a Procurement Supervisor and assistant staff trained in Bank financed procurement. The project was subject to an Independent Procurement Review (IPR) in 2006 and in 2008. Both reviews questioned the practice of selection and employment of faculty members as individual consultants under the Disbursement Category "Consultants Services and Training" without following the procedures specified in Schedule 4 of the Loan Agreement for a total amount of about US$ 12.3 million. Two points were made by the IPRs: (i) the Single Source Selection (SSS) method used would have required a prior waiver from the Bank; and (ii) the hiring of university professors– who are MOHE employees on a systematic basis (HEEPF, QAAP, FLDP) should have been agreed during the project preparation and disclosed in the project documents. The PMU response, supported by the project team, was that the nature of the project, especially HEEPF and QAAP, requires contracting a large number of university staff involved in sub-projects implementation, and that the selection of teams is

done by peers through procedures approved by the SCU. The practice of paying university professors to manage or participate to QAAP or HEEPF projects in their own universities can be questioned as this is supposed to be part of their regular duties, and should have been discussed during project preparation.

The PMU awarded a US$450,000 contract for IBCT (FLDP) using CQS rather than QCBS, and without prior Bank no objection. The no objection was granted retroactively by the TTL after consultation with the Procurement Department, driven by concerns about potential downside impact on project implementation and long term sustainability.

Financial management: The HEEP project was effective before the implementation of the Country Financing Parameters (CFP). The Bank's disbursement rules did not permit the financing of certain types of expenditures such as taxes and duties later allowed under the CFP. The project was confronted with ineligible expenditures related to the payment of taxes under the HEEPF as university teams were not aware of project requirements. The PMU collaborated with the project team to resolve the issue by reconciling the amount estimated at US$ 371,000 with other project proceeds funded through the GOE budget. Also, the Financial Management manual and the project accounting and reporting system were not ready at the initial stage of the project which caused the FM aspects to lag behind until late in the project life (rated U by the end of the project).

2.5 Post-completion Operation/Next Phase
(including transition arrangement to post-completion operation of investments financed by present operation, Operation & Maintenance arrangements, sustaining reforms and institutional capacity, and next phase/follow-up operation, if applicable)

The MOHE is determined to continue the path of sector reform through sustaining the initiatives supported by the HEEP and pursuing its efforts to reform the legislation governing the higher education system. The MOHE has actually initiated a number of projects labeled as HEEP2 projects aimed at sustaining HEEP outcomes and supporting new initiatives. Funding is expected to come mainly from the Education Development Fund (EDF) established by the Prime Minister and from reallocation of funds within the sector through either the Supreme Council of Universities (SCU) or universities budget.

The support provided by QAAP to universities to prepare their faculties and schools for accreditation is expected to be continued through the Continuous Improvement and Qualifying for Accreditation project (CIQAP) which is expected to receive LE 1 billion from the EDF.

The MOHE also considers that HEEPF has disseminated the culture of competitive funding and contributed to spreading essential skills needed for proposal writing, project implementation, and monitoring and evaluation; and that the academic community is now better prepared to compete for available funding offered by TEMPUS, the EDF, or competitive funds established by some universities (such as Alexandria University). According to the MOHE, the HEEPF competitive mechanism could be considered, in the next phase of the reform, as a complementary funding system for higher education institutions.

Funding for sustaining ICTP outcomes, especially the completion of the MIS, should come partly from the SCU, and partly from the universities themselves which have already funded about 14% of the project cost. The ICTP has established an interesting progressive cost-sharing mechanism by which university contribution to the running cost of this component's activities increased annually to achieve self-sustainability by 2009.

The continuation of training activities initiated by FLDP is expected to be funded by universities and through cost recovery. However, future funding for the National Center for Faculty and Leadership Development (NCFLD) established through the project is still unclear.

The reform of Technical Education would continue to be a priority area for higher education reform as LE 1 billion funding is expected from the EDF to support the restructuring of the sub-sector. The MOHE objectives for the next phase are to: (i) continue the reform of the TC's governance framework, (ii) motivate the top management and administrators in the TC to upgrade their technical and administrative capabilities, (iii) continue to upgrade the learning resources in the TC's, (iv) generate private revenues from business community, and (v) conclude twinning arrangements with counterpart community colleges.

The MOHE has prepared a strategic plan for 2007-2012 and has identified four pillars for the next phase of the reform: (i) improving governance at the university and sector levels; (ii) updating the legislation in order to cover all the subsectors and introduce more institutional autonomy and flexibility; (iii) developing strategic planning tools and mechanisms at the sector level; and (iv) continuing support to the accreditation and quality assurance process, and to TC. The MOHE has also engaged in a sector review exercise conducted by the Bank in collaboration with the Organization for Economic Cooperation and Development (OECD). The review will help establish a baseline for assessing progress in the implementation of the MOHE Strategic Plan and will be used as an opportunity to assist the MOHE Strategic Planning Unit in developing the technical and professional expertise to conduct similar reviews in the future.

3. Assessment of Outcomes

3.1 Relevance of Objectives, Design and Implementation
(to current country and global priorities, and Bank assistance strategy)

The overall relevance of Project objectives is high, both at the time of preparation and at completion. The improvement of quality and efficiency of the delivery of educational services at all levels remains a major challenge in Egypt. The pressure on the higher education system will continue in the coming years, as the MOHE is expecting the number of students enrolled in higher education institutions to increase by about 800,000, or 30% in the next ten years. This would require both additional funding and a better use of available resources. The need for improving the higher education system to ensure competitiveness of the Egyptian labor force, mentioned in the CAS 2001, is still valid as the economy is becoming more global and more knowledge-based. One of the three pillars of the CAS 2006 is to enhance the provision of public services, including the improvement of quality and relevance of education at all levels.

The project was designed to create conditions conducive to quality and efficiency improvement in higher education. The long consultation process established with the GOE before project preparation was critical to ensure the commitment and support of main stakeholders at the Government and the MOHE levels, and to prepare universities and the academic community to the change ahead. Project components and activities, although relatively ambitious and complex, succeeded in addressing major issues related to the quality of higher education such as the establishment of quality assurance and accreditation mechanisms, the development of universities' IT infrastructure and library networks and the modernization and upgrading of mid-level technical education. On the other hand, project initiatives and activities aiming at improving system efficiency lacked the global vision and coordination to ensure achievement of expected outcomes. Greater institutional autonomy and a criteria/incentive based resource allocation mechanism are key to improving system efficiency. Without reforming the current system, the initiatives supported by the project may have little impact on the efficiency of higher education.

Project implementation was mainly the responsibility of the PMU. The assumption was made that the experience acquired through the Engineering and Technical Education Project (ETEP, ln. 3137-EGT) would have prepared the PMU to smoothly implement HEEP. However the size, scope and complexity of HEEP led to the need to strengthen the PMU, notably through the appointment of five sub-project directors.

3.2 Achievement of Project Development Objectives
(including brief discussion of causal linkages between outputs and outcomes, with details on outputs in Annex 2)

Given (i) the discrepancies between project original design and actual activities components, and (ii) the shortcomings in project performance indicators, this ICR evaluates project outcomes with reference to the PDO stated in the LA and using the information available from supervision reports, PMU reports, the Impact Assessment Study and the ICR mission. The critical question is: to what extent did the HEEP create conditions conducive to quality and efficiency improvement?

- **The project contributed to create an environment conducive to improving the quality (and relevance) of higher education in Egypt through:**

a. **The establishment of a quality assurance and accreditation mechanism**. A National Authority for Quality Assurance and Accreditation in Education (NAQAAE), reporting directly to the Prime Minister, has been created with the mandate of assessing and providing accreditation to public and private institutions at all levels of education. Submission to NAQAAE accreditation is required for all institutions, public and private, by 2012. The QAAP provided support to the public universities and their faculties to prepare for accreditation through the establishment of Quality Assessment Centers in universities and faculties, self assessments by faculties, field visits by peer reviewers, and preparation of actions plans for accreditation by faculties.

b. **Improving the IT infrastructure in universities to support teaching, research and management**. HEEP supported the establishment of IT centers in all public universities, increased the broadband width available to universities (from 55 Mbps to 310 Mbps), and generally improved intranet and internet capabilities. According to the MOHE, over 60% of computers in the universities were connected to the internet by the end of the project. The Impact Assessment study shows that 58% of surveyed academic staff use internet facilities in the university and 83% of them are satisfied with their performance (49% and 25% respectively for students). The project also funded the establishment of e-learning centers and the development of e-learning content (95 e-courses), and allowed Egyptian universities to access digital libraries, including more than 81,000 electronic resources at a reduced negotiated cost.

c. **The initiation of a competitive grant mechanism to support quality enhancement**. The HEEPF supported 159 small projects aiming at improving quality, efficiency and relevance of teaching and research in public universities selected on a competitive basis among 563 proposals. By covering all public universities, the project surpassed the target of 50% stated in the PAD. The project contributed to disseminating the culture of competitive funding as the number and quality of proposals submitted to other competitive funds such as TEMPUS increased as a result of the dynamics introduced by the HEEPF, and some universities such as Alexandria University established competitive funds at the university level.

d. **A certifying training system for faculty**. The project supported the establishment of training centers in 17 universities and the collaboration with an international partner (ICTB). About 760 trainers have been trained under the project, including a core group of 40 certified trainers expected to play a leading role in promoting quality training in their respective institutions. The

project supported the development of 16 specialized and 3 TOT training packages, and the delivery of more than 220,000 trainer/courses.

e. **The upgrade and consolidation of the Middle Technical Institutes into 8 Technical Colleges (TC)**. Boards of Trustees (BOT) for all TC with representation from industry, and a Supreme Council for Technical Colleges to oversee the subsector were established through the HEEP. The project supported rehabilitation and equipment for 3 pilot TCs (Mahalla, Mataria and South Valley), revision of the curricula and development of new courses, training courses to upgrade qualifications of existing staff, and recruitment of new qualified staff. Although facing some implementation issues, the establishment of BOT facilitated the development of interesting partnerships with private sector such as in Mataria.

- **The contribution of the HEEP to create the conditions conducive to improved system efficiency was rather limited:**

a. Although the project facilitated a discussion among stakeholders on system reform, the new legislative framework to award more autonomy to universities is facing some resistance and has not been adopted yet. The draft law prepared by the MOHE has not been endorsed by the education committees of both the Shoura Council and the Parliament.

b. The MOHE has developed a model to estimate and analyze student unit costs, and worked on a funding formula. However, recurrent and investment budgets continue to be allocated through direct negotiations between individual universities and the Ministry of Finance and the Ministry of Planning.

c. The MIS was developed and deployed but not yet operational.

d. The HEEPF had a "pedagogical" effect by spreading the culture of competitive funding and preparing academic and administrative staff to operate in a competitive environment. However, without reforming the resource allocation system, a competitive funding mechanism cannot be sustained.

e. The SCTC and TCs Boards of Trustees (BOTs) have been established and have started operating. The consolidation of the MTI in a smaller number of TCs may induce some economies of scale. But the efficiency of TCs is still jeopardized by an overly centralized system. A Gap Analysis undertaken by USAID for the 3 pilot TCs (Mataria, Mahella and South Valley) in 2008, confirmed that BOTs have *little authority over governance of the Colleges and that the majority of authority and decision making was done centrally at the MOHE.*

3.3 Efficiency
(Net Present Value/Economic Rate of Return, cost effectiveness, e.g., unit rate norms, least cost, and comparisons; and Financial Rate of Return)

The Economic rate of Return (ERR) and the Financial Rate of Return (FRR) were not updated for this ICR as they were not estimated during appraisal. Also, the nature of certain components (HEEPF, QAAP) and the lack of data for other components (ICTP, FLDP, ECTP) did not allow for unit cost estimation. The ICR evaluation was then limited to validating the PAD analysis based on project outputs and expected impact.

The economic relevance of the project is still valid as the economy is becoming more global and knowledge based. Activities funded under the project have created some conditions favoring quality and relevance improvement. The HEEP has obviously strengthened the IT infrastructure in universities and TCs, funded 159 small innovative projects at improving the quality and relevance of academic programs at the undergraduate and graduate levels and established national academic standards that should help normalize university outputs. The quality of TCs graduates should be enhanced through the

modernization of the curricula, the new equipment and the substantial improvement in students/instructor ratio from 1/118 to 1/40 in industrial subjects and from 1/305 to 1/98 in services subjects. The partnerships initiated with private businesses in some TCs are also a good indicator of the potential of the TCs restructuring to improve the employability of their graduates.

The PAD analysis estimated that the expected increase in Egypt's GDP would not allow maintaining the same level of public funding per student, and that some measures should be taken to make an efficient use of available resources and to develop some mechanisms of cost recovery. Actually, the share of public funding for higher education in the GDP has dropped from 1.64% in 2002 to 1.06% in 2007 according to the MOHE figures, and the lack of resources has led to further deterioration of quality as reflected by a poor students/academic staff ratio of 1/29 well below the regional average of 1/21. The HEEP did not have the expected mitigating impact as (i) the comprehensive reform for university autonomy and funding did not take place; and (ii) enrolments in TCs increased by _only_ 10% between 2002 and 2007 which was below the overall increase in higher education of 12% for the same period, and the share of TCs is still at a low 6.6%.

3.4 Justification of Overall Outcome Rating
(combining relevance, achievement of PDOs, and efficiency)
Rating: Satisfactory

The overall outcome of the Project is rated as Satisfactory. The reasons are: (i) the relevance of the objective of preparing the Egyptian higher education for quality and efficiency improvement was and continues to be high; (ii) the project contributed to create an environment conducive to improving the quality (and relevance) of higher education; (iii) the MOHE has shown a strong commitment to and taken steps for improving system efficiency, but the reform of the legislative reform governing universities is still facing resistance.

3.5 Overarching Themes, Other Outcomes and Impacts
(if any, where not previously covered or to amplify discussion above)

(a) Poverty Impacts, Gender Aspects, and Social Development

The main social issue relevant to the project relates its possible impact on equity to access higher education. The two major aspects that might have had an impact on equity: (i) a cap on secondary school students access to university; and (ii) an increase in students financial contribution to the cost of higher education were not directly addressed by the project. On the other hand, the project contributed to increase enrolment in TCs by 10%, and to improve the quality and relevance of training programs offered by the TCs. Students who can pay for private tutoring have a distinct advantage over lower income students for the examination required to enter university. The TCs offer an alternative path to higher education for students from disadvantaged part of the society.

(b) Institutional Change/Strengthening
(particularly with reference to impacts on longer-term capacity and institutional development)

The project had a substantial institutional impact at system, MOHE and university levels.

At the system level, the project has contributed to the establishment of a national accreditation and quality assurance for education services providers at all levels including higher education, and the SCTC which will oversee and contribute to the development of Technical Education. The MIS developed under HEEP will be a useful tool for piloting system performance.

The capacity built in the PMU for managing development projects will serve for the implementation of future phases of the higher education reform. Already PMU staff have been involved in HEEP2 projects. The project also contributed to building the capacity of the Strategic Planning Unit in the MOHE.

The project contributed to the institutional strengthening of universities through: (i) the development and deployment of MIS; (ii) the establishment of Quality Assurance Centers; (iii) the international accreditation of training centers in three universities; and the establishment of a consortium of Egyptian university libraries. A major achievement of the project was the restructuring of the Technical Education sub-sector with the establishment of 8 TCs with BOTs including representatives from the industry.

(c) Other Unintended Outcomes and Impacts (positive or negative)

The project had several positive unexpected outcomes:

- The accreditation and quality assurance agency (NAQAA) was established with a dual mandate of quality assurance and accreditation, and covers not only higher education but all levels of education, including pre-schooling institutions. There are some limitations to this framework given the ambiguous position of the NAQAAE in combining the roles of fostering quality, granting accreditation and enforcing compliance; and institutional and program accreditation. Also, quality assurance in higher education and in general education are substantially different and, in most countries, are dealt with by separate institutions.
- The Development Engagement process introduced by QAAP was not initially planned in the project. This is a very useful mechanism to assist universities in preparing for accreditation.
- The establishment of the National Centre for Faculty and Leadership Development (NCFLD) with an international accreditation and the mandate of training of trainers and certification programs as well as the top Management at central and university levels.
- The establishment of the consortium of Egyptian university libraries.

3.6 Summary of Findings of Beneficiary Survey and/or Stakeholder Workshops
(optional for Core ICR, required for ILI, details in annexes)

Given the complexity of the project and the difficulty assessing project outcomes, the MOHE decided to undertake an Impact Assessment Study and organize a Stakeholders workshop.

Impact Assessment Study summary

The purpose of the Impact Assessment Study (see Annex 5) was to assess the perception of HEEP outcomes by the expected direct beneficiaries of the project. The first part of the study (available) focused on the impact of QAAP, ICTP and FDLP, and was undertaken in three universities (Cairo, Mansoura and Assiut) representing Urban, Lower Egypt and Upper Egypt governorates, and selected based on their involvement in the Project. In each university, four faculties (Engineering, Medicine, Commerce and Art) representing both hard and soft sciences were surveyed. The sample covered 3371 students (2.5%), 351 Teaching Assistants (11.2%) and 522 faculty staff members (8.9%). Beneficiaries were requested to respond to a number of statements related to project expected impact and on the learning environment in the universities by indicating their level of agreement/disagreement on a scale from 1-6. Despite some methodological issues (sample bias, no baseline, no control group), the study provides some interesting insight on the perception and expectations of the main beneficiaries of the project. Selected results provided by the study are presented in the table below. They show: (i) a globally good knowledge and perception by faculty members, especially for QAAP and ICTP; (ii) a significantly lower level of

knowledge and perception of project benefits from students; and (iii) higher expectations from faculty for project longer term impact.

Sample of HEEP Impact Assessment Study Results

	Faculty members	Students
Knowledge about HEEP	87% knew about the project	46% of undergraduate and 35% of graduate students did not hear about the project
Agree there is an improvement in teaching and learning environment	77%	42%
Agree Internet service efficiency improved	83%	49%
Use university Internet facilities daily or weekly	58%	25% (48% use Internet outside the university)
Use Digital Library daily or weekly	20% in Engineering and Arts; 9% in Commerce; 7% in Medicine	N/A
Received ICDL for IT courses	31%	12%
% of FDLP courses that had a clear benefit	54%	
Agreement Index on the need for a quality assurance system	4.91/6	
Agreement Index on the importance of Quality Assurance Centers	4.05/6	
Level of satisfaction with HEEP results	3.5/6	
Agreement with project impact in the long term	4.1/6	
Constraints/incentives that may affect project impact	Positive: Faculty role; Increased competition among institutions Negative: Centralized administration; Higher education laws and regulations	

Stakeholders workshop summary

An ICR stakeholders workshop was held on December 22-23, 2008, at the University of Ain Chams. The workshop was launched by the Minister of Higher Education and included about 60 participants representing the 17 public universities and 8 Technical Colleges. Participants worked in small groups to reflect on project achievements and sustainability issues, and discussed the lessons learned from project implementation. The table below provides the items most frequently mentioned by the participants (see Annex 6):

	Main achievement	Sustainability of outcome	Main lessons learnt
QAAP	Establishment of QAAP Centers in all universities	High	Involving staff members, students and community is essential and fruitful
HEEPF	Creating a culture of competitiveness with teamwork spirit	High	Teamwork spirit is important
ICTP	Development of IT network/infrastructure	High	The need to consult educational planners in future activities
FDLP	Certification of Internationally Qualified trainers	High	Importance of developing new human resource cadres in different universities with different specialties
ECTP	New curriculum and lab development for TCs	High	Partnership with universities is critical

Participants agreed that the project introduced a culture of change for quality and efficiency that need to be generalized across the sector and sustained mainly through: (i) providing more autonomy to, improving the governance and diversifying funding of universities (which was actually among the project expected –and not achieved outcomes); (ii) raising awareness among other stakeholders in the Egyptian society about the changes taking place in the sector; (iii) embedding the units established by the project in universities structure; (iv) developing partnerships with private sector; (v) continuing further reform of technical education for quality and relevance; and (vi) ensuring funding for the next phase of the reform.

4. Assessment of Risk to Development Outcome
Rating: Moderate

The overall Risk to Development Outcome is rated as moderate. It is likely that the PDOs in terms of creating an environment favorable to improving the quality and relevance of higher education will be sustained.

All universities must submit for accreditation by the NAQAA before 2014. It is expected that they will use the methodology developed under the Quality Assurance Centers established through HEEP to prepare for their accreditation. The resources reserved by the GOE through QAAP2 and CIQAP will support those efforts.

Also the cost-sharing approach adopted by ICTP and FLDP ensures that the universities will be able to sustain the running costs associated with the IT infrastructure and training, and with the libraries network.

The restructuring of the TCs and involvement of business representatives in the BOTs will very likely be sustained, despite the fact that the BOTs are performing unevenly. The GOE has pledged LE 1 billion to complete the modernization of the TCs. However, the success of TCs restructuring needs additional reform to: (i) allow more autonomy to TCs and facilitate collaboration with industry; and (ii) improve the transition mechanisms and collaboration with Schools of Engineering.

HEEPF has disseminated the culture of competitive funding and contributed to spread essential skills needed for proposal writing, project implementation, and monitoring and evaluation; and competitive funds have been established by some universities. However, this scheme would hardly be sustainable without specific recurrent funding. The continuation of training activities initiated by FLDP is expected

to be funded by universities and through cost recovery. However, future funding for the National Center for Faculty and Leadership Development (NCFLD) established through the project is still unclear.

5. Assessment of Bank and Borrower Performance
(relating to design, implementation and outcome issues)

5.1 Bank Performance

(a) Bank Performance in Ensuring Quality at Entry
(i.e., performance through lending phase)
Rating: Moderately Satisfactory

The Bank's performance during preparation is rated Moderately Satisfactory. The Bank engaged in a long process of consultations with the GOE before preparation and supported the MOHE in the preparation of the reform. The Bank's team also brought lessons learned from similar projects and prior operations in the sector, and sought guidance from the QAG at the project concept stage. However, project design suffered from some shortcomings: (i) insufficiently elaborated sector analysis; (ii) lack of clarity and consistency in the results framework; (iii) insufficiently developed implementation arrangements given the complexity of the project; and (iv) poorly designed indicators.

(b) Quality of Supervision (including of fiduciary and safeguards policies)
Rating: Moderately Satisfactory

Overall, the project team worked closely with the PMU to ensure smooth operation of the project and to resolve issues encountered over project implementation. However, there were some shortcomings in project supervision:

(i)   The team did not take early action to correct the relative mismatch between the original design and components of the project and the actual implementation structure. This made it difficult to achieve PDO and to monitor intermediate outcomes. As mentioned above, the team could have considered restructuring the project at an early stage which would have allowed definition of a more realistic PDO, development of the implementation arrangements and improve monitoring and evaluation system and indicators;

(ii)   The team has continuously followed up on the two major reforms related to university autonomy and resource allocation as recorded in supervision aide memoires. However, despite the fact that there has been almost no achievement in this regard, the PDO has been maintained as Satisfactory. Moreover, the intermediate indicator related to the corresponding legislative reform has been removed from the ISRs without any specific mention or justification;

(iii)   Although the project team ensured proper supervision of project compliance with the Bank's fiduciary requirements, some issues such as the tax payment under HEEP and the IBCT contract (see 2.4) could have been anticipated or, at least, dealt with more expeditiously once identified. Also further attention should have being paid to the IPR comments related to the employment of university staff as consultants, particularly to make sure that staff are not paid to perform tasks that are part of their regular duties.

(c) Justification of Rating for Overall Bank Performance
Rating: Moderately Satisfactory

The Bank's overall performance is considered Moderately Satisfactory, based on the following factors:

- Project quality at entry is Moderately Satisfactory;
- Quality of supervision is Moderately Satisfactory.

5.2 Borrower Performance

(a) Government Performance
Rating: Satisfactory

The Government's performance is rated Satisfactory. The Government showed a strong commitment to the implementation of higher education reform through the adoption of legislations establishing the NAQAA and consolidating the 45 MTIs in 8 TCs. The establishment of the EDF is an indicator of the government intention to sustain its support to the initiatives funded by HEEP in particular those related to quality improvement and technical education. The government drafted and has pushed for the legislative reform related to universities autonomy and funding. However this is a politically sensitive issue, and the reform is still facing some resistance. The Government also fully contributed its project counterpart funding despite some delays.

(b) Implementing Agency or Agencies Performance
Rating: Satisfactory

The PMU had to face real challenges in implementing such a complex and sector wide project given the lack of details in project design. Its structure was strengthened by the appointment of directors for the five sub-projects. The PMU had to develop action plans, operation manuals and guidelines for the five sub-projects. Despite the additional delays due to the change of some directors and the release of Government contribution, the PMU was able to successfully complete almost all the activities planned in the project. The PMU performance is however mitigated by shortcomings in monitoring and evaluation and in fiduciary compliance.

(c) Justification of Rating for Overall Borrower Performance

The Borrower's overall performance is considered Satisfactory, based on the following factors:

- Government performance is Satisfactory;
- PMU performance is Satisfactory.

6. Lessons Learned
(both project-specific and of wide general application)

- *A clear and well articulated result framework is essential to assess development outcomes*. By several measures, HEEP has achieved, and in some instances surpassed, its expected outputs. It is unclear, however, to what extent the higher education system in Egypt is prepared for quality and efficiency improvement.

- *Resistance to systemic change should never be underestimated*. Despite the long process of consultation and the commitment of the MOHE, key legislative measures to allow more autonomy to universities and reform funding mechanisms have been blocked over the life of the project by stakeholders who did not see their interest in the reform. Such politically and socially charged reforms require a substantial preparatory work, including (as recommended by the QAG): (i) a Social Assessment to establish breadth and depth of ownership; (ii) a comprehensive Communications Strategy; and (iii) an Institutional Analysis to identify and ensure the support of reform champions.

- *The academic community can be supportive to quality assurance systems*. The participative and "pedagogical" approach based on institutional self assessment, peer reviews and the development of strategic plan has ensured ownership and strong commitment from academic staff. To be sustained this commitment needs to be supported by appropriate funding.

- *Funding mechanisms can be embedded in the project to ensure sustainability of project activities*. The approach adopted in ICTP to cover the running costs of the university IT infrastructure and the digital library by requesting progressive contributions from the universities was successful and instructive. Would such approach has been adopted for HEEPF with contribution from the SCU, the competitive funding mechanism could have been sustained, and eventually constituted the basis for a competitive funding for universities investment budget.

- *The Technical Education sub-sector still needs attention given its potential to improve the overall relevance and efficiency of higher education*. The restructuring supported by HEEP was an important step in upgrading the sub-sector. More efforts are needed to: (i) increase enrolment in TCs which host only 5% of students; (ii) improve the transition mechanisms with universities; and (iii) provide more autonomy to the TCs to facilitate collaboration with business community.

- *Particular attention should be paid during preparation of higher education projects to the employment of academic staff as individual consultants*. Whenever the nature of the activities planned in the project require the recruitment of large numbers of academic staff, the procedures and conditions for hiring such staff should be agreed upon during the project preparation and disclosed in the project documents.

- *The Financial Management manual and the project accounting and financial reporting system need to be ready at the early stages of the project*. This would ensure fiduciary compliance of project payments and avoid mistakes that may jeopardize project achievements.

7. Comments on Issues Raised by Borrower/Implementing Agencies/Partners
(a) Borrower/implementing agencies

(b) Cofinanciers

(c) Other partners and stakeholders
(e.g. NGOs/private sector/civil society)

Annex 1. Project Costs and Financing

(a) Project Cost by Component (in USD Million equivalent)

Components	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
IMPROVE EFFICIENCY THROUGH THE REFORM OF GOVERNANCE AND MANAGEMENT THROUGH: (I) CHANGING/ INTRODUCING LEGISLATION; (II) RAT IONALIZ	0.00	30.26	
IMPROVE THE QUALITY AND RELEVANCE OF UNIVERSITY EDUCATION THROUGH: (I) ESTABLISHING INTEGRATED COMPUTER AND NETWORKING SYSTEM S; (II)	0.00	6.20	
IMPROVE THE QUALITY AND RELEVANCE OF MID-LEVEL TECHNICAL EDUCATION THROUGH: (I) CONSOLIDATION OF MTIS INTO TCS; (II) DESIGNIN G NEW C	0.00	13.04	
Total Baseline Cost	0.00	49.50	
Physical Contingencies	0.00	0.00	0.00
Price Contingencies	0.00	0.00	0.00
Total Project Costs	0.00	49.50	
Front-end fee PPF	0.00	0.00	.00
Front-end fee IBRD	0.00	0.00	.00
Total Financing Required	0.00	49.50	

(b) Financing

Source of Funds	Type of Cofinancing	Appraisal Estimate (USD millions)	Actual/Latest Estimate (USD millions)	Percentage of Appraisal
Borrower		9.50	0.00	.00
UK: British Department for International Development (DFID)		0.50	0.00	.00
International Bank for Reconstruction and Development		50.00	0.00	.00

Annex 2. Outputs by Component

Egypt Higher Education Enhancement Project
Key Performance Indicators

Objective	Key Performance Indicators			
		Baseline	End of Project	
Project Development Objective	**Outcome/Impact Indicator**		**Target**	**Actual**
To create conditions fundamental to improved system quality and efficiency through legislative reform, institutional restructuring, and establishment of independent quality assurance mechanisms and monitoring systems.	Key legislative reforms enacted for the universities to become effective self-governing institutions	No reform towards self-governing	Key legislative reforms enacted for the universities to become effective self-governing institutions	The several drafts prepared by MOHE did not get enough support to be submitted to the parliament.
	Legislative reform enacted to establish independent quality assurance mechanisms	No quality assurance.	National Quality Assurance and Accreditation Council (NQAAC) established and functioning	National Authority for Quality Assurance and Accreditation of Education (NAQAAE) established by Presidential Decree #82/2006; National Academic Reference Standards (NARS) developed for 10 sectors; Quality Assurance Centers established in all universities; internal quality assurance systems operating in 146 faculties
	Legislative framework in place for the Technical Colleges to become self-governing institutions with linkages to the private sector	No linkage with private sector.	Legislative framework for the Technical Colleges, to become self-governing with linkages to the private sector, in place	Decrees for clustering the 47 MTIs into 8 TCs issued in 2003-06. BOTs including representatives of private sector established. 8 TCs are operational. Twinning agreements signed with foreign institutions.
	Consolidation of 47 Middle Technical Institutes (MTIs) into 8 Technical Colleges (TCs).	45 MTIs	45 MTIs consolidated into 8 TCs	45 MTIs consolidated into 8 TCs. Directors of TCs appointed and bylaws adopted by Ministerial Decree
	Management Information System (MIS) developed and operational for the post-secondary sector.	Data is collected manually, no MIS in place	MIS developed and operational	MIS centers established in 14 universities; MIS applications for student, graduate studies and staff administration deployed in 175 faculties

Project Outputs	Output Indicators	Baseline	End of Project	
			Target	**Actual**
1. Restructure the governance and administration of the higher education system: Increase institutional autonomy on fiscal and governance matters; Establish governing bodies with oversight, monitoring and reporting responsibilities; Align technical institutes	a) Legislation. in place for greater fiscal & mgmt autonomy	No legislation in place,	Legislation in place;	Legislation drafted, but not adopted
	b) SCU& SCTC in place & overseeing sector and institutional performance	SCTC not established, no performance oversight	SCTC established and functioning	SCTC established and functioning
	c) MIS operating & guiding sector and institutional planning/mgmt/budget	No MIS,	MIS in place & used for management, planning and budgeting	MIS at sector level developed for SCU but not fully operational. MIS deployed in 14 universities. No systematic use for planning and budgeting
	d) SCU & SCTC publ. annual reports on perform & quality using MIS	No MIS to use	MIS used for reports on performance and quality	MIS is not fully operational.
	e) Competitive grant fund being utilized in 50% of universities	No HEEPF	HEEPF management in 50% of universities.	159 projects in 17 universities (100% of universities) funded by HEEPF
2. Create conditions for improved quality and relevance of instruction in universities: Improve IT infrastructure; Improve faculty use of modern technology and pedagogy; Create competitive grants.	a) All faculty & student have access to IT & new teaching methodologies	No value	IT access provided in all universities	All 17 universities connected to the unified fiber optic information network; installation of videoconference and streaming network in all universities; establishment of e-earning centers in universities and training of staff; digital library including more than 81,000 electronic resources operational and accessible to all universities
	b) 2/3 of public univ. students utilizing internet facilities	No value	67% of students of public universities utilizing internet;	Over 60% of computers in the universities connected to the internet. Impact Assessment study shows that only one fourth of surveyed students use internet facilities in the university, and only 49% are satisfied with the performance
	c) 5,000 instructors trained in integration of IT into teaching & into learning assessment and evaluation	No training	5,000 instructors trained in integration of IT into teaching and into learning assessment and evaluation.	22,000 faculty and administrative staff received IT training at several levels; 600 academic staff trained on e-content

3. Restructure mid- level technical education to provide conditions for improved quality and relevance linked to local economy.	a) Restructuring MTIs into autonomous TCs linked to the industry	No autonomy, no linkage with private sector,	Restructuring MTIs into autonomous TCs linked to industry	45 MTIs consolidated into 8 TCs. BOTs including representatives of private sector established. 8 TCs are operational.
	b) Redesigned curriculum, reflecting private sector input, introduced in TCs, benchmarked against intl standards;	Curriculum far below international standard,	New benchmarked curricula developed with participation from private sector	26 academic programs reviewed and 6 new programs designed by expert committees including university professors; two new programs in "Fast Food" and in "Refrigeration" developed in collaboration with private companies
	c)TCs generating 10% private revenues in public budget	0% private revenue generation	10% private revenue	The current legislation does not allow TCs to develop income generation activities
	d) raise enrolment 5%	Number of students enrolled in MTIs: 131,173	Number of students enrolled in TCs: 138,000	Number of students enrolled in MTIs: 144,480

Annex 3. Economic and Financial Analysis
(including assumptions in the analysis)

The economic evaluation undertaken during appraisal did not include an estimate of the Economic rate of Return (ERR) and the Financial rate of Return (FRR). It focused, in turn, on the following question: (i) Why should higher education be the focus of the Project?; (ii) What is the rationale for supporting public higher education? The present evaluation focuses on validating the PAD analysis based on project outputs and expected impact.

Justification for investment Project in higher education

The main justification was the potential contribution of a more relevant and of better quality higher education system to improving the competitiveness of Egypt's economy. It was expected that, building on the outcomes of other projects at the basic and secondary education levels (EEP, SEEP), the HEEP would contribute to improve the quality and relevance of tertiary education outputs, particularly through increasing the ICT content in university programs and the restructuring of the middle technical institutes.

The economic relevance of the project is still valid as the economy is becoming more global and knowledge based. Although, it is too early to measure any impact of the HEEP on the quality and relevance of higher education, the activities funded under the project have created some conditions favoring an improvement in this respect. The HEEP has obviously strengthened the IT infrastructure in universities and TCs. The HEEPF has funded 159 small innovative projects at improving the quality and relevance of academic programs at the undergraduate and graduate levels. The QAAP has established national academic standards that should help normalize university outputs and thus improve communication with employers. The quality of TCs graduates should be enhanced through the modernization of the curricula, the new equipment and the substantial improvement in students/instructor ratio from 1/118 to 1/40 in industrial subjects and from 1/305 to 1/98 in services subjects. The partnerships initiated with private businesses in some TCs are also a good indicator of the potential of the TCs restructuring to improve the employability of their graduates.

Rationale for supporting public funding for higher education

The PAD analysis estimated that the expected increase in Egypt's GDP would not allow maintaining the same level of public funding per student, and that some measures should be taken to make an efficient use of available resources, on one hand, and to develop some mechanisms of cost recovery on the other hand. It was expected that the increased enrolment and improved quality in TCs would induce a most cost effective use of the resources allocated to higher education. It was also expected that providing more autonomy to universities and reforming their funding mechanisms would facilitate the design of cost recovery alternatives for the universities to compensate for the expected reduction in public funding.

Despite the favourable treatment of higher education in the education budget (about 28%), the actual volume of funding has decreased steadily. The share of public funding for higher education in the GDP has dropped from 1.64% in 2002 to 1.06% in 2007 according to the MOHE figures. Rapidly increasing enrolment combined with this lack of resources has led to further deterioration of quality in most public higher education institutions as reflected by a poor students/academic staff ratio of 1/29 well below the regional average of 1/21. Did the HEEP mitigate this negative impact? (i) The project contributed, as mentioned above to improving the quality of training provided by the TCs. Enrolments has increased by 10% and did therefore surpass the project target of 5%. This does not reflect however an increase in their

weight in as the overall increase in higher education enrolments reached 12% for the same period, and the share of TCs is still at a low 6.6%. (ii) Although the reform of university funding did not take place as planned in the project, the GOE has encouraged public universities to diversify their income sources and has faciliated the development of cost-sahring programs through the "special accounts" that universities are allowed to establish for the delivery of special programs.

Annex 4. Bank Lending and Implementation Support/Supervision Processes

(a) Task Team members

Names	Title	Unit	Responsibility/ Specialty
Lending			
Supervision/ICR			
Mohamed Yahia Ahmed Said Abd El Karim	Financial Management Specialis	AFTFM	
Noha Nabih Abdel Gawad	Sr Accounting Asst.	MNACA	
Ghassan N. Alkhoja	Senior Operations Officer	MNSHD	
Amy Champion	Operations Analyst	MNSHD	
Ahmed Mohamed Mahmoud Dewidar	Consultant	MNSHD	
Christina W. Djemmal	Operations Officer	MNSHD	
Linda K. English	Sr Education Spec.	HDNED	
Brigitte S. Franklin	Program Assistant	MNSHD	
Mahmoud Gamal El Din	Senior Operations Officer	MNSHD	
Ingy Raafat Halim	Temporary	MNSHD	
Sahar Mohamed Hegazy	Program Assistant	MNC03	
Arun R. Joshi	Sr Education Spec.	AFTH1	
Maiada Mahmoud Abdel Fatt Kassem	Consultant	MNAFM	
Sebastian Martinez	Economist	HDNVP	
Samih W. Mikhail	Consultant	MNSHD	
Mona Ezzat Abdel Hamid Mostafa	Temporary	MNC03	
Alenoush Saroyan	Consultant	ECSPE	
Hisham Ahmed Waly	Sr Financial Management Specia	OPCFM	
Mona Sabet Zikri	E T Consultant	MNSHD	

(b) Staff Time and Cost

Stage of Project Cycle	Staff Time and Cost (Bank Budget Only)	
	No. of staff weeks	USD Thousands (including travel and consultant costs)
Lending		
FY98		22.89
FY99		63.11
FY00	45	249.65
FY01	14	71.42
FY02	18	68.85
FY03	2	31.07
FY04	3	3.07

FY05		4.01
FY06		0.00
FY07		0.00
FY08		0.00
Total:	82	514.07
Supervision/ICR		
FY98		0.00
FY99		0.00
FY00		2.00
FY01		1.48
FY02		6.17
FY03	14	41.54
FY04	14	83.19
FY05	21	93.92
FY06	29	91.39
FY07	39	109.10
FY08	35	139.24
FY09	16	0.00
Total:	168	568.03

Higher Education Enhancement Project

"Survey for measuring project`s return on beneficiaries"

Summary of findings

Introduction

The five projects directors prepared reports containing the targeted goals of each project and what has been implemented so far. It has been relied basically on these reports in designing the survey forms, which include a series of questions and statements used to develop benchmarks and indicators to identify the degree of results achievement.

The main constraints encountered are related to short time available for study implementation, and the beneficiary groups commitment with midterm exams dates.
Such constraints have led to the following:

- Narrowing the scope of the study to only 12 faculties within 3 universities.
- Prolonging the survey form to obtain a sufficient number of statements, to allow for developing measurement tools to measure the extent of results achievement of various development projects with a satisfactory degree of sincerity and stability.
- Lack of time to implement some Qualitative methods, such as the "Focus Group".
- The scope of the study did not include businesses and community.

Due to the different nature and scope of projects implementation, and different targeted samples of the study, the study was divided into three separated parts according to the following:
Part I: Return study of implementing: ICTP - FLDP – QAAP.
Part II: Return study of implementing Egyptian Technical Collages Project ETCP.
Part III: Return study of implementing Higher Education Enhancement Project Fund HEEPF.

The First Part: Study of the return of implementing
ICTP – FLDP – QAAP

Methodology

Beneficiaries of the three concerned projects in this part were divided into four different groups as follows:
First group: Faculty Staff Members
Second group: Students
Third group: Teaching Assistants
Fourth group: Post Graduate Students
Four different Questionnaires were designed for each group; each one includes questions related the projects' output associated with this group. It was taken into consideration to ask about different groups` point of view for the same output, each commensurate with his relationship with the supposed influence.

Sample Design

The study depended on a group of random samples of the participants and beneficiaries from the Higher Education Enhancement projects. The design includes three main stages.

The First stage: concentrated on choosing the participated universities in this study. To achieve a good representation of participated universities in these projects, the research team decided to choose three geographically dispersed universities, in order to reflect the Egyptian universities in Urban, Lower Egypt, and Upper Egypt governorates. Cairo University has been selected to represent the universities in urban

governorates and the University of Mansoura for Lower Egypt universities, and Assiut University as a representative for the Universities of Upper Egypt.

These universities were selected for being the most active participants in the enhancement projects in general.

Graph(1)

Universities distribution according to their participation in HEEPF & QAAP (%)
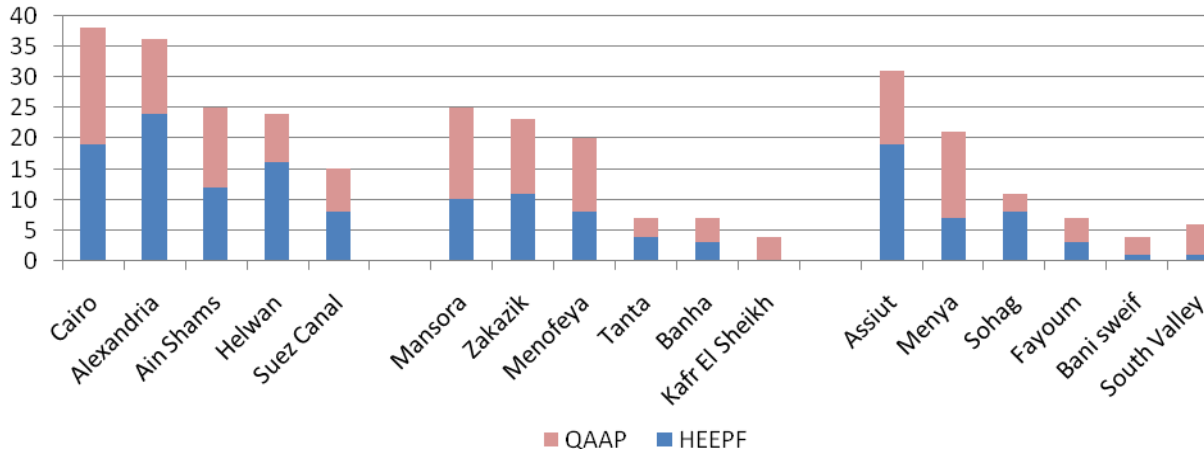
The Second stage: This stage concentrated on determining the faculties inside each of the selected universities. Here the research team agreed on including both the theoretical and applied Faculties. They were chosen according to the participation extent of each sector in the enhancement projects on all Egyptian universities level. According to these criteria, it was observed that Faculties of engineering and medicine are the most active applied Faculties, while Faculties of commerce and literature are the most active theoretical ones.

The Third stage: focused on choosing the random samples from the participants and beneficiaries of the enhancement projects; this includes four categories:
- First: Faculty staff members
- Second: Students
- Third: Teaching Assistants
- Fourth: Post Graduate Students

The sample size in each category was identified, in a way that the error in estimated percentages shouldn't exceed 0.05, which statistically acceptable. The size of each sample as following: 1000 students from the third year or above, 500 of faculty staff members, 350 of the teaching assistants and 300 of post graduate students from each participated university, equally distributed among the four Faculties in each university. The following table shows the total number of the four categories and their achieved sample sizes.

Table (1)
Sample Statistics

Participating Universities	Faculty	Total number of participants			Achieved Sample size			
		Total number of students	Total number of faculty staff members	Total number of teaching assistants	Total number of students	Total number of faculty staff members	Total number of teaching assistants	Post graduates
Cairo university	Medicine	9485	2452	957	250	60	25	49
	Engineering	13227	695	355	250	40	13	46
	Commerce	28807	135	127	251	42	41	30
	Arts	14577	333	202	265	59	40	42
Mansoura University	Medicine	6805	896	530	250	46	39	0
	Engineering	8399	213	174	255	65	35	0
	Commerce	8863	79	75	250	20	6	64
	Art Arts	130	93	253	41	39	13	
Assiut University	Medicine	3564	624	359	271	60	25	33
	Engineering	5576	185	127	250	39	38	4
	Commerce	6078	55	62	252	21	27	9
	Art	4151	100	84	270	29	23	14
		121615	5897	3145	3067	522	351	304

Analysis Method

The Questionnaires included some statements asking the respondent to identify the extent of his approval on each statement achievement from his point of view by choosing a scale from 1 to 6, where the first three choices show disagreement levels (totally disagree – disagree – disagree to some extent), while the last three show the different levels of agreement (agree to some extent – agree – totally agree). The following figure the way of explaining the degree of approval.

Figure (2)

Explaining the degree of approval on each statement achievement

Totally agree	agree	Agree to some extent	Disagree to some extent	Disagree	Totally disagree
6	5	4 3.5 3		2	1
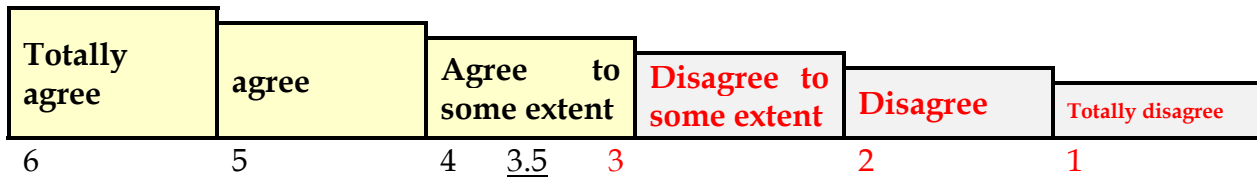
In analyzing the results, we depended on calculating the average degree of approval on each statement achievement for all responses. We took into account all the arithmetic mean limitations resulted from the outlier values, by reviewing the mode, standard deviation values of the responses. The following figure shows the used measurement and its explanation.

Figure (3)

Explaining the agreement degree on statement achievement

6	5	4	3	2	1
Very high degree		High degree	Medium degree	Low degree	Not achieved
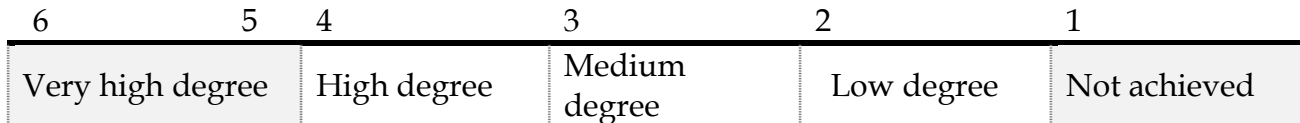
The values from 3 to below 4 express a medium degree of statement achievement, while the values from 4 to below 5 indicates a high degree of achievement, while the values from 2 to below 3 refers to a low degree of achievement. On the other hand, the values from 5 to below 6 refer to a very high achievement degree, while the values from 1 to below 2 indicate a very little degree of achievement.

Study Results

Section I: Communication with the Higher Education Enhancement Project

Knowledge about Higher Education Enhancement project

The results highlighted that the faculty staff members' and their assistants knowledge about the enhancement project is higher in degree than both the under graduate & post graduate students, as 87% of the faculty staff members and 85% of the assistants have mentioned their knowledge about the project in general, while 35% of post graduate students and 46% of under graduate students said that they did not hear about the project before.

Also it was observed that the project is more obvious for the faculty staff members, compared to the teaching assistants, as 74% of the first group mentioned the clarity of the objectives and programs of the project for them whether with great or medium extent, compared to only 55% from the second group, as shown in the following figure

Figure (4)

Clarity of the objectives and programs of the Higher Education Enhancement Project
Relative distribution for faculty staff members and their assistants (%)

	Obvious with a very high extent	Obvious with a very high extent	Not Obvious	Didn't hear about the project
Faculty staff members	29	45	13	13
Teaching Assistants	13	41	31	14
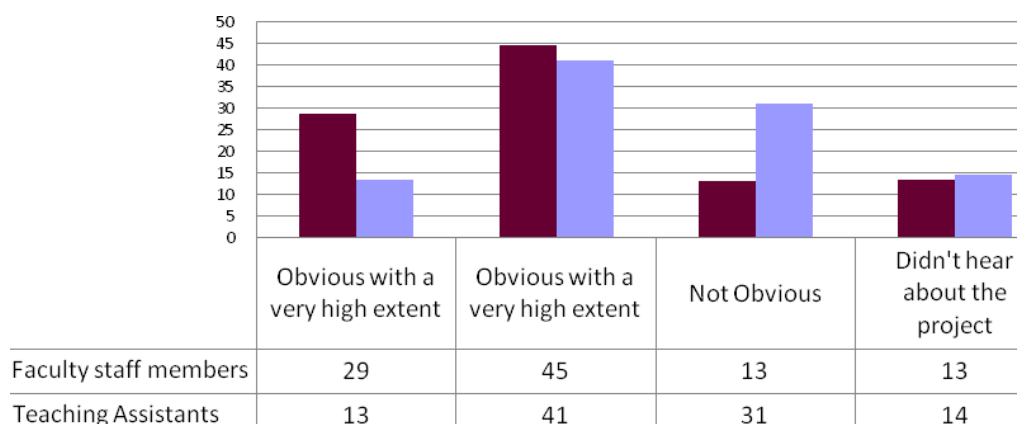
Development within the teaching and learning environment:

In order to identify the degree of development achieved in the teaching and learning environment for different beneficiaries groups, we asked the faculty staff members and teaching assistants to determine their degree of agreement on the following statement: "there is an improvement in the teaching & learning environment within the Faculty in general".

As for the students they were asked to determine their degree of agreement on the following statement "there is an encouraging learning environment within the Faculty". With regard to post-graduate students they were asked to determine their degree of agreement on the following statement "The learning environment of post graduate studies and scientific research encourages and helps learning." The following table shows the answers of different groups of beneficiaries.

Table(3) : Percentage distribution of respondents' degree of agreement on improvement in the teaching & learning environment according to major and the beneficiary group (%)

Number of respondents	Total	Don't know	Totally agree 6	agree 5	Agree to some extent 4	Disagree to some extent 3	disagree 2	Totally disagree 1	
All faculties									
521	100%	2%	7%	31%	37%	10%	9%	5%	Faculty staff members
350	100%	1%	7%	26%	31%	13%	15%	6%	Teaching assistants
312	100%	4%	5%	19%	31%	15%	13%	14%	Post graduates
3039	100%	1%	4%	13%	24%	19%	20%	18%	Students
Medicine									
166	100%	4%	5%	33%	46%	4%	5%	2%	Faculty staff members
89	100%	1%	10%	32%	23%	8%	23%	5%	Teaching assistants
82	100%		5%	26%	37%	12%	10%	11%	Post graduates
764	100%	1%	4%	14%	23%	21%	20%	17%	Students

Engineering									
144	100%	1%	12%	24%	35%	13%	9%	7%	Faculty staff members
86	100%		7%	21%	33%	17%	11%	12%	Teaching assistants
50	100%	8%		14%	26%	26%	14%	12%	Post graduates
756	100%		4%	15%	26%	21%	19%	14%	Students
Commerce									
82	100%	1%	6%	33%	24%	17%	10%	9%	Faculty staff members
74	100%	1%	3%	14%	31%	19%	23%	10%	Teaching assistants
112	100%	6%	7%	12%	28%	13%	17%	18%	Post graduates
746	100%	2%	6%	16%	24%	15%	18%	19%	Students
Arts									
129	100%	1%	5%	34%	35%	9%	12%	3%	Faculty staff members
101	100%		9%	36%	39%	11%	5%	1%	Teaching assistants
68	100%		6%	25%	35%	15%	7%	12%	Post graduates
773	100%	3%	3%	8%	24%	18%	23%	22%	Students

- Statement for faculty staff members and teaching assistants: there is an improvement in the teaching & learning environment within the Faculty in general".
- Statement for students: "there is an encouraging learning environment within the Faculty".
- Statement for post-graduate students: "The learning environment of post graduate studies and scientific research encourages and helps learning."

To summarize information in a certain index in order to allow analysis and comparison between beneficiaries groups and the various scientific specialties, we relied on calculating the average degree of agreement given by each group. The following figure illustrates the calculated average value for different beneficiaries groups.

Figure (6)
Improvement in the teaching and learning environment in general
The average evaluation degree - Scale from 1 to 6

	Medicine	Engineering	Commerce	Literature	Total
Faculty staff members	4.2	4.0	3.8	4.0	4.0
Teaching Asisstants	3.9	3.6	3.2	4.3	3.8
Post Graduate	3.7	3.2	3.2	3.7	3.5
Students	3.1	3.2	3.2	2.8	3.1
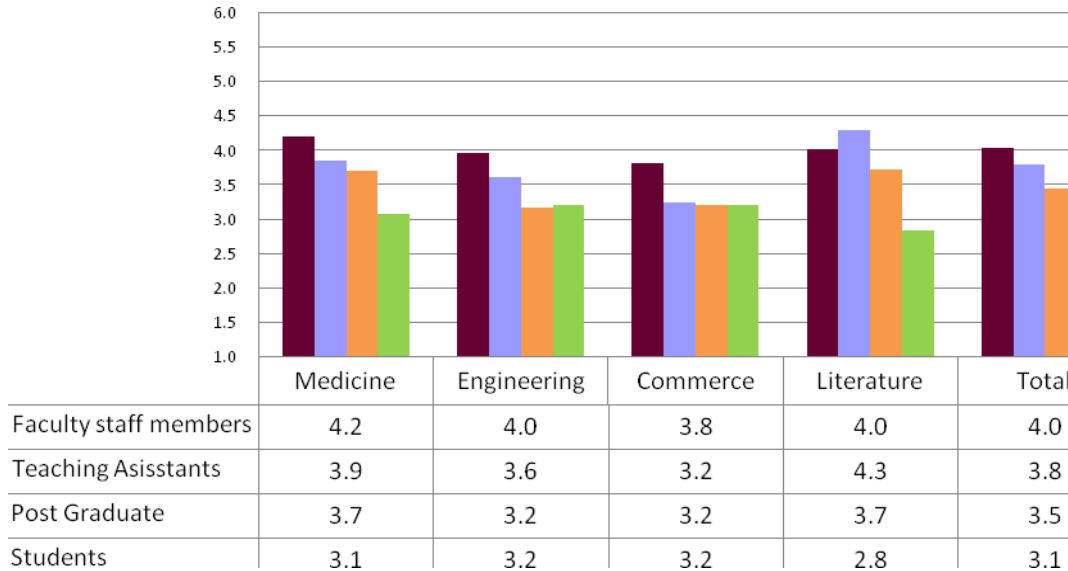
The answers of the teaching stuff members indicate that there is a significant development achieved in the teaching and learning environment in general. This was obvious in the faculty of medicine.
 It is clear from the above figure that the achieved development results were at limited extent within teaching assistants, as they mentioned a medium degree of achieved development. Excluding Faculty of Arts as their answers pointed to a high degree of development. With regard to post-graduate students, they referred to medium degree of encouraging learning environment with a special increase in faculties of medicine and Literature. Answers of the students showed an encouraging learning environment to some extent, but this agreement degree decreased within the Faculty of Arts.

Section II: Information and Communication Technology Project ICTP

Internet Service

To measure the improvement in the Internet service, 3 statements for staff members and 2 statements for assistants and students were used, to develop an instrument to measure various beneficiary groups' satisfaction with the Internet service efficiency and its development.

Table (5): percentage distribution of beneficiary groups` agreement degrees on internet service efficiency index according to university

No. of respondents	total	Totally agree 6	agree 5	Agree to an extent 4	Do not agree to an extent 3	Do not agree 2	Totally disagree 1	group	university
171	100%	6%	32%	42%	11%	5%	5%	Staff members	Cairo
81	100%	9%	32%	27%	15%	6%	11%	Teaching assistants	
825	100%	6%	18%	26%	21%	17%	12%	students	
159	100%	21%	37%	25%	8%	6%	3%	Staff members	Mansoura
70	100%	20%	33%	23%	13%	7%	4%	Teaching assistants	
761	100%	8%	18%	21%	17%	20%	15%	students	
137	100%	12%	40%	34%	11%	2%	1%	Staff members	Assuit
100	100%	12%	39%	25%	15%	7%	2%	Teaching assistants	
824	100%	10%	17%	23%	17%	21%	13%	students	
467	100%	13%	36%	34%	10%	5%	3%	Staff members	Total
251	100%	13%	35%	25%	14%	7%	6%	Teaching assistants	
2410	100%	8%	18%	23%	19%	19%	14%	students	

The previous table shows the percentage distribution of agreement degree according to the developed compound measurement, and in accordance with the beneficiary groups at universities sample. The table shows that there is a good return from the staff members and assistants view relative to the students view within the 3 universities. The (I do not agree % and totally disagree %) reached 33% among the students compared to 13% between the assistants and 8% among the staff members.

Figure (9) and (10) show a high degree of easy internet access from inside the faculty by the staff members and their assistants in different faculties and universities, while this feature is available with a medium degree among postgraduate students and with a lower degree among students. This feature is relatively better for groups of beneficiaries in faculties of medicine and engineering.

Figure (9): Easy Internet Access from inside the Faculty according to Beneficiaries in Different Faculties - Average evaluation degree - Scale from 1 to 6

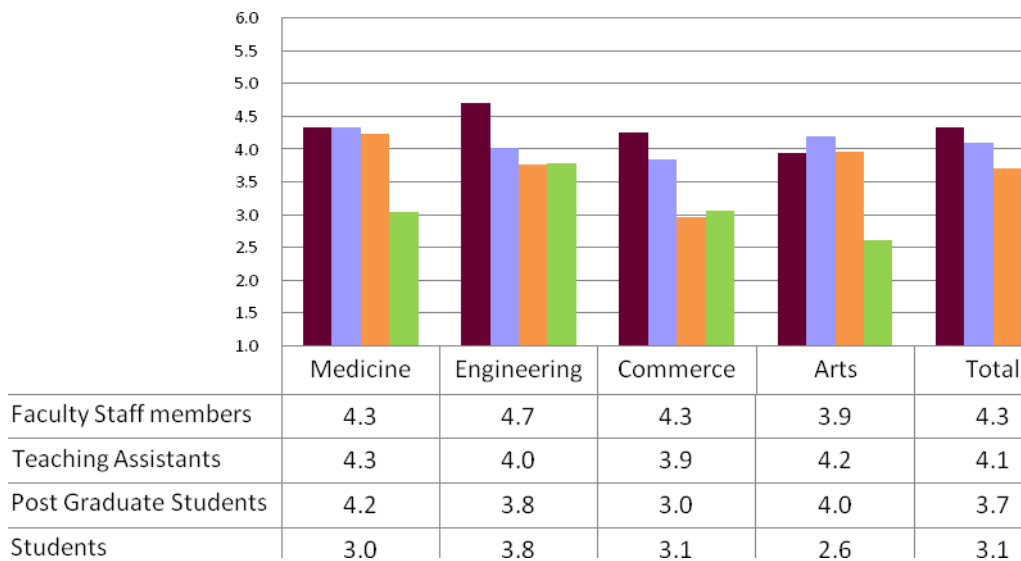|	Medicine	Engineering	Commerce	Arts	Total
Faculty Staff members	4.3	4.7	4.3	3.9	4.3
Teaching Assistants	4.3	4.0	3.9	4.2	4.1
Post Graduate Students	4.2	3.8	3.0	4.0	3.7
Students	3.0	3.8	3.1	2.6	3.1

Figure (10): Easy Internet Access From Inside the Faculty according to Beneficiaries in Different Universities - Average evaluation - Scale from 1 to 6
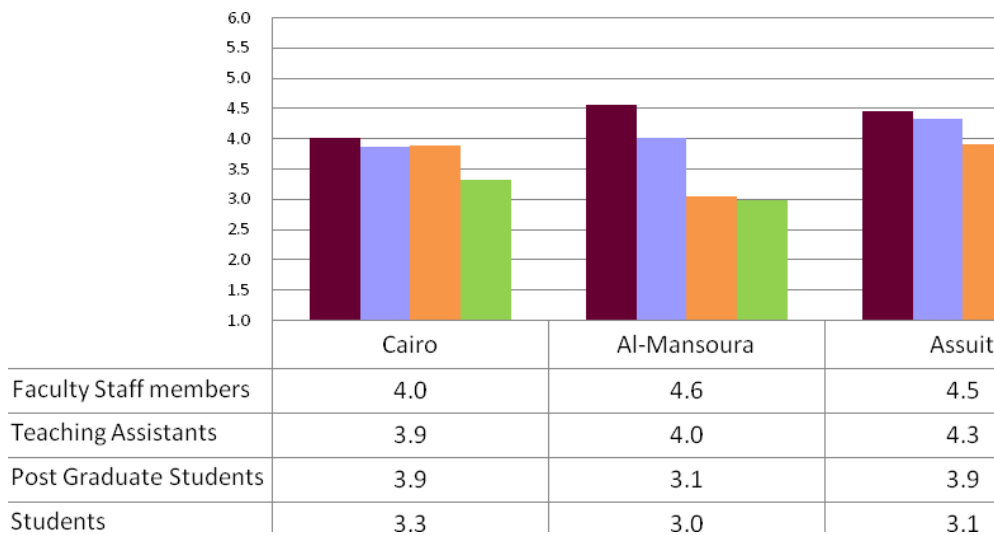
	Cairo	Al-Mansoura	Assuit
Faculty Staff members	4.0	4.6	4.5
Teaching Assistants	3.9	4.0	4.3
Post Graduate Students	3.9	3.1	3.9
Students	3.3	3.0	3.1

Figures (14) shows the pattern of the internet access inside the University for Different Beneficiary Groups. It is clear that 58% of the staff members access the internet from inside the faculty every day or every week, while 74% of them access from outside the faculty. It is also clear that 13% have never accessed the internet inside the faculty and 16% are rarely using it. 25% of the students access the internet daily or weekly from inside the university, while 48% of them access from outside the university. It is also clear that 36% have never accessed the internet from inside the university, and 29% rarely use it.

Figure (14): Percentage of Respondents Who Are Using the Internet Inside/Outside The University Daily or Every Week - Staff Members – Teaching Assistants- Students (%)

	Faculty Staff members	Teaching Assistants	Students
Daily or Weekly From Inside The University	58	43	25
Daily Or Weekly From Outside The University	74	77	48
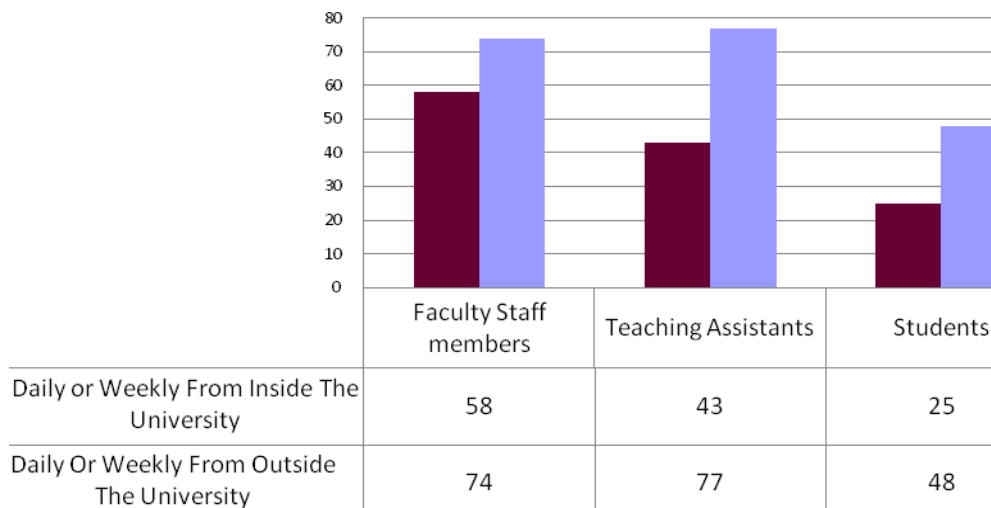
The Digital Library

Figures (18), (19) show the usage pattern of the electronic library by the staff members and their assistants within different faculties and universities. The results show that 15% of the staff members and 18% of the teaching assistants access the electronic library daily or weekly. This access rate decrease significantly in Cairo University compared with other universities. The access rate increase among the staff members and their assistants in the faculty of engineering, to reach 20% within the first group, and 22% for the second group. Moreover, the results show that 47% of the samples` staff members do not use the electronic library, while this percentage reaches its maximum level of 64% among Cairo University respondents. In addition, 44% of the teaching assistants do not use the electronic library.

Figure (18): Percentage of Beneficiaries (Faculty Staff Members -Teaching Assistants) Who Are Using he Digital Library Daily or Weekly according to Specialization (%)

	Medicine	Engineering	Commerce	Arts
Faculty Staff members	7	20	9	20
Teaching Assistants	6	22	18	15
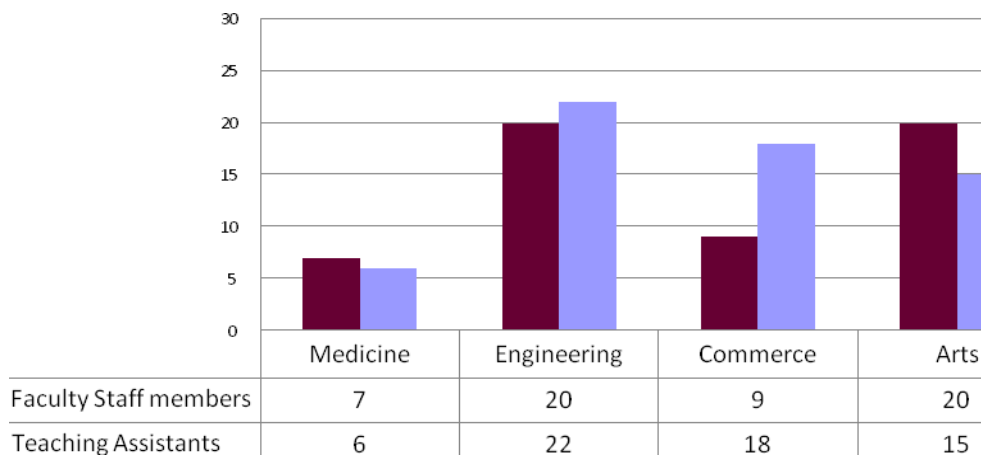
E-Learning

Figure (22) shows the extent of the staff members' agreement in general on e-learning experience generalization, it is clear that there is a high degree of support within all specialties; however this degree decreases in faculties of Engineering and Arts.

Figure (22): The acceptance of Staff Members **for Generalization of E-learning**

Average evaluation Degree - Scale from 1 to 6

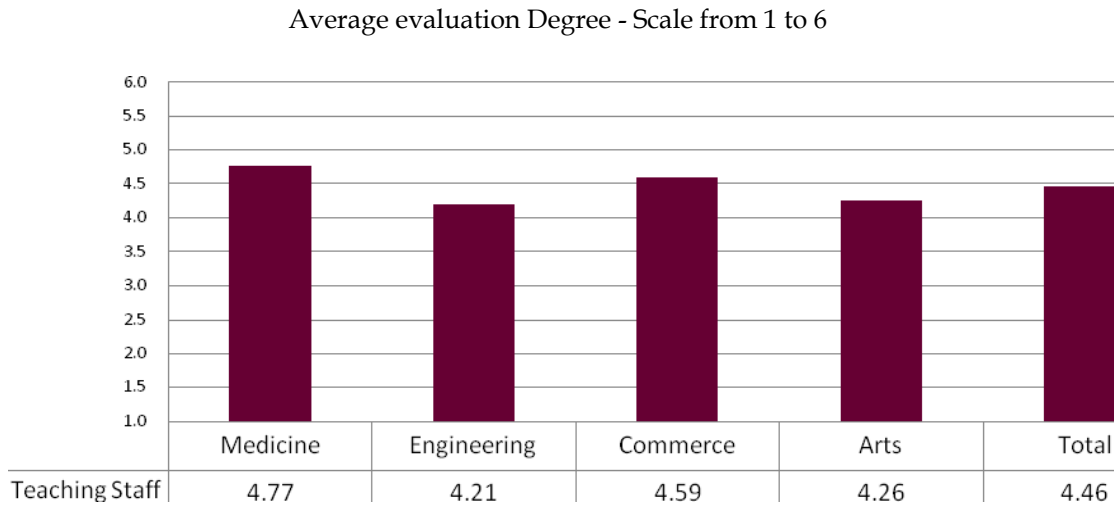|	Medicine	Engineering	Commerce	Arts	Total
Teaching Staff	4.77	4.21	4.59	4.26	4.46

Figure (23) shows the percentage of students who have studied courses in electronic forms and are willing to generalize this experience. This percentage is high in faculties of Commerce and Medicine, and relatively low in Faculty of Engineering.

Figure (23): Students` Agreement on the E-learning Experience Generalization

%

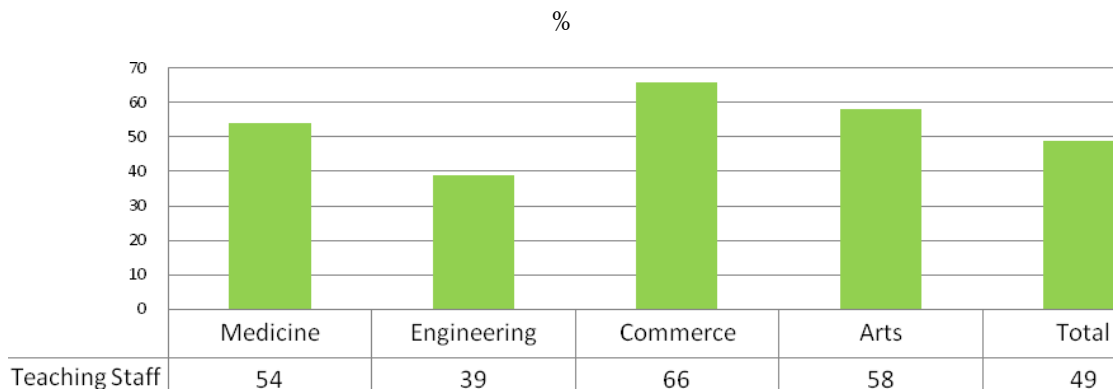|	Medicine	Engineering	Commerce	Arts	Total
Teaching Staff	54	39	66	58	49

Table (8) shows the e-learning preference degree compared to traditional way among students who have studied electronic courses before. 70% of the students prefer to study electronic courses; however this percentage decreases among students in Faculty of Engineering; as 29% of them prefer the traditional way.

Table (8): The Students' Degree of Preference to Study Courses/Books in Electronic form more than the Traditional Way according to Specialization (%)

Total	Traditional way is better	No Difference	Better to some extent	Better to a Great extent	
100	20	7	45	28	Medicine
100	29	9	39	23	Engineering
100	5	8	38	49	Commerce
100	13	15	42	29	Arts
100	21	9	40	30	Total

Courses Related to Information Technology

The following table shows 33% of staff members and 44% their assistants from the total respondents have attended training courses related to information technology, with a two courses on average per person.

Table (14): Percentage of Teaching Staff and Their Assistants Who Attended Courses Related To Information Technology (%)

Teaching Assistants %	Faculty Staff Members %	
45	37	Medicine
28	24	Engineering
32	27	Commerce
66	41	Arts
44	33	All faculties

As for teaching assistants, the following table shows the percentage of those who attended training courses through the university, in order to get International Computer Driving License ICDL, as well as the proportion of people who obtained them, according to the specialty. It is clear that 30% of the teaching assistants attended courses to get ICDL, and only 31% of them could obtain it. The teaching assistants of the Faculty of Arts were the most benefited group, as 39% of them attended the courses.

Table (15): The percentage of Teaching Assistants who attended ICDL courses and those who got it according to Specialization (%)

Managed to get ICDL certificate %	Attended ICDL Courses %	
35	34	Medicine
21	15	Engineering
30	30	Commerce
36	39	Arts
31	30	Total

As for students, the following table shows the percentage of those who attended ICDL training courses through the university, and the percentage of those who managed to get the certificate according to Specialization.

Table (16): The percentage of Students who attended ICDL courses and those who got it according to Specialization (%)

Managed to get ICDL certificate %	Attended ICDL Courses %	
4	3	Medicine
22	19	Engineering
15	16	Commerce
5	4	Arts
12	11	Total

Section Three: Faculty &Leadership Development Project (FLDP):

The following table shows the number of courses attended by the staff members and their assistants, also the number and percentage of courses that they consider as achieving a large benefit for them. The results show that over half of these courses were of huge usefulness for them among all specialties. This is more obvious in the Faculty of Commerce and Faculty of Arts.

Table (20): The attendance of staff members and teaching assistants FLDP courses

Teaching Assistants					Faculty Staff members					
Total	Arts	Commerce	Engineering	Medicine	Total	Arts	Commerce	Engineering	Medicine	
194	1006	291	129	194	1545	498	204	376	467	Number of courses you have attended?
95	560	187	66	95	805	267	111	192	235	Number of courses from which you had a clear benefit?
49%	56%	64%	51%	49%	52%	54%	54%	51%	50%	Percentage of courses that achieved a clear benefit (%)

It is worth noting that the training courses matrix has passed with many stages where several courses were excluded or introduced according to the experiment result. That indicates the need for pre-studies prior the implementation of any similar projects.

Section Four: Quality Assurance and Accreditation Project QAAP

The projects` success in defining & spreading awareness of the quality system

Figures (24) and (25) show the knowledge degree of the staff members and assistants about the Quality Assurance & Accreditation Project, and it appears that 63% of the staff members know about the project with a large or medium degree, compared to only 36% of the teaching assistants.

Figure (24): Faculty Staff Members Knowledge Degree about the Quality Assurance & Accreditation Project according to Specialization
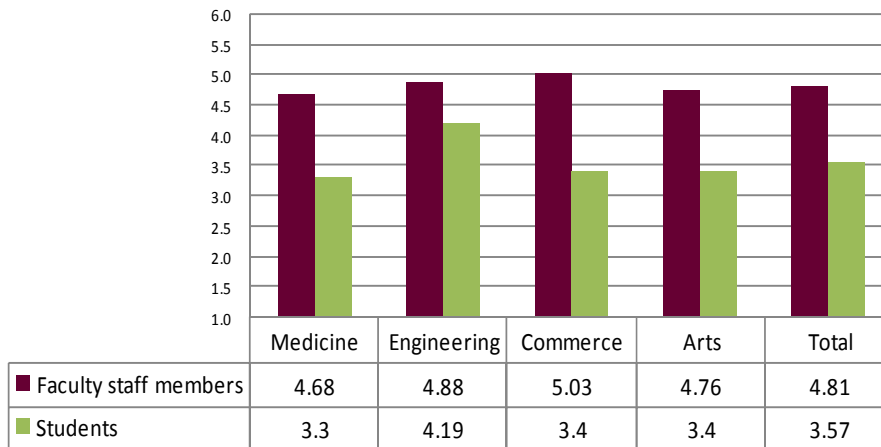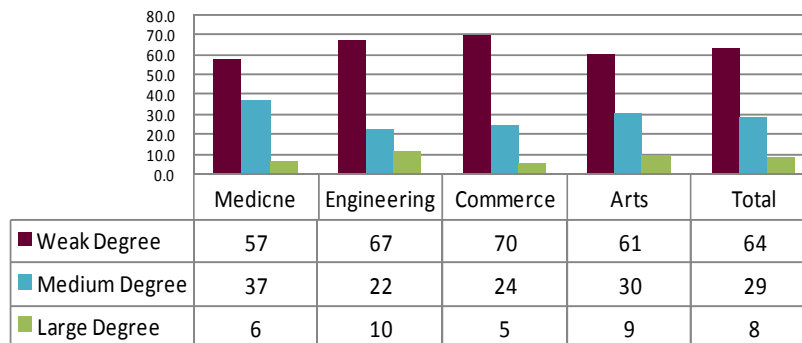
	Medicine	Engineering	Commerce	Arts	Total
Faculty staff members	4.68	4.88	5.03	4.76	4.81
Students	3.3	4.19	3.4	3.4	3.57

Figure (25): Teaching Assistants Knowledge Degree about the Quality Assurance & Accreditation Project according to Specialization

	Medicne	Engineering	Commerce	Arts	Total
Weak Degree	57	67	70	61	64
Medium Degree	37	22	24	30	29
Large Degree	6	10	5	9	8

The following figure shows the percentage of students who visited the internet Faculty's site. It is clear that there is high percentage among the students within the faculties of Engineering (84%) and Medicine (61%), compared to the faculties of Commerce (56%) and Arts (45%).

Figure (30): The Students who visited the Internet Faculty Site according to Specialization (%)

	Medicine	Engineering	Commerce	Arts	Total
Series1	61	84	56	45	61
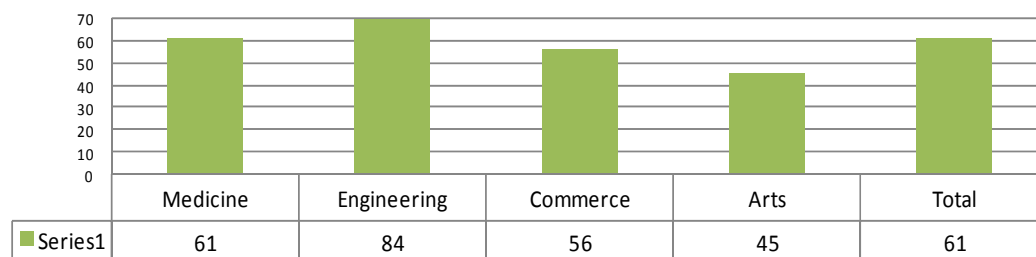
The projects` success in identifying and delivering a clear message for each Faculty

The following table shows the staff members, and assistants average agreement degree, on some statements related to the Faculty's mission.

Table (25): statements relate to development faculty mission and success index according to specialization – average evaluation degree - Scale from 1 to 6

Teaching assistant					Teaching staff					Statement
total	Arts	Commerce	Engineering	Medicine	total	Arts	Commerce	Engineering	Medicine	
4.04	3.84	3.79	4.1	4.43	4.64	4.64	4.76	4.55	4.66	There is a clear faculty mission
3.87	3.71	3.47	3.82	4.44	4.55	4.47	4.86	4.45	4.56	I am satisfied with the faculty mission
3.72	3.38	3.34	3.9	4.28	4.27	4.27	4.4	4.21	4.24	Improvement implementations match the faculty mission
3.71	3.3	3.48	3.9	4.21	4.17	4.09	4.51	4.13	4.09	Faculty mission matches the national and international requirements
3.02	3.26	3.78	4.22	3.99	4.05	3.11	2.88	3.89	4.06	Graduates gain knowledge and skills satisfies faculty mission
3.82	3.50	3.49	3.95	4.32	4.36	4.30	4.57	4.34	4.34	Developing faculty mission success index

Projects success in communicating with the project and in creating a suitable environment among staff members

The following table shows the average agreement degree among staff members on the Quality Project. There is a general positive opinion trend towards the project, as there was a great agreement among all specialization up on the comprehensive role played by the Quality Unit within the faculties and universities level. Moreover, there was a great agreement on faculties' commitment with the required quality standards, which would help achieving a better learning environment and raising the graduate level and lead eventually to obtain the accreditation. Finally, there was generally a degree of optimism concerning the possibility of positive results achievement in the near future.

Table (27): Creating suitable environment among teaching staff members for applying quality systems – related statements and success index – average evaluation degree - scale from 1 to 6

ar

Total	Arts	Com merce	Engin eering	Medic ine	Statement
4.91	4.69	5.18	4.76	5.08	There is a need to implement the quality system within the Faculty
4.24	4.36	4.55	4.07	4.13	Quality Unit within the Faculty communicate with us on an ongoing basis and provide all the help and clarification that we need
4.05	4.03	4.23	3.85	4.15	Quality Center at the university level plays an important role in this context
4.69	4.48	4.88	4.44	4.98	Commitment to quality standards required in the faculties can lead the faculty / university to get the accreditation with the continued implementation of the project
5.01	4.80	5.25	4.91	5.14	I agree to the development and improvement of the curriculum, which I taught in the form in which consists with the requirements of quality and accreditation
4.81	4.60	5.09	4.64	5.01	Commitment to quality standards required in the faculty would help to achieve a better environment for learning and to raise the level to graduate level, who can compete internationally
3.98	4.02	4.09	3.77	4.1	Quality systems are developed successfully within the Faculty
4.01	4.12	3.93	3.77	4.19	I expect a positive outcome in the near future
4.48	4.39	4.68	4.32	4.62	Composite Index of *Projects` success in communicating with the project and in creating a suitable environment among staff members*

The previous table shows 8 statements that could be used to develop an index to measure Projects success in communicating with the project and in creating a suitable environment among staff members.
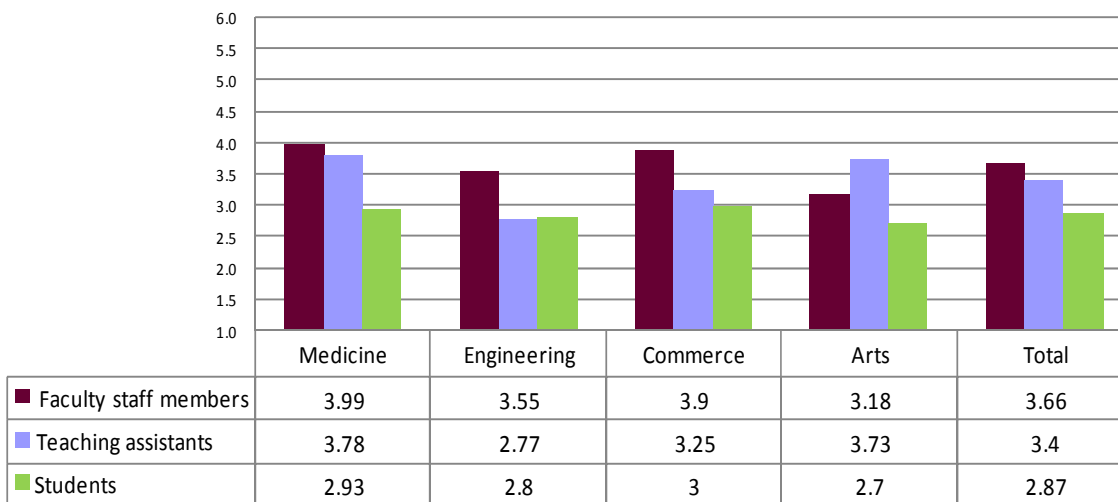
Section Five: Teaching and Learning Environment in general

In this part, one group of respondents or more is asked about their point of view, regarding satisfaction or agreement degree concerning the achievement of a certain result related to the teaching and learning environment in general. And it is worth mentioning that these statements are related directly or indirectly with the outputs of the overall development projects.

Appropriateness of the teaching place and availability of assistant teaching tools

The following figure shows a low satisfaction degree among the different groups about the appropriateness of the teaching place and assistant teaching tools. Staff members find that the teaching place is appropriate to a certain extent, and the assistant teaching tools are available with an acceptable degree, this degree decreases among the teaching assistants; however they consider that the teaching places are appropriate, While Students consider the teaching places inappropriate.
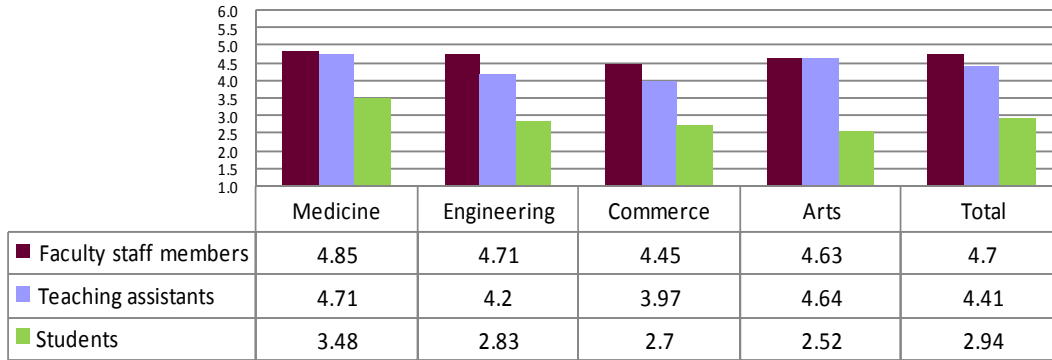
Figure (31): "Appropriateness of teaching place and availability of assistant teaching tools"
Average evaluation degree among beneficiary groups according to Specialization
Scale from 1 to 6

	Medicine	Engineering	Commerce	Arts	Total
■ Faculty staff members	3.99	3.55	3.9	3.18	3.66
■ Teaching assistants	3.78	2.77	3.25	3.73	3.4
■ Students	2.93	2.8	3	2.7	2.87

Applying various teaching methods:

The following figure shows high agreement degree, among staff members and teaching assistants, on applying various teaching methods, however this degree is lower among students significantly within the faculties of Arts and Commerce.

Figure (32): "Applying various teaching methods"
Average evaluation degree among beneficiary groups according to Specialization
Scale from 1 to 6

	Medicine	Engineering	Commerce	Arts	Total
■ Faculty staff members	4.85	4.71	4.45	4.63	4.7
■ Teaching assistants	4.71	4.2	3.97	4.64	4.41
■ Students	3.48	2.83	2.7	2.52	2.94

Using New & multiple measurement methods while forming the exams:

The following figure shows the average agreement degree of staff members on the statement "I keen on using new & multiple measurement methods to assess the students' level while forming the exam".

Figure (33): "Using new and various measurement methods"
The average evaluation degree among staff members according to Specialization
Scale from 1 to 6

	Medicine	Engineering	Commerce	Arts	Total
■ Series1	4.8	4.82	4.82	4.66	4.78
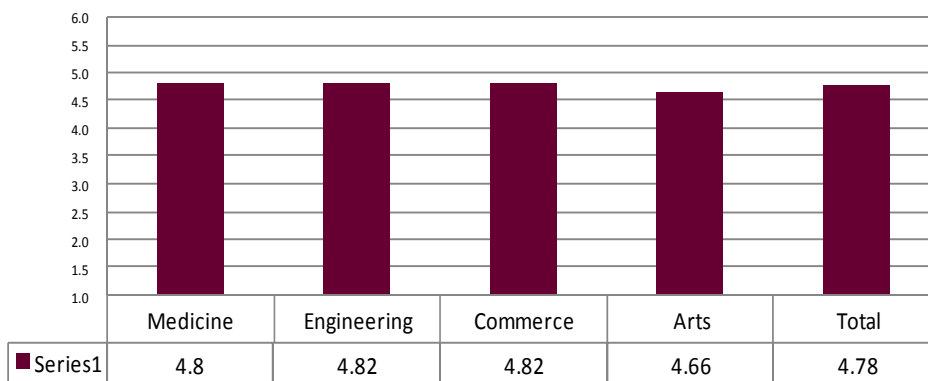
The previous figure shows that the staff members keen on applying new and multiple measurement methods for student's level evaluation.

On the other hand, the following figure shows the students` average agreement degree on the statement "I need only to memorize well, in order to get good marks in exams", and there was an obvious high agreement degree among the Faculty of Medicine students, compared with a medium degree among the students of other specializations.
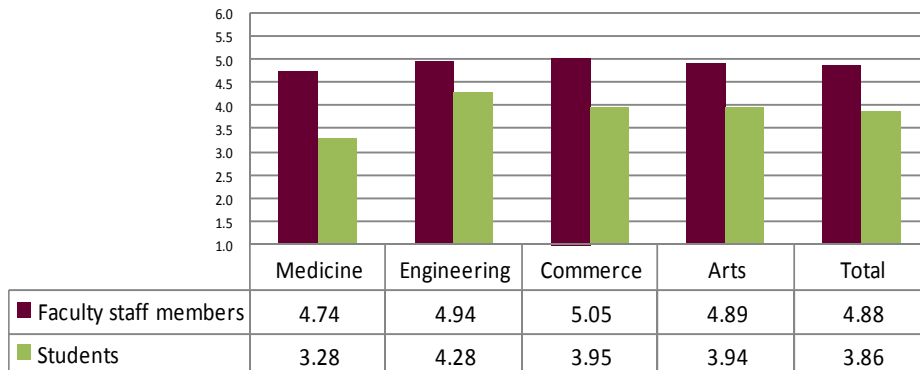
Figure (34): "I need only to memorize well, in order to get good marks in exams"
The average evaluation degree among students according to specialization
Scale from 1 to 6

	Medicine	Engineering	Commerce	Arts	Total
Series1	4.53	3.57	3.52	3.76	3.85
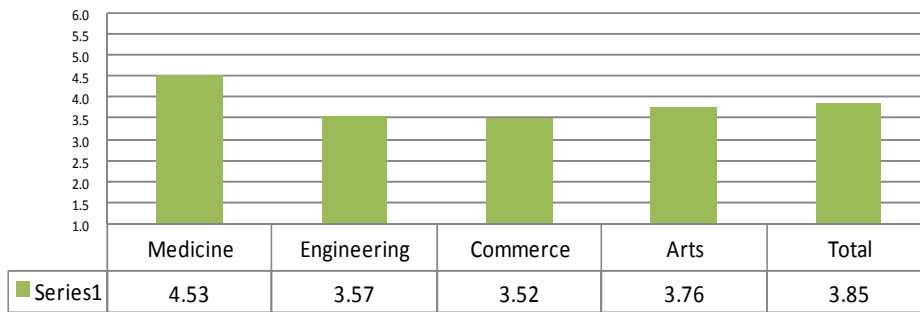
Clarifying the overall course objectives to the student since the beginning of the academic year:

The following figure shows a great concern among the staff members to clarify the overall course objectives from the beginning, the same result indicated from the students` answers but with a lesser degree. This is also achieved with a lower degree among the Faculty of Medicine students.

Figure (35): "The overall course objectives were clarified to students from the beginning"
The average evaluation degree among staff members and students according to specialization
Scale from 1 to 6

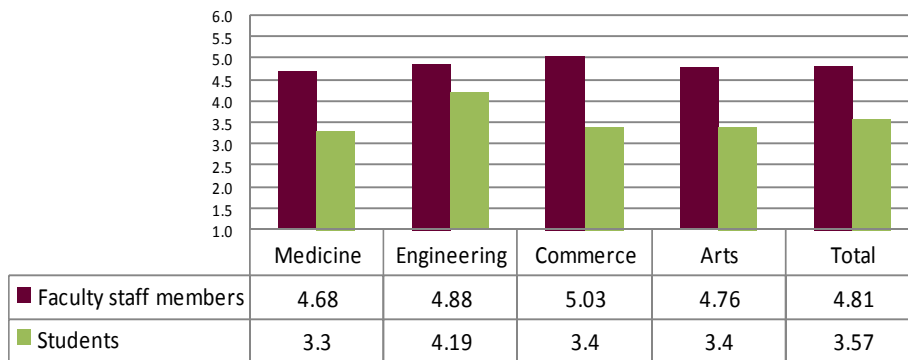|	Medicine	Engineering	Commerce	Arts	Total
Faculty staff members	4.74	4.94	5.05	4.89	4.88
Students	3.28	4.28	3.95	3.94	3.86

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Clarifying the applied evaluation method to the student since the beginning of the academic year:

The following figure shows a great concern among the staff members to clarify the applied evaluation method to the student from the beginning of the academic year. On the other hand, we can observe that students agree on the same thing with a high degree within the Faculty of Engineering compared to lower degrees in the remaining faculties.

Figure (36):
"The evaluation method was clarified to the student since the beginning of academic year"
The average evaluation degree among the staff members and students according to specialization
Scale from 1 to 6

	Medicine	Engineering	Commerce	Arts	Total
■ Faculty staff members	4.68	4.88	5.03	4.76	4.81
■ Students	3.3	4.19	3.4	3.4	3.57

Lectures and courses:

The following two tables show the students` average agreement degree and its percentage distribution on some statements related to the lectures, and curriculum. It is clear that the students are keen to attend the lectures among all specialties, as it has been noted that attendance helps in understanding the scientific subject. The answers also indicated that the provided material (books) are not enough understood, and there is medium satisfaction level with the lecturers performance, even lower with significant difference within the Faculty of Medicine (P <0.001). Moreover, it was mentioned that the curriculum have helped to upgrade some of the mental capacity among students by an average degree, this degree is lower with significant difference for the Faculty of Medicine (such as analytical and problem solving capabilities).

Table (28): statements relate to lectures and courses for teaching staff members according specialty
Average evaluation degree – scale from 1 to 6

Total	Arts	commerce	Engineering	Medicine	Statements
5.1	5.3	4.99	5.35	4.76	I am keen on attending the lectures.
4.79	5.03	4.91	4.81	4.39	Attending the lectures help me greatly to understand the course
3.95	3.91	4.13	4.08	3.7	I am Satisfied with the lecturers performance in general.
3.77	3.94	3.9	3.77	3.46	Faculty staff members are explaining what is required from me in each subject, in an easy and clear way.
3.52	3.54	3.69	3.47	3.41	The presented scientific materials (books) are clear and understandable
3.72	3.84	3.92	3.96	3.16	Course and teaching methods have helped in enhancing some of my mental and professional capacity (such as analytical capabilities and problem-solving skills and the ability to innovate ......)
3.87	3.48	3.73	4.11	4.15	Lecturers are committed to the time of the beginning and end of lectures
3.93	3.94	3.92	4.05	3.8	Lecturers provide useful information during all the lecture time.

Table (29): some statement related to performance inside lectures
Percentage distribution of teaching staff members according to specialty
Evaluation degree – scale from 1 to 6

No. of respondents	total	Totally agree 6	agree 5	Agree to an extent 4	Do not agree to an extent 3	Do not agree 2	Totally disagree 1	Group
I am Satisfied with the lecturers performance in general.								
758	100%	6%	19%	39%	18%	13%	6%	Medicine
751	100%	11%	27%	37%	15%	7%	4%	Engineering
732	100%	17%	25%	33%	12%	8%	6%	Commerce
753	100%	10%	24%	37%	12%	9%	8%	Arts
2994	100%	11%	24%	36%	14%	9%	6%	Total
The presented scientific materials (books) are clear and understandable								
756	100%	3%	14%	35%	24%	14%	10%	Medicine
752	100%	3%	14%	41%	20%	13%	9%	Engineering
735	100%	7%	20%	36%	15%	11%	10%	Commerce
758	100%	7%	17%	34%	17%	15%	10%	Arts
3001	100%	5%	16%	37%	19%	13%	9%	Total
Course and teaching methods have helped in enhancing some of my mental and professional								

capacity							
745	100%	6%	15%	27%	14%	20%	18%	Medicine
742	100%	14%	26%	29%	13%	10%	9%	Engineering
729	100%	18%	25%	24%	10%	11%	12%	Commerce
738	100%	13%	25%	29%	10%	12%	11%	Arts
2954	100%	13%	23%	28%	12%	13%	13%	Total

Faculty Library

Figure (38) shows the different beneficiary groups view point about the possibility of easy borrowing from the library. It appears that this privilege is available significantly for the staff members and their assistant, but moderately for the students, while mildly for post graduate students.

Figure (38): "The Possibility of easy borrowing from the library"
The Average evaluation degree by beneficiary groups According to Specialization
Scale from 1 to 6

	Medicine	Engineering	Commerce	Arts	Total
Professors	4.28	4.77	5.11	4.43	4.58
Assistants	4.54	4.4	4.29	4.47	4.43
Graduate Students	3.74	3.03	3.2	3	3.29
Students	3.28	3.73	3.65	3.53	3.54
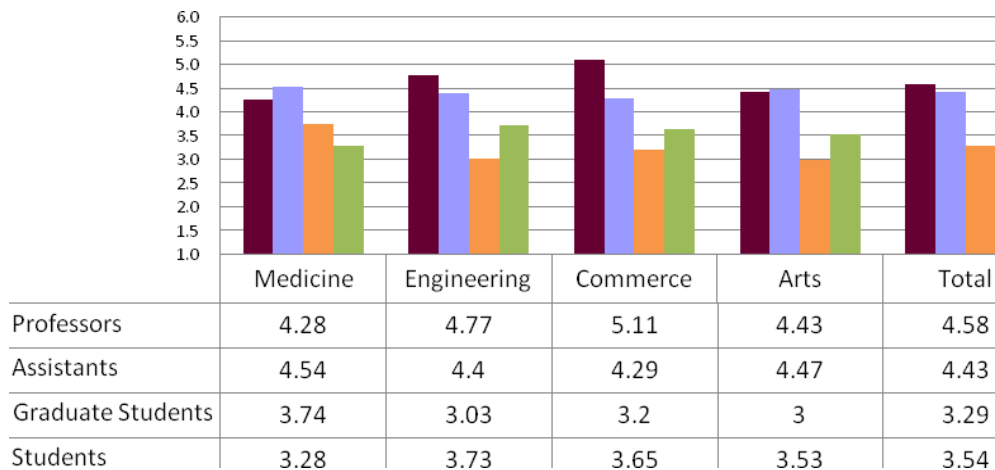
Figure (39) also indicates that the library succeeded significantly in providing books and references needed by staff members, teaching assistants, post graduate students and Faculty students.
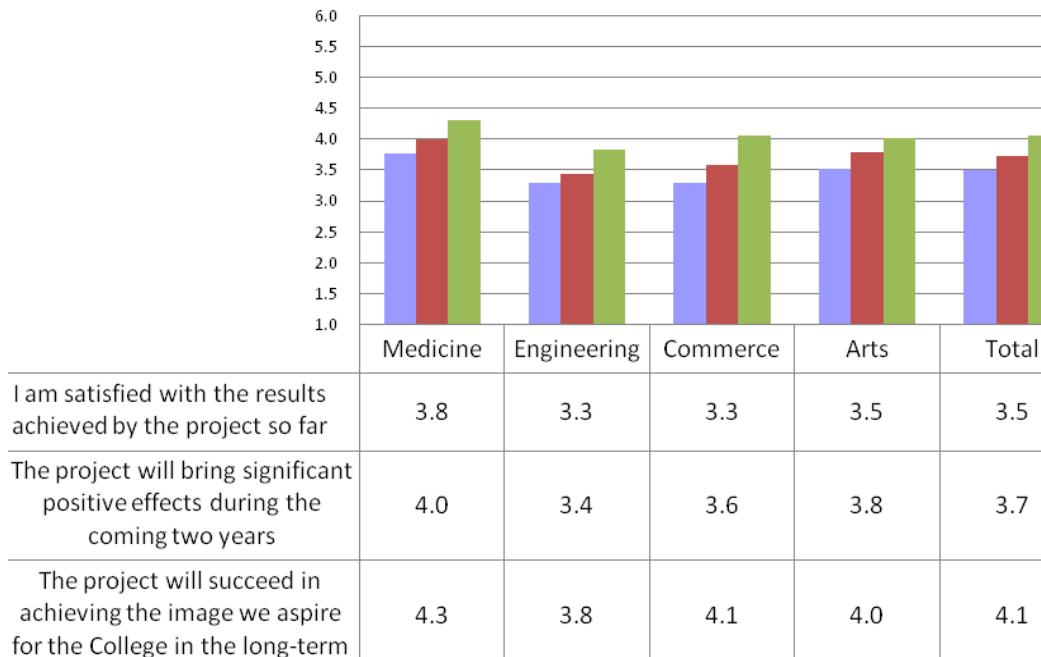
|	Medicine	Engineering	Commerce	Arts	Total
Professors	4.09	3.96	4.25	3.51	3.94
Assistants	4.15	3.88	3.55	3.96	3.9
Graduate Students	4.01	3.82	3.97	3.76	3.91
Students	4.01	3.76	3.88	3.73	3.84

Section Six: Future Vision, Constraints and Proposals

The Faculty staff members' vision regarding the Higher Education Enhancement Project

Figure (43): The Faculty staff members` vision regarding the Higher Education Enhancement Project
The Average evaluation degree according to Specialization
Scale from 1 to 6

	Medicine	Engineering	Commerce	Arts	Total
I am satisfied with the results achieved by the project so far	3.8	3.3	3.3	3.5	3.5
The project will bring significant positive effects during the coming two years	4.0	3.4	3.6	3.8	3.7
The project will succeed in achieving the image we aspire for the College in the long-term	4.3	3.8	4.1	4.0	4.1

The Teaching Assistants Vision Regarding Higher Education in Egypt

Figure (44): "I am optimistic regarding the future of higher education in Egypt"
The Average evaluation degree by Teaching Assistants according to Specialization
Scale from 1 to 6

	Medicine	Engineering	Commerce	Arts	Total
Series1	3.18	2.61	2.80	3.69	3.12
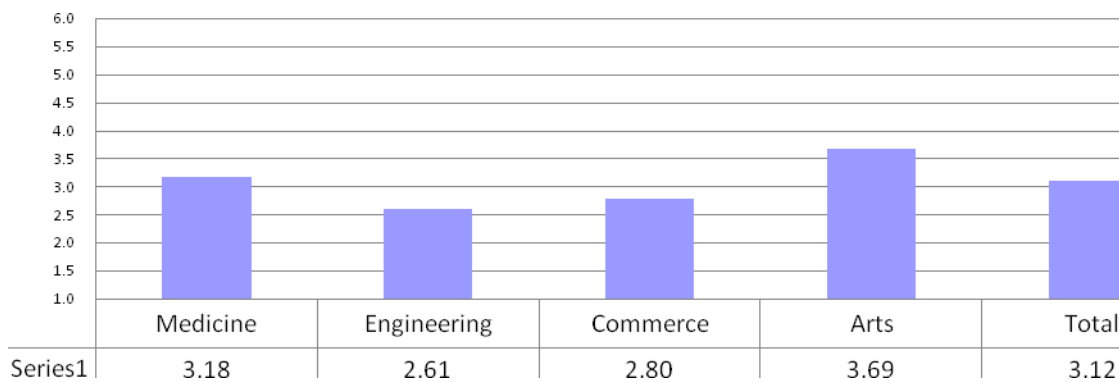
Staff Members' Viewpoint about the Effects and Constraints/Incentives Related to HEEP Implementation"

Figure (45): The Expected Impacts of the Project related to Graduate Qualification Level
Of Education Quality by Staff Members according to Specialization - The Average evaluation degree
Scale from 1 to 6

	Improve Graduate Qualification Enhancing his Opportunities in Labor Market	A Higher Quality Level in Education in the Field of Specialization
Medicine	4.45	4.69
Engineering	4.14	4.2
Commerce	4.52	4.56
Arts	4.33	4.49
Total	4.34	4.48
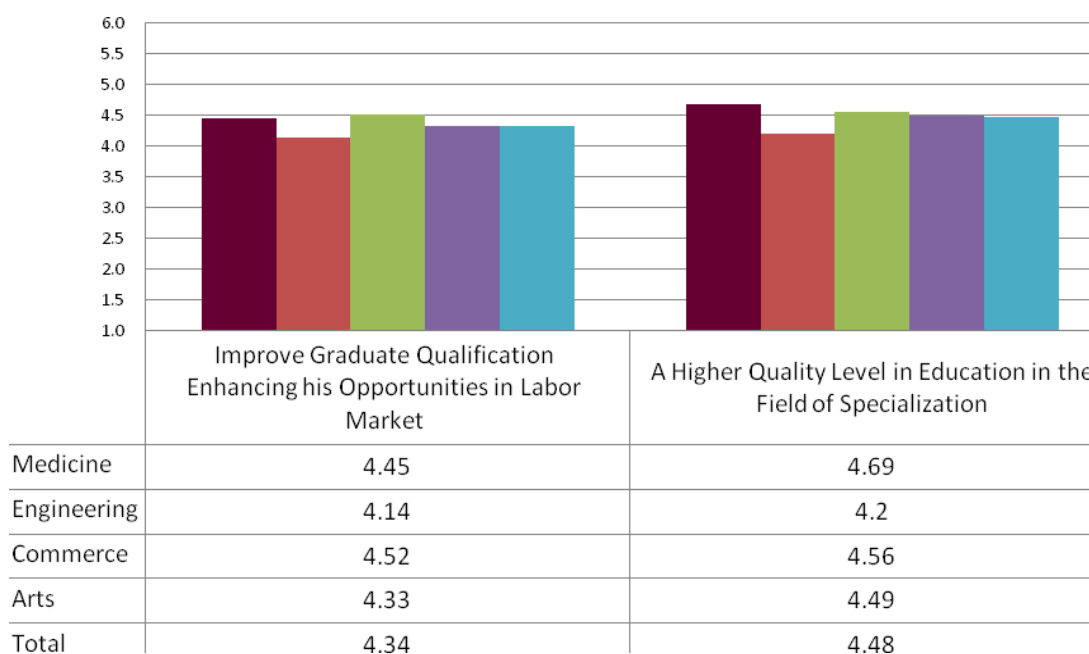
The following figure illustrates the staff members` viewpoint regarding the most important constraints and incentives that may affect the benefit from HEEP implementation.

Figure (46): Constraints and Incentives that may affect the Benefit from the HEEP
Average Impact Degree, negatively or positively, on the project
Scale from 1 to 6

	Centralized Adminstration	Regulations and laws governing higher education	Employers associated with the scope of specialization	Faculty teaching staff	Increased competition among colleges
Series1	2.7	2.86	3.81	4.07	4.46
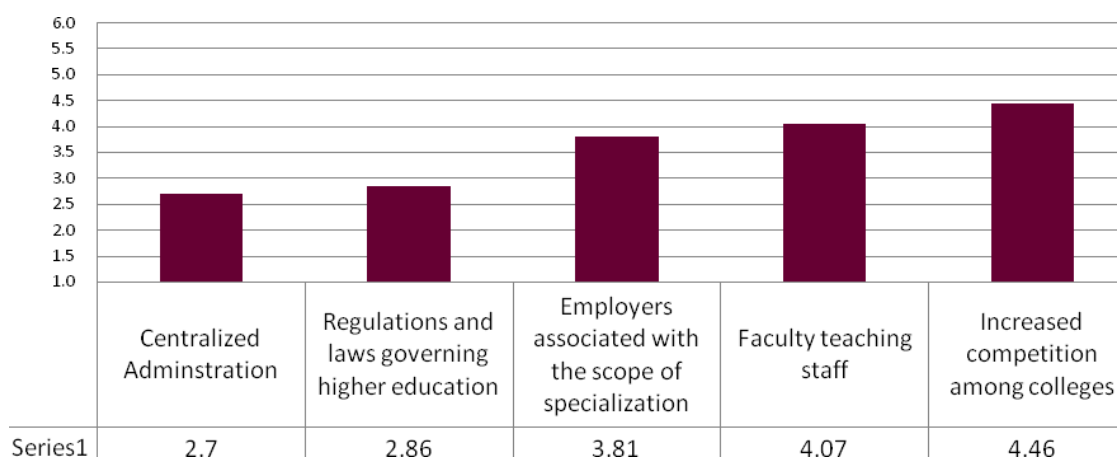
Negative Aspects during the last Five Years in Higher Education Environment

The increasing number of students was considered the most significant negative aspect noted by the staff members. Moreover, some of the staff members do not recognize the HEEP properly, in addition to the lack of adequate scientific research facilities. Also, some staff members complained about improper attention given to their financial and moral status, as well as red tape and intransigence in some cases within the implementation of decisions by the University administration.

As for the teaching assistants, they mentioned the students` number increase within faculties of Arts, Commerce, and Engineering. They also complained about red tape and the University administration treatment within the faculties of Medicine and Engineering, also there were complaints about regulations and laws related to the M.A. discussion and forbidding obtaining M.A. from outside the Faculty where the assistant works.

The students` most important negative aspect was related to the exams, in terms of evaluation method, the exam place, and the results delay and being linked with faculty fees payment; such complaints were relatively more obvious within the faculties of Medicine and Commerce. Moreover, the students complained about their relation with the staff members, the schedule of lectures, the delay in providing books, some courses are not empirical and e-learning courses.

A complaint also appeared within the Faculty of Engineering about some of the specialized subjects being taught during the first year instead of third or fourth year. Students also mentioned the expensive books and high Faculty fees and lack of attention to expatriates. Some students demanded more attention to cleanliness of teaching rooms and restaurants.

Positive Achievements during the Last Five Years in Higher Education Environment

Staff members believe that the development project is the most important positive achievement during the last five years within higher education. They also pointed to salary increases, and the higher attention given to them, as well as the development of textbooks and curricula.

Also, teaching assistants believe that such development project is the most important positive development achieved during the last five years within higher education, and then comes the increase in salaries and the electronic library project. Faculty of Medicine staff members mentioned both curriculum and explanation methods improvement as positives achieved outcomes.

Students have been asked about their viewpoint regarding the most important advantages occurred during their stay in faculty. They referred to student activities and making new friends, the style and way of explanation, as well as acquiring new skills and information, in addition to increase in their analysis capabilities.

Important Proposals for Higher Education Development

Staff members demanded for the provision of all facilities required for the higher education development implementation & marketing, they also demanded more attention to scientific capacity and skills building for them, as well as supporting and developing the infrastructure and laboratories, increasing salaries, reducing the number of accepted students, developing of courses and books, caring about pre-University education, and reducing red tape.

Teaching assistants' proposals included the provision of the necessary facilities and support to encourage scientific research, greater promotion for the HEEP. They also mentioned the importance of linking

courses to practice. Faculty of Medicines` teaching assistants pointed to the attention needed for skills development, through the use of international expertise and the increase of specialized courses. While in the Faculty of Engineering claim was made to reduce the working hours and to increase salaries. Faculties of Arts and Commerce called for more attention to infrastructure.

Conclusion

Here is a quick summary of the main points of the report conclusions:

- There is a high degree of communication between the development project and the staff members. However, there is a need for further objectives and programs clarification for the teaching assistants and students.

- Regarding the communication and information technology project, there is generally an agreement degree about the improvement in the Internet services level; in terms of ease of entry and the speed of loading and a constant level of service. However, a lower satisfaction degree was shown among students compared to staff members and their assistants.

- A great praise was made regarding the electronic library, as well as its ability in providing the needed references and studies, but more encouragement is needed for the expansion of using this feature among various beneficiary groups, where the results showed a large proportion of staff members and their assistants who are not dealing with the electronic library.

- Regarding teaching e-learning courses, opinions were divided between supporters and opponents students, due to the presence of some difficulties in teaching these courses, such as the lack of computers for all students, and the need to activate a mechanism that compensates the missing communication between the professor and student.

- There is a clear need for more activation of the e- mail usage among beneficiary groups.

- Regarding the FLDP, the staff members and their assistants have welcomed these courses, and have shown satisfaction about the diversity of training matrix, and the level of equipped centres and classrooms as well as the trainers' level. Reference was made to a significant benefit achieved from attending most of these courses, and they believe that providing these courses would create human capital within universities. However, there is a complaint improper dates and timing of these training courses, especially among the staff members.

- Regarding the quality and accreditation project, there is a positive trend among the staff members in terms of the need for its application, and there is satisfactory degree of communication and cooperation among the quality units and centres within the faculties and universities. Also, a state of optimism has emerged regarding positive results achievement in the near future, as well as upgrading capabilities and qualifications of the graduate.

- A lack of knowledge about the Faculty mission content as well as a lack of content satisfaction has appeared in some cases among the students; this requires more publication and explanation of the Faculty mission for students, in order to familiarize them with the mission content and increase their convince with it.

- A moderate degree of optimism can be observed in general among the staff members regarding the possibility of positive results achievement through the project before the end of 2010. This degree increases for the long-term in terms of; better graduate upgrading and thus enhance his opportunities in labor market, as well as achieving better quality of higher education.

- Centralization and regulations as well as the laws governing higher education, appeared as barriers to achieve satisfactory benefits from the development project implementation. On the other hand, the staff members and business owners associated with various specializations, and the presence of a competitive environment among faculties have considered as catalysts that could help for the development project success.

Annex 6. Stakeholder Workshop Report and Results
(if any)

ICR Workshop

Participants' Feedback

Dr. Ahmed Dewidar
The World Bank

QAAP

Main Achievements	Freq.	Sus.
1. Establishment of QAAP Centers at every university	8	2 (3) 1 (4) 0 (1)
2. Establishing the Quality Assurance Culture in Egypt	5	2 (3) 1(1) 0 (1)
3. Formation/development of good teams/qualified personnel	4	2 (2) 1 (2)

QAAP

Main Achievements	Freq.	Sus.
4. Documentation (Course filing, specs, reports)	4	2 (2) 1 (2)
5. Preparation of 13 universities QA startegic plans	3	2 (2) 0 (1)
6. Establishment of NAQAAE	2	2 (1) 0 (1)

QAAP

Lessons Learned:	Freq.
1. Involving staff members, students and community is essential and fruitful	3
2. Support of top management is essential	3
3. Resistance is inevitable. Persistence is necessary (Change management)	2
4. Essential continuous training for upgrading	2

HEEPF

Main Achievements	Freq.	Sus.
1. Creating a culture of competitiveness with teamwork spirit	8	2(4) 1(3) 0(1)
2. Monitoring & Evaluation is a unique	4	2 (2) 1 (1)
3. Diversity of projects and topics	3	2(2) 1 (1)
4. Improving infrastructure in some institutes (lab, etc,)	2	2 (1) 1 (1)

HEEPF

Main Achievements	Freq.	Sus.
5. Spreading the culture of planning educational projects	2	2(1) 1(1)
6. Establishing project management techniques	2	2(2)
7. Emphasis on community oriented projects	2	2(1) 1(1)
8. Diversity and innovation in project ideas	2	2 (1) 1 (1)

HEEPF

Lessons Learned:	Freq.
1. Teamwork spirit	2
2. How to write a competitive research proposal	2
3. Project management and M& E are a must	2
4. Funding is essential for research enhancement	1
5. A link with actual community needs was established	1

FLDP

Main Achievements	Freq.	Sus.
1. Certification of Internationally Qualified trainers	6	2 (4) 1 (2)
2. Change of faculty members' attitude towards training	4	2 (2) 2 (1)
3. Establishment of FLDP Centers at every university	4	2 (1) 1 (3)
4. Spreading the culture of training among faculty members	4	2 (2) 1 (2)

FLDP

Main Achievements	Freq.	Sus.
5. Improving the efficiency of staff members and assistants	3	2 (1) 1 (2)
6. Production of training material that is competitively refereed	2	2 (2)
7. Linking project outcomes to clear local and international standards	1	2 (1)

FLDP

Lessons Learned:	Freq.
1. Developing new human resource cadres in different universities with different specialties	2
2. FLDP should target senior administrators and students	1
3. Extending project services to private universities and Arab countries	1
4. FLDP programs should be optional not obligatory	1

ICTP

Main Achievements	Freq.	Sus.
1. Development of IT network/infrastructure	6	2 (4) 1 (2)
2. MIS	3	2 (2) 1 (1)
3. Establishing and Activation of E-learning	3	2 (1) 1 (2)
4. Digital library	3	2 (2) 1 (1)

ICTP

Main Achievements	Freq.	Sus.
5. Capacity building of academic and administrative staff in ICT	2	2 (1) 1 (1)
6. Spreading the culture of IT and E-learning	1	0
7. Automation of SCU functions	1	1

ICTP

Lessons Learned:	Freq.
1. The need to consult educational planners in future activities	1
2. The procurement process is slow	1
3. Measures for retaining calibers within universities	1
4. Awareness campains are needed to spread the use of the system	1

ETCP

Main Achievements	Freq.	Sus.
1. Curriculum and lab development	3	2 (3)
2. Partnership with industry/community	2	2 (2)
3. Restructuring of Technical Institutes in Technical Colleges	1	1
4. Establishment of BOTs will lead to community participation	1	0

ETCP

Main Achievements	Freq.	Sus.
5. Introduction of new "needed" programs	1	2
6. Capacity building for staff	1	2

ETCP

Lessons Learned:	Freq.
1. **Partnership with industry**	1
2. Change of management in ineffective TCs & Training of the remaining cadres	1
3. Importance of changing culture to appreciate technical education	1
4. Coordination between project management and faculty leadership	1

Annex 7. Summary of Borrower's ICR and/or Comments on Draft ICR

1. Project Context, Development Objectives and Design

The Government of Egypt (GOE) rightly accorded first priority to expanding and improving the quality of its basic and secondary school systems. Since 1990, the Government increased its pre-university education budget by 150 percent in real terms, achieving near universal access at the basic level and expanded secondary enrollment rates to over 64 percent at the secondary level. Consistent with the CAS recommendations, the World Bank has, since 1997, expanded its dialogue with the Government on basic and secondary education and provided support under the Education Enhancement Program (EEP) and Secondary Education Enhancement Project (SEEP). These Programs' objectives directly support the Government's 20-year Education Sector Strategic Framework (1999-2019), developed with technical support from the World Bank. With the reforms of basic and secondary education already under implementation, the World Bank considered supporting Egypt's efforts to improve the market orientation of the higher education sector by improving quality and relevance and enhancing sector efficiency. These efforts envisioned to be accomplished through the implementation of a project specifically aiming to help the Government restructure and change the higher education system so it produces the type of graduates needed to underpin a private sector-led, export-driven economy, competitive in a global market.

In 1997, the Minister appointed a committee for the reform of higher education (known as the HEEP Committee) which drew in a wide range of stakeholders including industrialists and parliamentarians. A National Conference on higher education reform was held in February 2000, and a Declaration for action emanating from the Conference was endorsed by the President and the Prime Minister. The Declaration identified 25 specific reform initiatives. The Bank agreed with, and supported, the Declaration. A range of multilateral and bilateral agencies also concurred with the Declaration's proposals, and was committed to supporting various aspects of the reform process.

The Government's Higher Education Reform Strategy (HERS) consisted 25 sub-projects, including a sub-project to improve the quality of the Faculties of Education (pre-service teacher training) which was supported with an IDA credit of US$13 million from the ongoing EEP. The Government has also sought donor financing to fill the funding gap, including a US$0.5 million grant for legislative reform from DFID. An IBRD loan of US$50 million was concluded with the World Bank to cover eleven sub-projects of the Government's reform strategy, and the GOE contributed approximately US$10 million allocated to support the first phase of the HERS. The Government was well positioned to implement the measures needed to create a more efficient, quality-driven higher education system underpinned by better governance and greater efficiency.

The Government's reform strategy is comprehensive and ambitious. The National Conference on Higher Education helped shape the reform agenda into 25 specific reform initiatives which will be implemented over a 15-year period. While the Bank supports the entire reform strategy, it has made a strategic choice to fund 11 of the 25 specific reform initiatives. This is complemented by IDA funding of US$13 million for one of the initiatives - improving the quality of the Faculties of Education - under the ongoing Education Enhancement Program (ITF-N0008). Other donors are supporting other reform initiatives of the Governments 25 sub-projects, including: Prince Talal (US$ 0.5 million) supporting technical education, The Ford Foundation (US$ 0.4 million) supporting quality assurance and accreditation initiatives for higher education and DFID (US$ 0.5 million) supporting legislative reform for technical

education. The 11 initiatives supported by the IBRD under HEEP are those deemed most fundamental to bringing about meaningful, systemic changes in quality, relevance and efficiency. The initiatives included:

- *Initiatives to improve governance and efficiency*: the development and diversification of funding sources for higher education; the establishment and modernization of an MIS for the university system; and the establishment of a national center for education administration and management.
- *Initiatives to improve quality and relevance*: the reform of legislation governing the higher education system; establishment of a National Quality Assurance Council; establishment of centers of excellence in higher education; the development of an IT and networking system; the establishment of a National Learning Technologies and Multimedia Center.
- *Initiatives to consolidate and upgrade mid-level technical education*: training and upgrading of faculty/instructors as well as expansion and Arabization of library and learning resources.

HEEP Projects Endorsed by the National Conference

Ser. No.	PROJECT NAME	Intended Impact					Involved Entities
		Access	Quality	Efficiency	Relevance	Gov. & Finance	
1	New Higher Education Legislation	➤	➤	➤	➤	➤	GOE – MOHE – SCU – WB
2	Develop New Map for University and Higher Education	➤			➤		GOE – MOHE – SCU – PIU
3	Develop Faculties of Education and Teacher Training		➤	➤	➤		MOHE – SCU – PIU
4	Establish Learning Technologies and Multimedia National Center		➤	➤	➤		MOHE – SCU – PIU – WB
5	Enhance Study Programs and Curricula		➤		➤		SCU – UNIV – HEI
6	Develop New Admission Mechanisms to Tertiary Education	➤			➤		GOE – MOHE – SCU
7	Setup Library and Learning Resources		➤	➤			SCU – PIU – UNIV – HEI – WB
8	Develop Higher and Middle Technical Institutes		➤	➤	➤		MOHE – PIU – HEI – MTI – WB
9	Promote Open and Distant Learning	➤			➤	➤	GOE – MOHE – SCU – UNIV
10	Develop Information Technology and Networking		➤	➤	➤	➤	SCU – PIU – UNIV – HEI – WB
11	Restructure Scientific Departments.		➤	➤			MOHE – SCU – UNIV – HEI
12	Promote Faculty Development.		➤	➤		➤	SCU – UNIV – HEI – WB
13	Develop Graduate Studies.		➤	➤	➤		SCU – UNIV – HEI
14	Develop Scientific Research, Systems, and Mechanisms.		➤	➤	➤	➤	MOHE – SCU – UNIV – HEI
15	Modernize MIS for University Administration & Management			➤		➤	MOHE – SCU – PIU – UNIV – HEI – WB
16	Setup National Center for Developing Tertiary Education, Administration and Management			➤		➤	MOHE – SCU – PIU – WB
17	Promote Linkages with Business and Industry				➤	➤	MOHE – SCU – UNIV – HEI
18	Establish Alumni Center for Higher Education Institutions	➤			➤	➤	SCU – UNIV – HEI
19	Promote International Cooperation		➤		➤	➤	GOE – MOHE – SCU – UNIV – HEI
20	Enhance Cultural, Ethical and Sportive Activities			➤	➤		SCU – UNIV – HEI
21	Develop Programs for Gifted and Talented Education		➤	➤	➤	➤	MOHE – SCU – UNIV – HEI
22	Establish Centers of Excellence in Higher Education	➤	➤	➤	➤		MOHE – SCU – PIU – UNIV – HEI – WB
23	Development and Diversification of Funding Resources		➤	➤	➤	➤	GOE – MOHE – SCU – PIU –WB
24	Establish National Quality Assurance and Accreditation Agency		➤	➤	➤		GOE – MOHE – SCU – WB
25	Establish National Qualifications Framework.		➤	➤	➤		GOE – MOHE – SCU – PIU

GOE: Government of Egypt **MOHE**: Ministry of Higher Education **SCU**: Supreme Council of Universities **PIU**: Projects Implementation Unit

UNIV: Universities **HEI**: Higher Education Institutions **MTI**: Middle Technical Institutes **WB**: World Bank Organization

Black Color: "GOE" and other sources of funding (Nos. 2, 5, 6, 9, 11, 13, 14, 17, 18, 19, 20, 21, 25) **Blue Color:** IDA funding (No. 3) **Red Color:** "IBRD" funding (Nos. 1, 4, 7, 8, 10, 12, 15, 16, 22, 23, 24)

2. Key Factors Affecting Implementation and Outcomes

2.1 Project Preparation, Design, and Quality at Entry

This project was funded by the World Bank after the success achieved in the Engineering and Technical Education Project (ETEP) funded by the World Bank's loan agreement No. 3137-EGT. However, it was the first project designed for a sector-wide reform to cover all specializations in the Egyptian Higher Education Institutions. To do so, it was mandatory to start the design phase of each project component following a top-down approach with the exception of HEEPF that was well defined from project startup to fulfill the needs of our institutions on a competitive basis.

The World Bank and MOHE jointly prepared the design of the project based on six studies in the areas of labor market analysis, quality assurance and relevance, private sector role, financial diversification, governance and accountability, and developing policy framework.

The project design included the Key Performance Indicators (KPIs) for successful implementation of the project. However, these indicators focus mainly on *outputs* rather than results i.e. short or long term *outcomes* or impacts. Moreover, a major shortcoming is that the bank changed its strategy during implementation of the project to a results-based evaluation, including project impact, which was not taken into consideration in the original design of the project. This unforeseen change in directive led to the initiation of impact assessment studies without having baseline data to compare it with the output/outcome from project activities. However, this new directive will benefit the second phase of implementation of the project, and other future projects, to develop any missing baseline data according to its targeted objectives before, ideally before starting implementation.

The design of the project was based on the assumption that the PMU and the management team are already appointed and ready to startup implementation. The reality that has to be taken into consideration in the design of any similar project is that appointment of the implementation team does not take place before endorsement of the relevant authority (in Egypt's case the People's Assembly) to the loan agreement as a mandatory bureaucratic requirement. MOHE cannot commit itself to select and appoint the management team, and issue the necessary Ministerial Decrees, before this endorsement takes place. In addition, the nature of this project requires at least six months startup period to develop action plans, operation manuals and guidelines before any notable project disbursement takes place. Provision for the planned disbursement has to be more realistic and cater for such startup provisions leading to delay in sizable disbursements, noting that procurement of goods and services are lengthy procedures that consume considerable amount of time until delivery of goods, and/or completion of services before issuing payment.

Tying-up disbursement for loan proceeds to local funds under the civil works and goods categories created many serious problems jeopardizing PMU credibility with suppliers of goods and contractors of civil work. As a result, the contractors and suppliers became reluctant and not motivated to apply for the bids offered by the PMU, which led to several rebids. Moreover, the suppliers and contractors sometimes increased their offers to mitigate the risks caused by the delay of the financial reimbursements. The discrepancy between the disbursement procedures from the loan and local funds considerably improved when a fully autonomous financial unit was established at the PMU, handling both payment portions from the loan and local funds at nearly the same time. However, delays in receiving local funds on a quarterly basis, and/or receiving funding approvals from concerned government authorities, considerably affected the payment me mechanism and led to the same gap despite the corrective measures taken to establish the financial unit. It is essential for the World Bank to reconsider this tying-up of disbursement to avoid such hassles in future projects.

2.2 Implementation

1. There was a delay in achieving some of the project activities due to several reasons:

- Universities were not ready to accept or deal with the change.

- The change of project directors for some project components at the start of the project. This delay was incurred as the new project directors familiarized themselves with the project and its implementation plans. However, these delays caused a slight slippage of the project time schedule in the first year of implementation. Nevertheless, the delays were controlled and the project achieved all its planned deliverables and objectives, and more.

- Considerable delays in issuing payments from local funds to completed civil works and procurement of goods due to bureaucracies in negotiating funds with MOP, getting their approvals and at the end receiving just a portion of the funds requested by the PMU based on actual contractual commitments. These delays were partially resolved after the establishment of the financial unit at the PMU in 1/7/2007 to handle the local funds, whenever it was made available.

- The Government decision to transfer all bank accounts to the Central Bank of Egypt (CBE) created a lot of confusion and considerable delays, particularly at the institutions side, until the situation was cleared and settled.

- Delays in obtaining construction permits for the new buildings, resulted in startup delays and consequently in completion times. These delays caused a slippage of the project time schedule and a decision had to be taken by the PMU Board to continue funding projects that have not been completed before the closing date of the loan agreement, from local fund allocated for the second phase of the HEEP reform projects.

- Delays in the achievement of some activities implemented for EUN, TCs and universities. However, corrective actions controlled these delays and the project finally achieved all its planned deliverables and objectives.

All these delays, however, caused a slight slippage of the overall project time schedule, and their control led to the achievement of all the project planned deliverables and objectives, and the evaluation of the World Bank biannual Supervision Missions to implementation progress was consistently satisfactory.

2. The limitation of the project budget constrained the achievement of some planned activities such as implementing the fifth cycle under HEEPF.

2.3 Monitoring and Evaluation and Utilization

The former Projects Implementation Unit (PIU) of the ETEP had more than nine years of experience in Bank project management, including familiarity with the Banks procurement and financial management guidelines. This unit has been reinstated as the Projects Management Unit (PMU) for HEEP. The PMU's activities include: (i) opening and maintaining separate Special and local accounts; (ii) implementing the different procurement actions and procedures in full conformity with the Project procedures; (iii) monitoring performance of the Project overall; and (iv) maintaining overall responsibility for universities procurement actions, documentation and record keeping, as well as for all overall financial management tasks.

To strengthen the monitoring and evaluation activities, the PMU contracted a monitoring and evaluation consultant in March 2006 to be responsible for coordinating monitoring reports from HEEP directors on progress against agreed-upon performance indicators and follow up the impact evaluation studies conducted for HEEP. In this direction, a template for the quarterly reports was designed and endorsed by the World Bank supervision teams. Each project component provided the PMU with regular (quarterly) progress reports summarizing the current status of Project implementation, including financial records, explanations for deviations from agreed-upon implementation plans, constraints and corrective measures to be taken using the pre-designed template for progress report. These quarterly reports were used to develop the consolidated collective report prepared by the Monitoring and Evaluation Consultant in coordination with the PMU Executive Director.

The PMU also prepared periodic quarterly reports illustrating the main achievements and the progress of the project activities as well as future plans for the next period. All these reports are posted on the HEEP website for disseminating the project achievements among all stakeholders. A detailed mid-term report about the project achievements and the progress of the project activities has also been prepared and submitted to IBRD to serve as the basis for the mid-term review which the IBRD and the Borrower conducted in December 2005.

The PMU also prepared this Implementation Completion Report (ICR) within the four months grace period allocated to complete all pending payments and activities for services rendered before the closing date of the project in accordance with World Bank regulations and guidelines. In addition, as part of the requirements for completing the ICR, the PMU conducted an impact evaluation study in order to validate the achievements of the HEEP project.

The PMU also established an Impact Evaluation System that was applied in a pilot study at Zagazig University in order to test the study tools and design before it is implemented on a wide scale. The Supreme Council of Universities SCU has approved this system in 5/5/2008 to adopt it by all the seventeen public universities to measure the impact of the HEEP projects on their respective institutions focusing on academic performance.

2.4 Post-completion Operation/Next Phase

This project has provided several pathways for the future sustainable development of the higher education system in Egypt.

First, reform legislation governing higher education under component one led to (i) the adoption of the Government's "Higher Education Reform Agenda 2000-2007" by assisting in the issuance of several Ministerial decrees governing the Egyptian Higher Education system such as: the Act #528/2003 governing the clustering of MTIs into technical colleges (TCs) and the Act #290l2004 concerning the establishment of the Education Development Fund (EDF); (ii) the establishment of the National Authority for Quality Assurance and Accreditation for Education (NAQAAE) with the Presidential Decree #82/2006; and (iii) the development of the new legislative framework for higher education system under a unified Law, an initiative that has been temporarily postponed for political reasons.

Second, through its support for Higher Education Reform Agenda, the project has helped create a more robust higher education sector and assisted in the adoption of the higher education policies that call for and insists on strategic planning for the Egyptian Higher Education by establishing a Strategic Planning Unit (SPU) responsible for planning ahead to develop a road map for the Egyptian Higher Education, forecast for higher education based on scientific methodology, and develop Project Appraisal Documents PAD according to international norms.

Third, the HEEP project developed and supported the application of sustainable quality assurance mechanisms in the Egyptian public universities and TCs through the QAAP project under component one which led to: (i) establishing quality assurance infra-structure within the Egyptian public universities and TCs, (ii) helped in building the qualified calibers needed to apply and review the quality assurance systems, (iii) developed 10 National Academic Reference Standards (NARS) in different fields, and (iv) providing the academic institutions with opportunities to test, develop, and refine their internal quality assurance system. The second phase of the Higher Education Enhancement Project HEEP2 will support the Continuous Improvement and Qualifying for Accreditation (CIAQP) for all the Egyptian public and private Academic Institutions.

Fourth, the project supported competitive grant funds under (HEEPF) component one to improve competitiveness among faculty and help enhance the quality in various fields such as: management, academic programs, capacity building, information technology, new teaching methods, and entrepreneurship among faculty. HEEPF created a credible, transparent, and competitive atmosphere that helps in the development of higher education institutions and in fulfilling their needs (departments/ faculties/universities). It promoted and supported the priority areas to fulfill the actual/real needs of universities. It also strengthened the cooperation and integration between industry and higher education institutions. HEEPF became a comprehensive model (self-assessment, M&E, IA) that can be implemented/replicated worldwide. Now, some Egyptian Universities allocated funds for competitive projects based on HEEPF as a successful sustainable mechanism for replication. The second phase of the reform activities continues to implement HEEPF as a complementary mechanism to fulfill the needs of higher education institutions on a competitive manner.

Fifth, the ICTP project led to: (i) upgrade the network infrastructure for both EUN and Egyptian Universities, (ii) establishing a MIS/DSS for the SCU and MIS for 3 applications for 200 faculties, (iii) established the National e-Learning Center (NeLC) in the SCU and subsidiary e-learning centers in the Egyptian universities responsible for producing the e-courses, and (iv) providing the staff members and

researchers with electronic journals, books, and databases. These project components continue to provide their services under the SCU as sustainable mechanisms.

Sixth, the establishment of the National Centre for Faculty and Leadership Development (NCFLD) through the FLDP, which primarily focuses on training of trainers and certification programs as well as the Top Management programs, continues its support of university FLDP centers by providing them with certified trainer of trainers' program and workshop materials for a selected set of courses. On the other hand, the universities will be responsible for conducting the training programs or e-training according to their available facilities.

Finally, the ETCP project will continue in the second phase of the HEEP project as one of the priority areas of reform. The objectives of the next phase is to: (i) continue the reform of the ETC's governance framework, (ii) motivate the top management and administrators in the ETC's to upgrade their technical and administrative capabilities, (iii) continue to upgrade the learning resources in the ETC's, (iv) generate private revenues from business community, and (v) conclude twinning arrangements with counterpart community colleges.

3. Assessment of Outcomes

This part of the report addresses the outcomes of HEEP activities based on the project developmental objectives (PDO) grouped under the three components reviewed earlier and included in the Project Appraisal Document (PAD).

3.1 Relevance of Objectives, Design and Implementation

The Government's Higher Education Reform Strategy (HERS), endorsed by the National Conference in February 2000, consists of 25 sub-projects addressing the diverse areas of reform to support *efficiency* and *quality* enhancement initiatives and improve the quality and *relevance* of higher education so graduates have the knowledge and skills demanded by Egypt's developing and globalizing economy. Twelve projects were identified and extended together into six integrated projects that are given priority in the first phase of the strategic plan (2002 – 2007). These projects are:
- FOEP   Faculties of Education Project
- ETCP   Egyptian Technical Colleges Project
- FLDP   Faculty-Leadership Development Project
- ICTP   Information & Communication Technology Project
- QAAP   Quality Assurance and Accreditation Project
- HEEPF   Higher Education Enhancement Project Fund

The first phase was funded through an IDA credit of US$13 million from the ongoing EEP and an IBRD loan of US$50 million from World Bank Agreement No. 4385-EGT to cover the Government's reform strategy. The GOE contributed by approximately US$10 million to support the first phase of the HERS.

The project objectives were derived from the key issues in the Higher Education (the need to: (i) restructure the legislative, governance, and financing systems of the higher education system to support *efficiency* and *quality* enhancement initiatives; and (ii) improve the quality and *relevance* of higher education so graduates have the knowledge and skills demanded by Egypt's developing and globalizing economy). The design of the HEEP project focused on a top-down approach for the following reasons:
- Universities were not ready to accept or deal with the change
- To create the critical mass to affect change
- To create the environment and culture for accepting the change
- Creating a competitive mechanism to encourage participation

The project objectives were derived directly from this analysis and KPIs were chosen to reflect them. Linkage between the PDOs and KPIs was generally good.

Implementation of the project suffered as the Educational institutions were not ready to be receptive to the reform project due to the lack of confidence and the resistance to change. **Extensive Awareness** at all projects levels was mandatory to attract faculty to participate. After the contractual agreements under HEEPF first cycle became effective, confidence in the reform activities started to gain momentum.

3.2 Achievements of Project Development Objectives

Overall Rating: Highly Satisfactory

This section takes each of the three project development objectives in turn and reviews changes in the KPIs and the achievements of the expected outputs that are related to each objective.

Achievements of the First Development Objective

The first development objective was to *improve efficiency through the reform of governance and management of the higher education system.* The three KPIs linked to this <u>first objective</u> show a positive trend. They were: (i) reform legislation governing higher education and rationalizing funding allocation mechanisms; (ii) establish a National Authority for Quality Assurance and Accreditation in Education (NQAAAE); and (iii) establish a Higher Education Enhancement Project Fund (HEEPF).

(a) Reform Legislation Governing Higher Education and Rationalizing Funding Allocation Mechanisms

- A draft of a new unified legislative framework for the Egyptian higher education system was developed during the early stages of project implementation and continuously refined but was never approved in its entirety in the public debates organized for concerned stakeholders to consider its endorsement as a comprehensive framework for change; the community resisted introducing such major changes. The Ministry decided to pursue implementation of many of its features in an ad-hoc manner until consensus is reached to accept such changes in the Egyptian higher education system. Extensive efforts have been exerted since project inception to establish the legislation for a new unified law for the Egyptian higher education system. However, the final version of this law is pending the consideration and endorsement of the education committees of both the Shoura Council and the Peoples' Assembly (the Parliament). Passing this unified law, ultimately through the Parliament, is highly political and largely influenced by community/ stakeholders responses, and it is difficult to speculate when such comprehensive framework for reform will be endorsed. Accordingly, it is difficult to specify the percentage achievement, although many of its features have already been implemented successfully and/or in the process.
- Among the initiatives considered by the project to help improve the governance and efficiency is the development of proposals to help diversify sources of funding. A model has been developed consisting of three main parts: (i) student costs; (ii) budgeting procedures; and (iii) funding formula. The work on the student cost component of the model has already uncovered that on average only 35% of the higher education resources are directly allocated to support student learning while the other 65% goes to overhead. This is the mainly the result of the duplication of functions and administrative staff overstaffing.

(b) Establish a National Authority for Quality Assurance and Accreditation of Education (NAQAAE)

- The NAQAAE was established by a Presidential Decree #82 in June 2006 and bylaws prepared and endorsed by Shura Council and People's Assembly in December 2006. It has been established as a result of the Quality Assurance and Accreditation Project (QAAP). QAAP also advanced the NAQAAE goals and bylaws. Now, the NAQAAE has the autonomy and established a performance

standard and a benchmarking system for both the education and the higher education. NAQAAE is now in the initial stages of planning its activities. It was expected to begin implementing its mandate in September 2008.

- QAAP introduced the Developmental Engagement (DE) exercise, an initiative that was not initially planned but has evolved during the life of QAAP, provided an opportunity for the Egyptian higher education institutions with the opportunity to test and develop, in cooperation with the QAAP, the effectiveness of the institution's quality assurance systems to meet the requirements for accreditation, the robustness of the evidence base and reports that they generate in those systems. Development Engagement took place during the transition period to offer the academic institutions with the opportunity to evaluate their quality assurance systems and their programs with a view to identify the strengths and areas of further improvement. The benefits of the DE to the institution include offering the academic institutions with: (i) opportunities to test, develop, and refine internal review processes; (ii) receiving external structured comments and the written review report identifying points of strength and areas require further improvement, which should offer an agenda for future improvement. All of these may assist further with the institution's arrangements to enhance the programs and disseminate good practice. At the end of December 2008, QAAP conducted 120 DE visits and all visited faculties received their evaluation reports.
- The development of 10 National Academic Reference Standards (NARS) has been completed for the following sectors: nursing, agriculture, engineering, veterinary medicine, basic science, pharmacy, home economics, medicine, arts and physical education.
- The QAAP project assisted the Egyptian universities to develop their strategic plans for quality. To date, fourteen universities have completed their strategic plans and subsequently evaluated by QAAP peer reviewers and two external international experts, while Kafr El-Sheikh University is in the process of preparing their strategic plan. Another two universities (Benha and Beni-Suef) are still in the process of preparing proposals to engage in the exercise.
- QAAP has offered workshops and seminars in different fields such as: peer and chair reviewing, role of facilitators, writing syllabi, student assessment, developing NARS and selected topics related to QAAP projects: preparing self-study, writing annual reports and preparing action plans. These workshops and seminars helped in building the qualified calibers needed to apply and review the quality assurance systems in the Egyptian universities. To date, the QAAP team is assisting in the implementation of the activities of QAAP2 and CIQAP projects as well as the NAQAAE.
- The QAAP project helped in establishing 16 Quality Assurance Centers QACs in the Egyptian universities as well as 150 quality assurance units in the faculties. QAAP also periodically visited and provided the technical support these quality centers and units. QAAP also supported the establishing of an internal quality assurance system in the faculties of education in cooperation with FOEP.
- Five sub-projects were established, including the one to establish Quality Assurance Centers QACs, to set the QA infrastructure necessary to prepare universities & faculties for accreditation by developing a handbook containing guidelines, procedures and mechanisms, used to implement these projects. Achievements of each sub-project are posted on the project website and well exceeded the targeted objectives.

(c) Establish a Higher Education Enhancement Fund (HEEPF)

- The main objective of the HEEPF project is to enhance *quality, relevance, and efficiency* of the higher education through establishing a sustainable competitive mechanism among Egyptian universities and Technical Colleges. This is done through funding of competitive projects from higher education institutions. Competitive grant funds have been utilized to improve competitiveness among faculty and help enhance quality in the following domains: management practices, academic programs, curriculum/course/ program development, capacity building, information technology, new teaching methods, and entrepreneurship among faculty. All public universities (17 public universities, 5 Technical colleges, and MOHE) have benefited from this grant.

Achievements	HEEPF Gant Projects
159 projects out of 563 submitted proposals (28%)	Number of Funded Projects
4 Cycles	Number of RFP cycles
US$ 87,000	Average project size
20 Months	Average Project Duration
Small projects (Less then US$ 50,000): 26% Medium projects (US$ 50,000 - US$ 100,000): 42% Large Projects (Over US$ 100,000): 32%	Distribution of projects by size
Academic Programs: 22.1% Capacity Building: 25.6% Curriculum Development: 22.1% Information Technology: 15% Knowledge Resources: 9% Quality Assurance: 6.2%	Types of Projects
90 faculties in 17 universities and 5 Technical Colleges	Number of public universities participating
121,722 undergraduate students and 100,915 from other categories	Number of direct beneficiaries from the funded projects
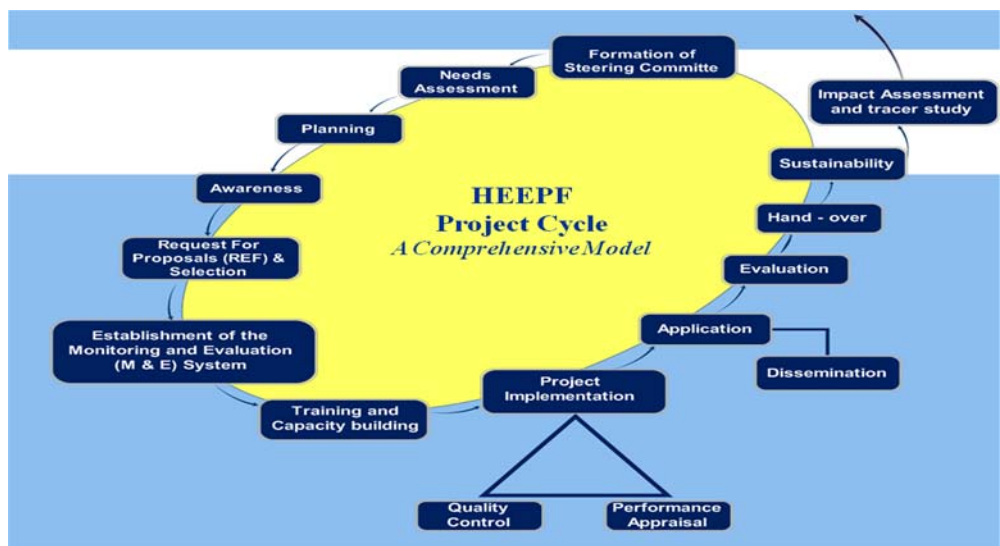
- HEEPF has been instrumental in engaging the academic community in a wide range of development projects and has reached all the public institutions in the academic community (90 faculties in 17 public universities, 5 Technical colleges, and MOHE). About 8.4% of the under-graduate students benefited directly from HEEPF projects (121,722). While 6.2% of the under-graduate students

benefited indirectly from HEEPF projects. There are other beneficiaries from HEEPF projects such as: alumni, post-graduate students, university leaders, staff members, and technicians.

- HEEPF has also created the capacity and expertise in the universities to execute investment projects.
- HEEPF followed a systematic and transparent procedure to evaluate the proposals submitted by the educational institutions. Each proposal has been technically and financially evaluated by three or may be four experts. The technically qualified proposals must have at least 60% of the technical evaluation score (66 points out of 110) and the financial qualified proposals must have at least 50% of the financial score (20 points out of 40). The technical evaluation criteria includes: Academic excellence, technical quality, relevance to Egypt, sustainability and commitment, collaboration and focus on multidiscipline work, and innovation and originality. The following flow chart illustrates the evaluation process of the HEEPF proposals.
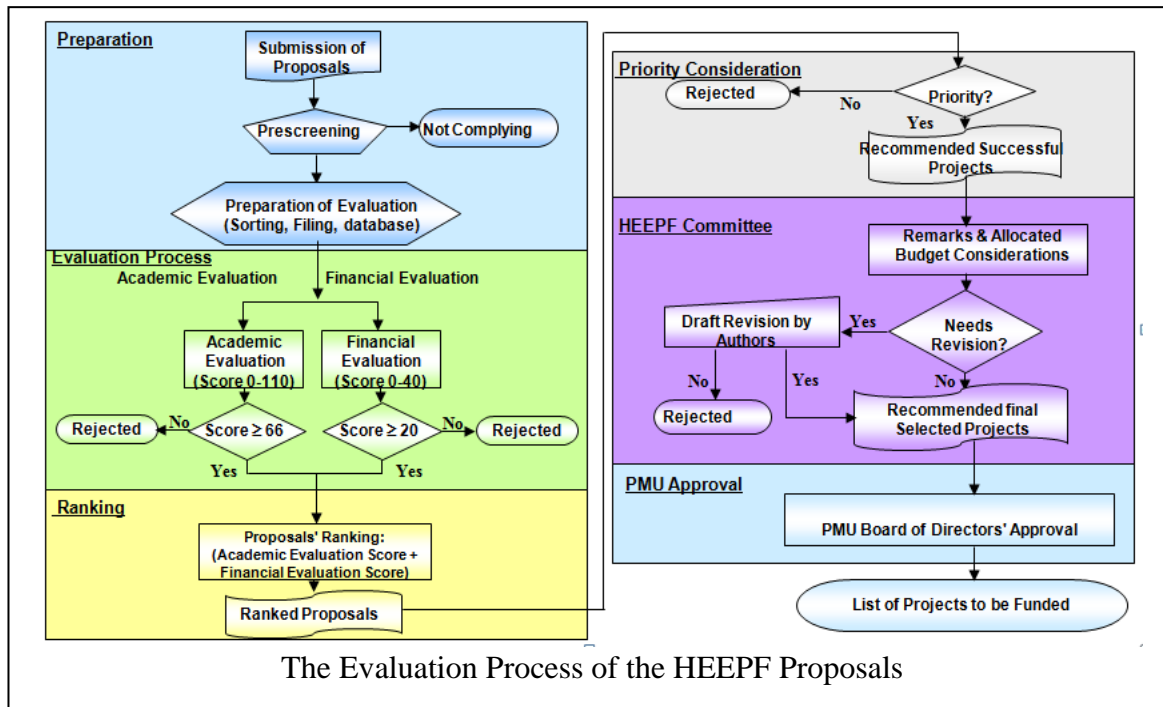

The Evaluation Process of the HEEPF Proposals

- HEEPF established a strong monitoring and evaluation system that is used to track the progress and evaluate the impact of all funded projects. This process involves a team comprised of internal and external evaluators and site visits. Formal site visit reports showing the technical performance of the funded projects along with recommendations for better achievements were prepared and sent to the project directors. HEEPF used specific defined and declared reference criteria for technical evaluation. These criteria includes:
  - The achievements of the targeted project objectives and the achievements of the project success indicators specified in the project proposal.
  - The achievements of the targeted project deliverables with the targeted quality.
  - Following the project time schedule.
  - The efficiency of the applying the project activities.
  - The effectiveness of the project internal management system.
  - Project quality control procedures.
  - The effectiveness of the dissemination procedures for the project outputs.
  - The project sustainability procedures in order to sustain the project achievements.
  - The suitability of the project location.

- – The adequacy and the efficiency of using the procured equipments.
- – The adequacy of the project co-financing.
- ▪ The following graph illustrates the evaluation of the funded projects based on the monitoring reports.

Evaluation of the HEEPF Funded projects
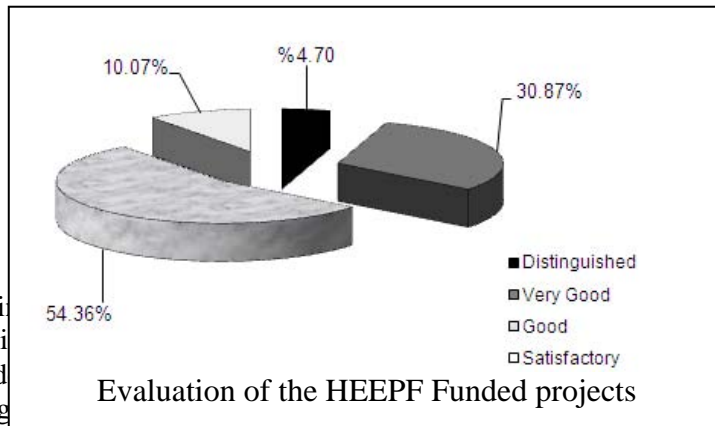
- ▪ The level of i[...]ity is obvious and evident from the consi[...]F in the four cycles.
- ▪ HEEPF has d[...]nt fields. Specifically, 10 project manag[...]tive proposal writing and effective management of HEEPF projects, 6 financial training workshops attended by 260 staff members and accountants on effective financial management and preparation of financial reports, and 2 specialized attended by 64 staff members on e-learning and new learning methodologies.
- ▪ HEEPF embarked initiatives to strengthen the link between all funded projects in the higher education, regardless of their sources of funding. The process is intended to forester integration and collaboration vertically (inside one institution) and horizontally along regional, sectoral, disciplinary dimensions and is seen as a vehicle for eliminating duplication, sharing resources and experiences, increase the number of beneficiaries, strengthening the ties and exchange of benefits among projects, integrating training and disseminating activities, building a stronger critical mass of activities, and building up bridges of interaction and attempting to achieve sustainability.
- ▪ HEEPF held a mid-term conference at Al-Azhar University in March 2007 for better dissemination of the projects' outputs and outcomes to the whole academic community including Al-Azhar University. In that regard, new publications were distributed during the conference, which include: Evaluation of Phase I and Future Prospects; HEEPF performance Appraisal by Egyptian Universities; HEEPF Specialized Booklet Series (9 parts in Arabic); Summaries of the HEEPF Funded Projects (in Arabic and English) and HEEPF Brochures (1 in Arabic and 2 in English).
- ▪ HEEPF established an IT system including: a comprehensive website www.heepf.com.eg (English and Arabic), an accounting system, Database system, and electronic documentation system (Jupiter).
- ▪ HEEPF compiled all project publications in one library (online DB of 1666 items representing a variety of topics related to: Basic Sciences, Engineering, Information & Technology, Medicine, Dentistry & Pharmacy, Veterinary Medicine, Agriculture and Education) as shown in the Figure below.
- ▪ HEEPF has developed a well articulated database available on the website to make all the information related to the projects implemented accessible to all universities and concerned stakeholders for wider dissemination of successful models for potential replication.

Class Distribution
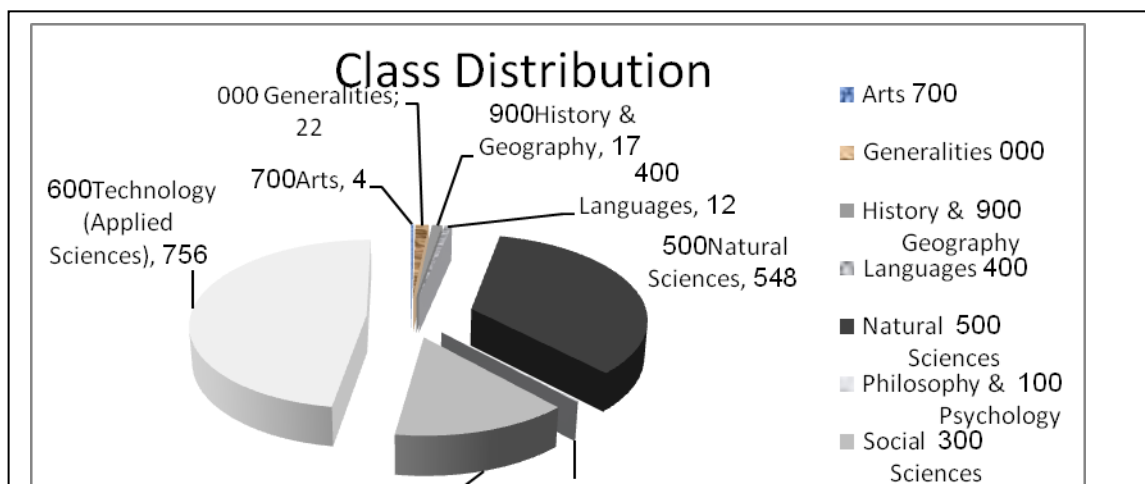
Achievements of the Second Development Objective

The second development objective was to *improve the quality and relevance of university education.* The two KPIs linked to this second objective show a positive trend. They were: (i) establish an integrated information and Communication technologies infrastructure; and (ii) provide training for faculty and staff.

(a) Establish an Integrated Information and Communications Technologies Infra-structure (ICTP)

- The Information and Communications Technology Project (ICTP) includes 5 sub- components at a wide level, as well as activities at the university level to address quality and efficiency related issues. The overall aim of this component is to being the global revolution in knowledge creation and sharing into the teaching and learning process in the Egyptian universities. Sub-components include: Network Infrastructure, Management Information System, (MIS), e-learning, Digital Libraries, and ICT training.

- **The Network Infrastructure** is organized along three tracks: (i) Egyptian University Network (EUN); (ii) EUN Central data Center; and (iii) Individual University Networks.
  Egyptian University Network (EUN):
  – Fiber optic network is established between the universities and research institutes in MPLS cloud. The bandwidth of the traffic between the universities is 34 Mbps. The Internet bandwidth for the universities is increased from 55 Mbps to 310 Mbps.
  – Videoconference and streaming network is installed in all universities in addition to EUN.

  EUN Central data Center:
  – The establishment of the data center in the Egyptian Universities Network (EUN) is completed. Now, EUN can be considered as a reliable content delivery network that satisfies universities' needs in terms of bandwidth and maintains the quality of value added services as well as the linkage between the Egyptian Universities and the outside world.

  Individual University Networks:
  – The internal information network of all the 17 public universities have been completed through improving the connectivity between the faculties and the universities' information center, increasing the network nodes, and enhancing the security and management systems. Now all the Egyptian universities are connected with a unified fiber optic network. Additional 310 Mbps (Two STM-1) Internet Bandwidth is allocated to all universities.
  – The intra-network of the public universities has been enhanced by improving the links between the faculties and the university's information center, increasing the network nodes, and enhancing the security and management systems.

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- The universities started the tendering process of the second stage of the infrastructure enhancement projects, which are funded by MCIT as a part of the cooperation protocol between MOHE and MCIT. The objective of this stage is to upgrade the faculties' information networks to serve the MIS and D-Library applications. The tenders will be issued after transferring the required budget from MCIT to MOHE and expected to be finished by March 31, 2009.

- **Management Information System (MIS)** is organized along two tracks: (i) SCU-level MIS & Decision Support System (DSS); and (ii) University level MIS.
  SCU-Level MIS/DSS:
  - ICTP completed building MIS/DSS in the Supreme Council of Universities (SCU).
  - ICTP established for the SCU several online regular statistical reports to reflect on system performance and utilization, as well as making this data available to the public to monitor ICT related performance on the institutional level as well as at the SCU diverse activities. This is an ongoing activity that will continue the development and fine-tuning of the reporting system.
  - SCTC is not yet fully functional and annual reporting will be initiated during the second phase of reform benefiting from the developments made under the SCU reporting system. However, over 70% of the work developed for the SCU can be used to develop the reporting system of the SCTC with some customization to suit the needs of this sector of technical education.
  - In January 2008 a one-year contract was signed with a consulting company to develop MIS/DSS applications for the SCU, the project scope include 22 applications and 5 DSS models. The consulting company developed over 70% of these applications. The rest of applications will be developed during 2009 and SCU will bear its cost. The implementation of the completed applications already started within SCU departments.

  University-Level MIS:
  - The construction of MIS centers in 14 public universities (82%) has been completed.
  - A contact has been signed with a consulting company in March 2007 to develop MIS for 3 applications: student affairs, post graduate studies, and academic staff affairs for 200 faculties within two years. The developments of these applications were completed and the deployment started in December 2008. Now the applications are applied in 185 faculties in 14 universities. The deployment is progressively elaborated and will continue during 2009. According to contract of the Universities MIS projects, the cost of the deployment will be sponsored by the universities during 2009.

- **E-Learning.**
  - The National e-Learning Center (NeLC) has been established in the SCU and subsidiary e-learning production centers (UeLC) have been established in all universities. The e-learning centers in the Egyptian universities have been equipped by 20 PCs and infra-structure network and the technical staff members of the UeLCs in the Egyptian universities have been recruited and trained.
  - NeLC produced templates for the instructional design system and developed the web application that automates these templates.
  - NeLC developed some e-learning tools such as e-course generator, virtual lab repository, learning style system, and NeLC portal.
  - NeLC trained 600 staff members on "e-content" training program by Microsoft.
  - More than 95 e-courses are developed by the UeLC staff under NeLC's supervision. These courses are hosted on servers inside EUN data center and delivered through MOODLE Learning Management System (LMS). Also more than 30 e-courses are under production in the UeLCs.
  - During the first semester of 2008/2009 academic year, 33 e-courses are delivered to the students. More than 15,000 active users are currently accessing these e-courses.

- **Digital Library for academic community** is organized along two tracks: (i) Digital library subscriptions; and (ii) Integrated Library System (ILS).

  Digital library subscriptions:
    - ICTP established the Egyptian universities libraries consortium including all the public Egyptian universities and some foreign and private universities in Egypt.
    - ICTP co-finance four projects in the consortium including: establishing a digital library for the Egyptian universities libraries, automating universities libraries, building a national database for theses and dissertations, and developing a library management system.
    - The digital library now includes 16 international databases and 10 free web resources that serve most of the Egyptian scholars academic needs. All these resources are made available through the Egyptian Universities Library Portal (http://www.eul.edu.eg).
    - Through the Egyptian Universities Libraries Consortium, contracts were signed with 3 major providers of online academic and research content and journals: ELSERVIER (Science Direct), OVID, and EBESCO offering full access. In 2008, additional electronic resources are subscribed by the Egyptian Universities Libraries Consortium including Springer database, which cover more than 1600 full text journals and 3500 electronic books, and Proquest digital dissertation database, which cover more than 2.6 millions international thesis and dissertations. Also, starting from January 2009, new resources are subscribed such as Wiley-Blackwell journals (more than 1216 Full text Journal), Springer e-books (Books published in 2006, 2008, and 2009), ISI data base (more than 23,000 Journals and journal citation Report), Gale academic one file database. Now, the total available electronic resources reached 81,200 (11,400 full text journals, 37,000 abstract journals, 32,000 industry standards, and 800 e-books) covering most subjects. These subscriptions yielded substantial opportunities for academic, research, and efficiency gains. The number of searches and downloads reached 2,873,456 and 3,843,796 until December 31, 2008.
    - The project also tends to provide a document delivery service for the Egyptian scholar community through an international document repository.
    - ICTP is now funding 15 universities to allow their libraries to input book indexes based on a unified Egyptian Catalogue. The automation of 5 out of those 15 libraries (33%) is completed with the required hardware (PCs, Printers, and Bar Code reader). the data entry of the Bibliographic data of the libraries holding (more than 2,210,000 records are entered) is completed.

  Integrated Library System (ILS):
    - A union catalog database of the universities holdings contains the data of 60 libraries in 15 universities. Now more than 2,220,000 records are indexed and stored in the system. Also, the bibliographic data of more than 200,000 theses are stored in the database of theses and dissertations. The Future Library management system is used in the management of these data. This system is currently installed in servers inside EUN data center.
    - The development process finished about 85% of the main required modules which include cataloging, circulation, OAPC, inventory, serial control, reports and statistics. The system also provides an authentication methods allows the Egyptian scholars to use the digital library resources off campus.
    - ICTP funding the process of building a national database for theses and dissertation and technical support through the Egyptian universities libraries consortium. More than 200,000 records have been entered representing more than 50% of the library holdings.
- **ICT Training**
    - ICT training is fully coordinated with the HEEP Faculty Leadership and Development Project (FLDP).

- ICTP established Central Unit for IT Training (CUIT) in early 2006 as a new unit in the Supreme Council of Universities to be responsible for the empowerment of the IT training in the 17 government universities.
- The CUIT unit established ICT training centers in all the Egyptian universities. Each ICT center was equipped with a training lab consists of 20 PCs, UPS, Printer, and LAN. In the first two years, CUIT trained more than 22,000 trainees from staff members, teaching assistance and employees on the most essential IT programs. Through the last three years, the training was executed in three main levels: Basic, advanced, and professional.
- The target was to train at least 10,000 trainees from all the Egyptian universities. To date, ICTP provided training for more than 22,000 trainees from all Egyptian universities which exceed the targeted number by far.
- The project also signed an agreement with the Egyptian Education Initiative (EEI) for 6,000 trainees to receive basic training and 4,000 trainees to receive advanced training in cooperation with Microsoft.
- The development of the electronic test center is completed and deployed (www.scutraining.edu.eg). This application allows online testing for the trainees inside the universities and is hosted on servers in EUN data center.
- Sustainability plan for the universities training centers is proposed and sent to the universities. This plans depends on converting the universities ICT training centers into units with a private nature and the central training unit in the SCU will accredit these centers, the training materials, and the trainers and also maintain the electronic test center and issue the training certificates against fee (10 LE for each certificate is suggested).
- ICT training is planned also to replace the ICDL training which is very good step toward sustainability.
- ICTP also conducted "e-learning" and "digital library" training courses for 2,000 staff members in cooperation with the Egyptian Education Initiative and also conducted "digital library" training courses for students in the faculties of education and "specialized digital library" training courses for EUL librarians.

(b) Provide Training for Faculty and Staff (FLDP)
- This component supports capacity of academics and administrative staff. Its specific objectives focus on professional development initiatives to (i) consolidate the professional and institutional competencies of the human resources in the Egyptian HEIs; (ii) strengthen the competencies of the academic staff and technical assistance in the HEIs; (iii) reinforce the capacity of the universities and enable them to take over the responsibility of training and development for their staff; (iv) promoting and supporting institutional continuous self-development in the HEIs; (v) upgrading the administrative and leadership capabilities in the HEIs; (vi) improving the quality of the higher education outcome to cope with the challenges of globalization, information age, the labor market, and the professional conduct of the education profession; and (vii) monitor and evaluate the quality and impact of training.
- FLDP established training centers in all the Egyptian universities (17 universities), 3 of which have been internationally certified according to the standards of namely: Alexandria, Tanta, and Zagazig.
- FLDP also established the National Center for Faculty Leadership and Development (NCFLD) that is internationally recognized by the International Board of Certified Trainers (IBCT) that organizes the certification of trainers and HRD professionals in USA and Europe since 1988. The goal of the NCFLD is to develop qualified, credible, and certified trainers for trainers; develop standardized training materials; and address the needs for top management training. The long term goals of the NCFLD extended to the delivery of training services to the business community and continuing education to professionals and to North Africa and other Middle East countries.
- FLDP also purchased the license and the training package from the International Board of Certified Trainers (IBCT) that certifies the delivery of training and to undertake the training of trainers for the

FLDP. The IBCT agreement entitles that the NCFLD to certify up to 1000 Egyptian and 1000 international trainers. The IBCT certificate is valid for three years two weeklong face-to-face training modules lead to the certification training program which is 3 months long.

- The Board of PMU and the minister of Higher Education and Scientific Research has been approved the future role of the National Centre for Faculty and Leadership Development (NCFLD) to concentrate on training of trainers and certification programs as well as the Top Management programs and continue its support of university FLDP centers by providing them with certified trainer of trainers' program and workshop materials for a selected set of courses. On the other hand the universities will be responsible for conducting the training programs delivered by the NCFLD certified Trainers or e-training according to the facilities available.

- FLDP conducted a total of 42 **TOT-preparatory** workshops**,** 10 **TOT-Supplementary** workshops, and 4 Certified Trainers workshops. Now, a total of 764 individuals have completed the **TOT-preparatory workshop,** 143 individuals have completed the **TOT-Supplementary** workshop, and 40 have completed the certification program which is being delivered by the European representative of IBCT in Cairo. Besides, the NCFLD has conducted 6 training workshops on special topics and training programs of the NCFLD matrix. 177 participants have been trained on the 16 training programs. In addition to this, the NCFLD has conducted 1 special supplementary training program for 15 participants.

- FLDP publically announces the certification programs to encourage potential candidates to apply. Transparent criteria are used for screening according to International Standards and contracts are signed with those who are chosen for the certificate training program to ensure that the time and resources invested in their training is not wasted.

- At start FLDP prepared 29 training courses in 6 different competencies for the academic leaders, staff members and administrators. Then FLDP revised the training programs as well as the training materials. The list of training programs was reduced from 29 to 16. The selection of these courses was based on input from the SCU and from trainers and faculty trainees in 6 different universities. These 26 programs cluster 4 competencies: Teaching, Scientific Research, Management & Leadership, and Group Communication & Interaction. The training material for the 16 selected topics was revised and developed to conform to the IBCT standards.

- At the university level, the FLDP centers in the Egyptian universities conducted 9,552 training programs attended by 223,573 staff members and 80,775 administrative staff. Moreover, 1,404 training programs were conducted in the field of management. Also 91,627 staff members have been trained on Management & Leadership and Group Communication & Interaction.

Achievements of the Third Development Objective

The final development objective was to *improve the quality and relevance of mid-level technical education.* The eight KPIs linked to this <u>third objective</u> show a positive trend. They were: (i) reform of the ETC's governance framework; (ii) refurbishing of the ETC's physical facilities; (iii) upgrading of the ETC's laboratories and workshops; (iv) capacity building of ETC faculty and support staff; (v) development of the ETC's educational programs, curricula and learning resources; (vi) development of ETC information and communication technology network; (vii) development of effective links to the productive sectors and labor markets; and (viii) development of quality assurance and accreditation for the ETC's.

This component supports extensive restructuring and comprehensive overhaul of teaching content and practices for the mid-level technical institutes <u>in order to improve the quality and relevance of teaching in these institutes.</u>

(a) Reform of the ETC's Governance Framework
- Consolidation of the 45 MTIs into 8 TCs has been achieved. This is expected to improve the quality of teaching in the TCs as a result of more consolidated management and greater efficiencies.

- The 8 Egyptian Technical colleges (ETCs) and a new Supreme Council for the Technical Colleges (SCTC) were established by ministerial decrees #528 and #2089 in 2003. The SCTC is headed by the Minster of Higher Education. 8 Directors and 16 Deputy Directors for the 8 ETCs were appointed after a rigorous and transparent selection process that involved their performance in a leadership training workshops supported by the project.
- A ministerial decree # 2087 was signed in November 2003 for the establishment of the Board of Trustees (BOTs) and the Technical Colleges Councils (TCCs). The BOTs terms of reference were developed and disseminated. The transfer of decision-making responsibilities from MOHE to the ETCs through their BOTs is a major reform breakthrough for higher education and for middle level technical education in particular.
- Considerable progress was made in decentralizing the governance of the TCs and shifting the responsibility for the policy development and strategic decision-making in the ETCs from the MOHE to the Boards of Trustees (BOTs) of the Technical Colleges, since the release of the new bylaw by the Ministerial Decree #2655 in October, 2006. The bylaw provides better representation of the employers and their associations on the BOTs, provides the legal framework for the eight ETCs and defines the rules and regulations concerning: (a) the role, mandate and composition of the BOTs, (b) roles, responsibilities and remuneration of teachers, academic managers and staff, (c) academic structures and programs, and (d) rules and regulations governing student issue
- As a consequence of BOT efforts, a new department was initiated in the Hotel and Tourism Institute of Mataria TC. This new department came through the cooperation of the ETCP, the BOT of Mataria TC, the management of the TC and a private chain of fast food restaurants in the form of a 5-year contract. The contract includes paid internship periods linking the training to the market need and it is anticipated that graduates who will have their training certified by the chamber of Commerce will be employed in the fast food business. Success of the program motivated its extension to be implemented in Alexandria TC in 2008. On the other hand, the BOT of the Mataria TC signed a twinning agreement with the Technical University of Berlin TUB and the first project will be twinning of the Institutes for Optics. TUB will provide the technical support and assistance for establishing a new Excellence Institute for optics.
- The existing reform program for technical colleges has been progressing positively. Measures to grant greater autonomy, setting up of Board of Trustees, transferring budget resources, hiring managers based on competitive process, developing standards and new curricula and textbooks are all reforms in the right direction. The challenge will be to continue the momentum, involve the private sector to a much greater extent to move to more demand-driven approaches, increase the incentives and financing mechanisms so that Technical Colleges will continue to improve their performance.
- In March, 2008; major changes have been taken in place in the management of the ETCs as a result of a decision taken by the ETCP National Committee not to renew the appointment of the eight ETC directors at the end of the three year term, and hire replacements through a careful selection process. Seven new ETC directors were appointed, and the former Director of ETC Alexandria was reappointed on probation for one year. BOTs were also reformed in September 2008.
- The role of BOTs in the technical education is a new concept in Egypt. Therefore, their ability to affect a measurable change in the policies and strategies directions of the ETCs remains not noticeable across the sector.

(b) Refurbishing of the ETCs physical Facilities
- Considerable progress has been made in the general refurbishing of the ETCs physical facilities in Damietta and Zagazig (Mahalla TC), and Quena (South Valley TC). Constructions for Quena will be handed over very soon. Refurbishing of institutions in Alexandria (Alexandria TC), Beni Suef and Sohag (Middle valley TC) that are funded by the MOHE has been completed and handed over. Progress has been made in the refurbishment of all the targeted number of computer labs, internet labs and language labs.

- A GIS Database for the physical facilities of the ETCs was developed using the ARCGIS and ARCVIEW 2 software. The Database contains details of the architecture drawings, photographs and technical specifications on 90% of the institutions in the system.
- Refurbishing of the Technical Institute in Shoubra (Mataria TC) stopped in April 2008 due to contractor's fault. The HEEP Executive Director formed a committee with representatives of ETCP, HEEP-PIU, and the MOHE, which after careful investigation of the facts, decided to terminate the contract with the contractor, and award it to another contractor. Legal actions against the contractor have been taken by the PMU. The completion of the construction works will be completed in a later stage and will be financed by MOHE from the local fund.

(c) Upgrading of the ETC's Laboratories and Workshops
- The status of upgrading the ETC laboratories in December, 2008 involving the procurement, acquisition, installation, testing and commissioning of equipment in the laboratories in the three pilot ETCs is as follows:

% of Total	Value in LE	Number of Packages	Package and Status
87.2	44,463,337	81	Procured, delivered, tested and installed
12.8	6,548,578	35	Bid preparation cancelled. Procurement will be made in Fiscal 2009 by MOHE
100	51,011,915	116	Total

- The previous Table indicates that the process of procurement, installation, testing, and commissioning of equipments in the laboratories and workshops of the ETCs has been successfully accomplished as 87.2% of the packages have been installed and tested. The rest of the procurements will be completed in a later stage and will be financed by MOHE from the local fund.

(d) Capacity Building of ETC Faculty and Support Staff
- In order to increase the capacity of the TCs management and staff, 17 candidates travelled in June 2008 to USA to start 2- month language training and join one academic-year training in community colleges through Fulbright commission (2008-2009). A mission from USA visited in the 3 pilot TCs in Egypt during March 2008 to put the training program in its final and realistic form in collaboration with ETCP.
- In order to raise the capacity of the TCs' management and administrative staff, 341 senior management staff received leadership training and 661 administrative staff received management skills training. As for the teaching staff, 2053 teaching staff had ICDL, English, and specialized training, 339 newly appointed teachers had educational training and 126 technicians had special training to be lab technicians.
- The ETCP working with MOHE has hired 116 teachers in 2006, 316 teachers in 2007, and 103 in 2008 for a total of 535 new teachers (this number exceeds the approved targeted number 500 new teachers). Unfortunately, 59 teachers of them found other employment opportunities leaving the net number of new teachers at 476. The majority of the new hires are either university graduates in science, engineering and commerce or graduates of the Industrial Education Colleges IEC. Two of these colleges were established through a World Bank project in the mid 1990s. The hiring of the new teachers has resulted in the average student teacher ratio dropping down to 40:1 in the industrial MTIs and 98:1 in the commercial MTIs compared to previous ratios of 118:1 and 305:1 respectively.
- A number of training of trainers initiatives have taken place to provide training opportunities for the new teachers:

1. Training of Trainers (TOT) program offered by the FLDP, which designed, and delivered a one week (36 hours) " effective training" workshop to 230 new teachers, and a program in the management and administration of the ETCs for senior administrators..
2. The Federation of Egyptian Industries FEI provided specialized TOT program in industrial automation at its centre in Amirya for 57 instructors from the ETC of Sahafa in Cairo. The FEI has given preliminary approval to provide training for 500 additional teachers from the whole system over the coming 4 years

- A contract has been signed in June 2008 with the Industrial Education College in Kuba, Helwan University, for continuous practical training of MTIs teaching staff.

(e) Development of the ETC's Educational Programs, Curricula and Learning Resources

- In order to link ETC program standards to the occupational standards being developed under the National Skills Standards Program NSSP, a project managed by the Social Fund for Development SFD; the course outlines, syllabi, and associated books for 36 programs containing 592 courses in the commercial, industrial, civil, architect, hotel management and tourism, and social services specializations were developed. Moreover, the quality of and relevance of the courses outlines and syllabi have been revised by curricular review committees to review the integrity of the programs, ensure that redundancies and duplications are reduced to a minimum, review the compliance with the prevailing standards and the emerging quality assurance guidelines in the QAAP project.

(f) Development of the ETC Information and Communication Technology (ICT) Network

- The 8 ETCs are now connected to the internet through commercial service providers. The quality of the connection varies by the location of the college and the available bandwidth that commercial providers in the region can support.
- Linking of six locations covering 12 institutes in 5 TCs to the Egyptian University Network EUN has been approved and the connection is expected to be completed in June 2009.
- MIS systems are installed, tested, commissioned and handed over in 4 institutes belonging to Mataria TC. The system is also installed in 2 institutes of Mahalla TC and will be installed soon in 4 institutes belonging to the South Valley TC. Handing over the MIS in these 6 MTIs is expected to be completed in June 2009. The MIS includes databases for student records, teachers and staff as well as physical resources.
- Three Computer Networks CISCO labs in the ETCs of Mataria, Quesna and Sahafa have been procured and shall be installed in June 2009.

(g) Development of Effective Links to the Productive Sectors and Labor Markets

- Progress has been made in some of the ETCs in developing effective links to the productive sectors and the labor markets including: (a) the agreement between the Fast Food Services Americana and the Mataria TC to support the Fast Food Services program, (b) the agreement between the Social Fund for Development SFD and Mataria TC to support the small enterprise management programs, (c) the agreement between the Mehalla TC and the Association of Small Garment Manufacturers to support a related program in the TC , (d) the agreement between the Ministry of Culture and the South Valley TC to support the program for the restoration of monuments, and (e) the agreement between Mataria TC BOT and Olympic Group for training students of refrigeration and air conditioning branch during summer.

(h) Development of Quality Assurance and Accreditation for the ETCs

- ETCP established 10 QA units in the 3 pilot TCs and 7 of their institutions.
- ETCP in coordination with QAAP has organized and delivered 20 workshops, training programs, and monitoring site visits providing overview of quality assurance and accreditation principles in the higher education and their application to ETCs, and train ETCs staff on the preparation of the institutional reports using QAAP templates.
- The QA units produced the first Annual Reports in a satisfactory form in November 2008.

3.3 Justification of Overall Outcome Rating

Overall Rating: Highly Satisfactory

The Overall Outcome Rating is put as "Highly Satisfactory" for the following reasons:

- First, although the developmental objectives of the project were ambitious and all the challenges faced by the project, it succeeded focused and achieved more than its specified developmental objectives.
- Second, despite all the challenges, the HEEP project participated to the adoption of the "Higher Education Reform Agenda 100-2007", by assisting in the development of several Ministerial decrees governing the Egyptian Higher Education system such as: the Act #528/2003 governing the management of the technical colleges and the Act #290l2004 concerning the education development fund; (ii) the establishment of the National Authority for Quality Assurance and Accreditation for Education NAQAAE with the presidential decree #82/2006; and (iii) the development of the new legislative framework for higher education which is expected to be presented to the Shura Councils and education committee of the People's Assembly (the parliament) soon.
- Third, through its support for Higher Education Reform Agenda, the project has helped create a more robust higher education sector and assisted in the adoption of the higher education policies that call for strategic planning for the Egyptian Higher Education by establishing a Strategic Planning Unit (SPU) responsible for planning ahead to develop a road map for the Egyptian Higher Education, forecast for higher education based on scientific methodology, and develop Project Appraisal Documents PAD according to the international norms.
- Fourth, the project has made substantial achievement in institutional strengthening and capacity building of academics and administrative staff at universities. The stakeholders' feedback in the ICR workshop indicated that the main achievements of the FLDP project is: (i) providing the Egyptian universities with the qualified certified trained, (ii) changing the attitudes of the staff members towards training, (iii) establishing the FLDP centers at all universities, (iv) spreading the culture of training among staff members, and (v) improving the efficiency of staff members and teaching assistance.
- Fifth, the HEEP project supported the application of the quality assurance systems in the Egyptian universities though the QAAP project under component one which led to: (i) establishing quality assurance infra-structure within the Egyptian public universities, (ii) helped in building the qualified calibers needed to apply and review the quality assurance systems, (iii) developed 10 National Academic Reference Standards (NARS) in different fields, and (iv) providing the academic institutions with opportunities to test, develop, and refine their internal quality assurance system. The second phase of the Higher Education Enhancement Project HEEP2 will support the Continuous Improvement and Qualifying for Accreditation (CIAQP) for the Egyptian Academic Institutions.
- Sixth, the project supported competitive grant funds under (HEEPF) component one to improve competitiveness among faculty and
- Seventh, the ICTP project led to: (i) upgrade the network infra structure for both EUN and Egyptian Universities, (ii) establishing a MIS/DSS for the SCU and MIS for 3 applications for 200 faculties, (iii) established the National e-Learning Center (NeLC) in the SCU and subsidiary e-learning centers in the Egyptian universities responsible for producing the e-courses, and (iv) providing the staff members and researchers with electronic journals, books, and databases. This project will continue to provide its services under the SCU.
- Eighth, The Board of PMU and the minister has been approved the future role of the National Centre for Faculty and Leadership Development (NCFLD) established through the FLDP to concentrate on training of trainers and certification programs as well as the Top Management programs and continue its support of university FLDP centers by providing them with certified trainer of trainers' program and workshop materials for a selected set of courses. On the other hand the universities will be responsible for conducting the training programs or e-training according to the facilities available.

- Ninth, the ETCP project will continue in the second phase of the HEEP project. The objectives of the next phase is: (i) continue the reform of the ETC's governance framework, (ii) motivating the top management and administrators in the ETC's and upgrading their technical and administrative capabilities, (iii) continue upgrading learning resources in the ETC's, (iv) generating private revenues from business community, and (v) twinning the ETC's with international community colleges .
- Tenth, the stakeholders' feedback in the ICR workshop indicated that investments in universities though the competitive sub-projects have led mainly to: (i) creating a culture of competitiveness with team work spirit, (ii) creating a credible, transparent, and competitive atmosphere that helps in the development of higher education institutions and in fulfilling their needs (departments/ faculties/universities). It became a comprehensive model (self-assessment, M&E, IA) that can be implemented/replicated worldwide. Now, some Egyptian Universities allocated funds for competitive projects based on HEEPF mechanism (replication & sustainability), and (iii) enhancing the quality in various fields such as: management, academic programs, capacity building, information technology, new teaching methods, and entrepreneurship among faculty. Furthermore, HEEPF has created the capacity and expertise in the universities to execute investment projects.
- Eleventh, the stakeholders' feedback in the ICR workshop indicated that the ICTP project participated mainly to: (i) developing of the IT infrastructure, (ii) developing of the MIS for both SCU and universities, which will lead to effective decision making, and (iii) establishing of e-courses.
- Twelfth, the project has helped the Ministry of Higher Education to define its future reform program in higher education and create a more conductive environment for planning and development of the Egyptian Higher Education system.
- Finally, the HEEP Impact Assessment study revealed that both the staff members and the students agreed that HEEP project led to a significant improvement for the learning environment in the Egyptian universities.

4. Assessment of Bank and Borrower Performance

4.1 Bank Performance

(a) Bank Performance in Ensuring Quality at Entry (*i.e., performance through lending phase*)

Rating: Satisfactory

Monitoring and evaluation was built into the project based on Key Performance Indicators KPIs. However, there were no records for the initial baseline measurements. Also, the evolution of the project KPIs was not taken into consideration in the WB mission aide memories.

(b) Quality of Supervision

Supervision by the bank was timely, frequent and technically sound. However, the frequent changes in the Bank supervision team during the course of implementing the project led to the unfamiliarity of the newly appointed members that took them some time to become familiar with the project design and its progress.

Bank reporting of the project performance, of the development outcomes and of the implementation outputs and progress was comprehensive and provided directions for future implementation. However, as already mentioned the WB aide memories described the status of the project performance but it did not report the evolution of the project relative to the originally designed KPIs. Moreover, although the Projects Management Unit (PMU) issued quarterly performance reports based on the data collected from the sub-projects, little attention was paid to use these reports to assess the impact of the quality of project performance.

Procurement the challenge of procurement thrown up by this project was to ensure that the Projects Management Unit PMU correctly carried out competitive biddings centrally. This task was completed satisfactorily for 261 bidding packages with a total amount of US$ 26.2 Million.

(c) Justification of Rating for Overall Bank Performance

The overall Bank performance is rated as "Satisfactory". The project design was relevant to the Egyptian Government and was adapted to the policy context. The development objectives and outcomes were well aligned with the higher education system. The project suffered from some of the implementation difficulties due to the unfamiliarity of the higher education sector with these projects. However, these difficulties were generic and overcome by the Bank and the Projects Management Unit. Adequate attention was paid to the Implementation Status Reports ISRs and aide memories, although greater effort should have been paid to the use of the monitoring and evaluation of the project reports.

4.2 Borrower Performance

(a) Government Performance

Rating: Satisfactory

The government's ownership and commitment was demonstrated when establishing a high-level steering committee and the Projects Management Unit (PMU) to provide support to the governmental Higher Education Institutes (HEIs) to implement the first phase of the Higher Education Enhancement Project (HEEP). The PMU closely monitored project inputs, outputs, and outcomes during the life of the project, and evaluated over the HEEP lifecycle.

The Ministry of Higher Education MOHE highly supported sustainability of the outputs and the outcomes achieved by the HEEP project by issuing all the necessary ministerial decrees that supports the implementation of the project Such as the establishment of the National Authority for Quality Assurance and Accreditation (NAQAAE) as well as the establishment of the National Center for Faculty and Leadership Development. (NCFLD).

The MoHE also supported the initiatives considered by the project to help improve the governance and efficiency is the development of proposals to help diversify sources of funding. A model has been developed consisting of three main parts: (i) student costs; (ii) budgeting procedures; and (iii) funding formula.

Although, extensive efforts have been exerted since project inception to establish the legislation for a new unified law for the Egyptian higher education system, the final version of this law is pending the consideration and endorsement of the education committees of both the Shoura Council and the Peoples' Assembly (the Parliament). Passing this unified law, ultimately through the Parliament, is highly political and largely influenced by community/ stakeholders responses, and it is difficult to speculate when such comprehensive framework for reform will be endorsed.

There were some delays in the availability of the counterpart local funds but these have been resolved by establishing a unit for local fund in the PMU.

(b) Implementing Agency or Agencies Performance

Rating: Satisfactory

The Ministry of Higher Education (MOHE) through its Projects Management Unit (PMU) was responsible for the HEEP project. They were clearly engaged and committed to the developmental objectives of the project. They provided all the necessary support to implement the first phase of the Higher Education Enhancement Project (HEEP). The PMU closely monitored project inputs, outputs, and outcomes during the life of the project, and evaluated over the HEEP lifecycle.

Internal communications and coordination between the MOHE and the PMU was strong. Also, the minister was fully engaged and informed with the progress and achievements of the HEEP projects. He also headed some of the meetings of the Board of Directors of the Projects Management Units.

Consequently, full coordination and support was achieved and all diffculties have been solved throughout the project lifecycle.

(c) Justification of Rating for Overall Borrower Performance

Rating: Satisfactory

The overall rating for the Borrower performance is "Satisfactory" for the reasons given above. Both the government and the Projects Management Unit remained focused and committed to the original project objectives throughout the project lifecycle. Also, all project results and outputs were achieved and the project built capacity at the Projects Management Units that will be responsible for the implementation of the second phase of the project HEEP2.

5. Lessons Learned

Policy related lessons: the following policy related lessons can be drawn from this project:

1. To ensure support and success of the Higher Education Reform, commitment of the main stakeholders needs to be in place at all levels:

   - The Egyptian government
   - The Ministry of Higher Education
   - The Supreme Council of Universities (SCU)
   - The directors of the HEEP projects.
   - Presidents of Universities and their Vice Presidents
   - Deans and Deputy Deans of Faculties/institutes
   - Heads of Departments and Units/Centers, etc.
   - Project Managers of the HEEP funded projects.

   Everyone has a fundamental role to play in his own capacity and responsibilities to ensure success of the reform.

2. Establishing a **Strategic Planning Unit (SPU/MOHE)** was mandate to:

   - Plan ahead to develop the Road Map for Higher Education based on real data generated from diverse studies
   - Forecast for Higher Education system based on past, current, and future data to better plan based on scientific methodology

3. It is mandatory that the Egyptian universities to develop their Strategic plans on both the University/Institution and the Faculty/Department levels

   Strategic Planning on the University/Institution level

   - Comprehensive strategic plan that includes plans for QA and Accreditation, as well as for Capacity building and training
   - Establish an action plan identifying priority areas
   - Periodic revisiting of the strategic plan to meet continued and changing needs

   Strategic Planning on the Faculty/Department level

   - For Accreditation requirements
   - To improve efficiency of the system

Process and Capacity Issues: the following lessons can be drawn from this project:

1. The continuity in the staff responsible for project oversight, management and implementation is a major contribution to project success.

2. Establishing the Projects Management Units provided support to the governmental Higher Educational Institutes to implement the Higher Education Enhancement Project (HEEP) and create the capacity required to conduct the second phase of higher education reform. This includes institutional capacity for financial management and procurement.

3. The *first* phase of HEEP project focused on a top-down approach for the following reasons:

- Universities were not ready to accept or deal with the change
- To create the critical mass to affect change
- To create the environment and culture for accepting the change
- Creating a competitive mechanism to encourage participation

   While, the *second* phase of will focus on a bottom-up approach for the following reasons:

- To emphasize more institutional autonomy
- To create a state of ownership of the reform according to institutional needs
- Building capacity to cope with this approach that depends primarily on taking initiatives to fulfill the needs

4. HEEPF created a **credible, transparent, and competitive atmosphere** in the Egyptian higher education institutions.

5. HEEPF became a **comprehensive model** that can help the development of higher education institutions, on both faculty/university levels, to promote and support the priority areas and to fulfill their actual/real needs. Some Egyptian public universities allocated funds for competitive projects based on HEEPF mechanism.

6. HEEPF model can also be implemented/ replicated worldwide.

7. The FLDP project passed through two phases. The first phase of the FLDP project focused on consolidating the concept of Long Life Learning culture within universities. It established a Faculty and Leadership Development Center in all the Egyptian public universities. It also produced a competency and Skills Matrix needed for capacity building of human resources in Egyptian universities at all levels and developed the training Materials based on the competency and skills matrix. In order to encourage the academic staff members to attend the training courses, FLDP linked the fulfillment of training attendance/requirements with Promotion. The second phase of the FLDP focused on quality training. It established the National Center for Faculty and Leaders Development (NCFLD) authorized by an International Certifying body IBCT (International Board of Certified Trainers) in the USA to offer International Certification locally and on the regional level. It also worked on certifying the FLDP centers in the Egyptian universities in accordance with the IBCT standards (3 FLDP centers have been certified till now). It also provided the Egyptian universities with certified trainers in accordance with the IBCT standards to provide training courses.

8. The ICTP project focused on: (1) Reinforcing the backbone network infrastructure for the Egyptian Higher Education system, (2) Establishing Management Information and Decision Support Systems at the Supreme Council of Universities (SCU) and Egyptian Public Universities (EU), (3) Introducing new teaching and learning methods such as e-learning and establishing the National e-Learning Center (NeLC) as a coordinating body among universities e-Learning centers, (4) Providing Digital Library and electronic resources to all academic staff and researchers to enhance the chances for creating better quality researchers and research, and (5) Upgrading the capabilities of the academic and administrative staff in Egyptian universities and scientific research institutions for using Information Technology.

9. **Extensive Awareness** at all projects levels is mandatory to attract faculty to participate

Monitoring and Evaluation (M&E) : the following lessons can be drawn from this project:

1. Monitoring and Evaluation (M&E) activities within the capacity of the borrower are essential. Also, the continuing Bank support and technical assistance was beneficial to the project.

2. A well designated <u>results</u> M&E framework coupled with a monitoring and evaluation system should remain simple and focus attention on outputs and outcomes, thus avoiding being swamped by administrative issues that tend to dominate whenever implementation is delayed. However, the outcomes and impact of many interventions in education are often only apparent sometime after the closure of the project.

3. Measurement of the project outcomes and impact on the academic community is a challenge especially in large reforms. On large projects that support large reforms, it is difficult to isolate the contribution of the project from other factors.

4. Establishing a Monitoring and Evaluation system for HEEP was essential to:

- Developing a sustainable monitoring and evaluation system that focuses on outcomes rather than outputs Better control and follow-up the implementation to assure compliance of HEEP Projects with their indicators of success
- Designing a unified reporting system for HEEP
- Strengthening the M & E and reporting system as well as World Bank requirements for certification of UPMUs
- Establishing analysis reports based on the comparative evaluation to recommend areas of emphasize and future directives

5. It is mandatory develop a sustainable impact assessment system, including tools which can be easily used, modified and/or institutionalized as a routine procedure to suite different educational/academic environments

6. It is mandatory to develop baseline data at the startup of the project in order to be able to assess the impact of HEEP Sub-projects on improving the higher education system in Egypt and providing information about the actual fulfillment of the program objectives

Sustainability: the following sustainability related lessons can be drawn from this project:

7. Among the key issues for sustainability of the reform programs is the establishment of three Centers/Units as part of the organization structure of each university:

- Quality Assurance and Accreditation Center (QAPAC)
- Faculty and Leadership Development Center (FLDC)
- University Projects Management Unit (UPMU)

6. Project Costs and Financing

The implementation of the first phase of the HEEP projects was successfully completed for the six projects given priority within the higher education strategic reform plan that was translated into 25 projects as indicated earlier. In order to meet quality requirements, two projects were added during the implementation of the first phase of the HEEP projects, these projects were the Strategic Planning Unit (SPU) and the Continuous Improvement and Qualifying for Accreditation Project (CIQAP) as a starting point to implement the second phase of the HEEP projects.
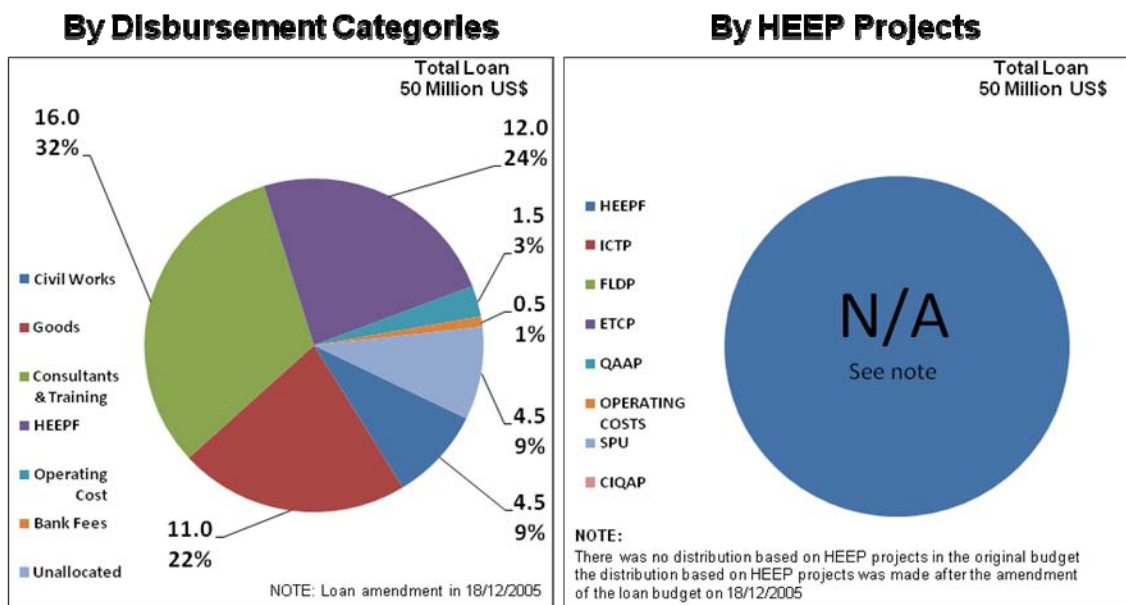
The actual implementation of the Loan agreement started in April 2003 and the closing date was on 31/12/2008 with a grace period of four months ending on 30/4/2009 to settle all contracts and services

rendered before 31/12/2008 according to the World Bank guidelines. The total amount of the Loan (US$ 50 Million) was fully disbursed and reviewed by the World Bank, and authorizing the PMU to close the Loan account in the Central Bank of Egypt on 31/3/2009. Statistics reveal 70 withdrawal applications from the World Bank in Washington, 14 Letters of credit, 3784 Cheques issued through the Central Bank of Egypt to pay the suppliers, contractors and consultants in a total of 30581 transactions. The report also contains financial records about the amounts transferred from each project to Universities and Technical Colleges, reflecting on direct and indirect benefits from the Loan.

As for the GOE contribution, L.E. 41.10 Million was disbursed from the local fund equivalent to US$ 8.93 Million according to the exchange rate at the time of signing the Loan agreement (1 US$ = 4.60 L.E.). GOE fulfilled its financial obligations to HEEP by providing the extra funds needed that exceeded the remaining balance of the approved budget.

The following report contains a detailed analysis to the final financial status of the HEEP projects.

Original Budget Distribution
(July 2002 – March 2009)
IBRD Loan No. 4658 - EGT

By Disbursement Categories

Total Loan
50 Million US$

16.0
32%

12.0
24%

1.5
3%

0.5
1%

- Civil Works
- Goods
- Consultants & Training
- HEEPF
- Operating Cost
- Bank Fees
- Unallocated

4.5
9%

4.5
9%

11.0
22%

NOTE: Loan amendment in 18/12/2005

By HEEP Projects

Total Loan
50 Million US$

- HEEPF
- ICTP
- FLDP
- ETCP
- QAAP
- OPERATING COSTS
- SPU
- CIQAP

N/A
See note

NOTE:
There was no distribution based on HEEP projects in the original budget the distribution based on HEEP projects was made after the amendment of the loan budget on 18/12/2005

Amended Budget Distribution
(July 2002 – March 2009)
IBRD Loan No. 4658 - EGT

By Disbursement Categories

Total Loan 50 Million US$

14.5
29%

13.0
26%

1.5
3%

0.5
1%

2.0
4%

18.5
37%

Legend:
- Civil Works
- Goods
- Consultants & Training
- HEEPF
- Operating Cost
- Bank Fees

NOTE: Loan amendment in 18/12/2005

By HEEP Projects

Total Loan 50 Million US$

11.55
23.1%

5.95
11.9%

5.60
11.2%

1.50
3.0%

0.35
0.7%

0.25
0.5%

0.50
1.0%

13.85
27.7%

10.45
20.9%

Legend:
- HEEPF
- ICTP
- FLDP
- ETCP
- QAAP
- Operating Cost
- SPU
- CIQAP
- Bank Fees

NOTE: Loan amendment in 18/12/2005
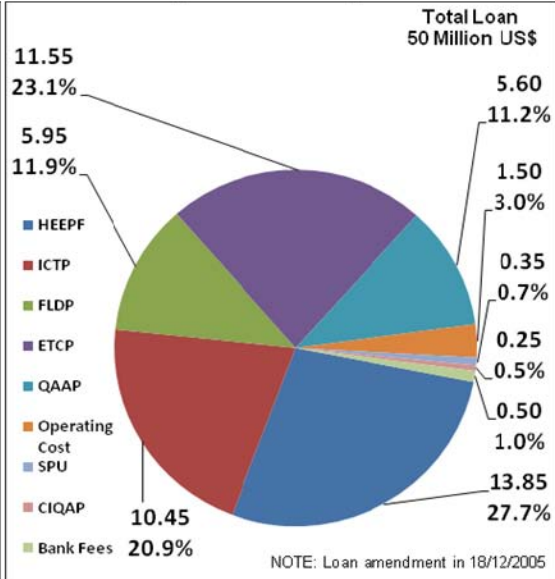
Total Disbursement from HEEP Amended Budget
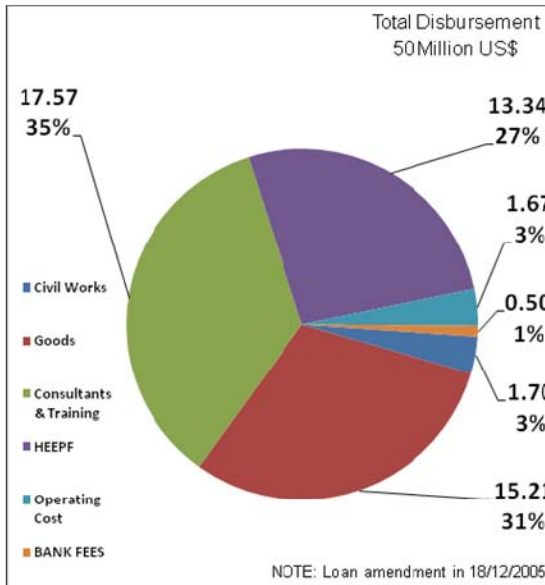## (July 2002 – March 2009)
IBRD Loan No. 4658 - EGT

By Disbursement Categories

Total Disbursement 50 Million US$

17.57
35%

13.34
27%

1.67
3%

0.50
1%

1.70
3%

15.21
31%

Legend:
- Civil Works
- Goods
- Consultants & Training
- HEEPF
- Operating Cost
- BANK FEES

NOTE: Loan amendment in 18/12/2005

By HEEP Projects

Total Disbursement 50 Million US$

10.51
21%

6.00
12%

6.20
13%

1.67
3%

0.53
1%

0.61
1%

0.50
1%

13.34
27%

10.64
21%

Legend:
- HEEPF
- ICTP
- FLDP
- ETCP
- QAAP
- Operating Costs
- SPU
- CIQAP
- BANK FEES

NOTE: Loan amendment in 18/12/2005
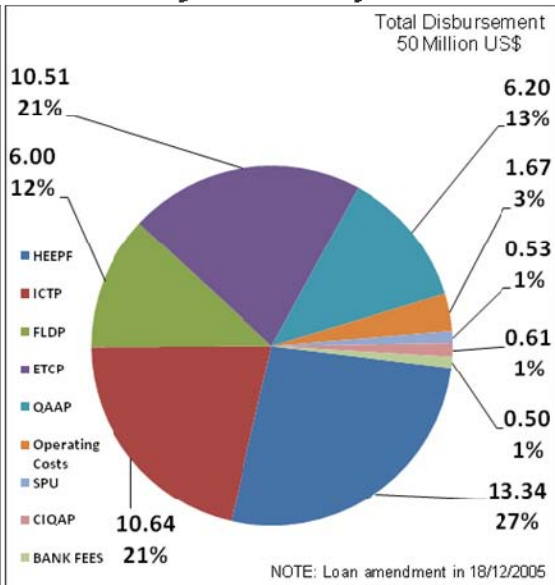
HEEP Quarterly, Cumulative & Planned Disbursement
Based On Disbursement Categories & HEEP Projects
(July 2002 – March 2009)
#### IBRD LOAN NO. 4658 - EGT

*Start up of actual implementation   *Actual disbursement
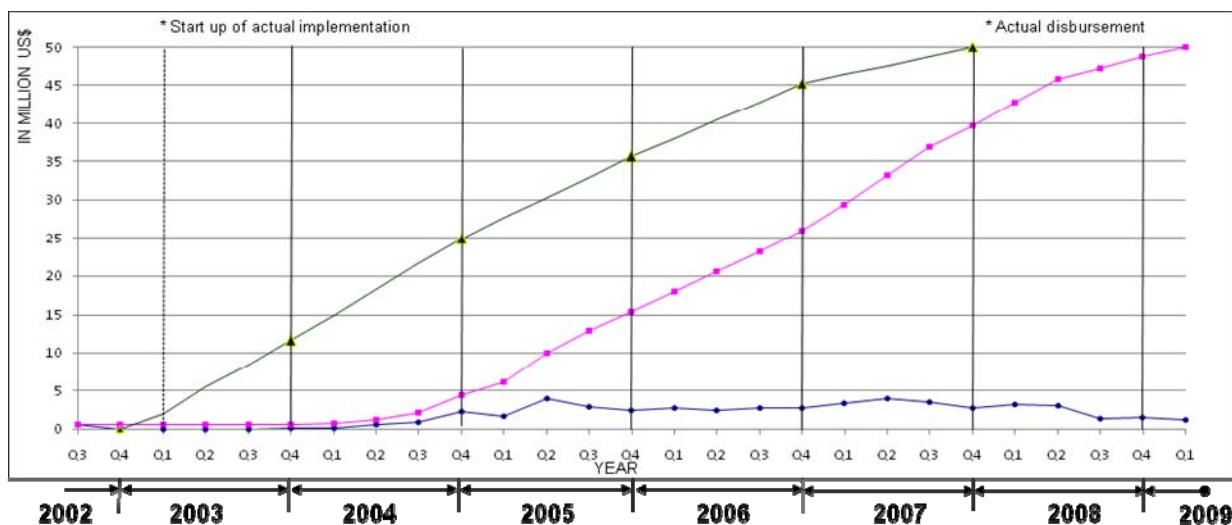
Actual disbursements	Disbursements	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
	• Quarter	0.00	0.00	0.00	0.00	0.03	0.06	0.09	0.54	0.91	2.22	1.70	3.91	2.94	2.49	2.73	2.47	2.72	2.70	3.37	3.90	3.57	2.99	3.13	3.96	1.40	1.47	1.24
	■ Cumulative	0.00	0.00	0.00	0.00	0.53	0.99	0.65	1.23	2.14	4.36	6.06	9.97	12.91	15.31	18.04	20.51	23.23	26.02	29.39	33.29	36.86	39.87	42.99	45.98	47.39	48.76	50.00
▲ Estimated Disbursements (PAD)			0.00				11.90				24.96				36.64				45.91				50.00				0.00	0.00

Amended Budget for HEEP Projects Compared to Actual Projects Disbursement
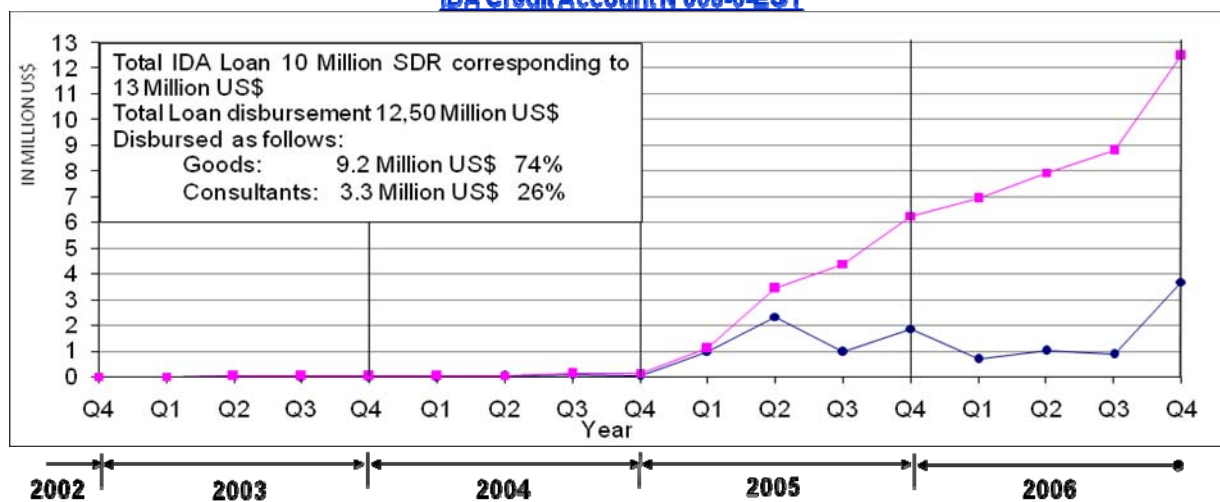## (July 2002 – March 2009)
IBRD LOAN NO. 4658 - EGT
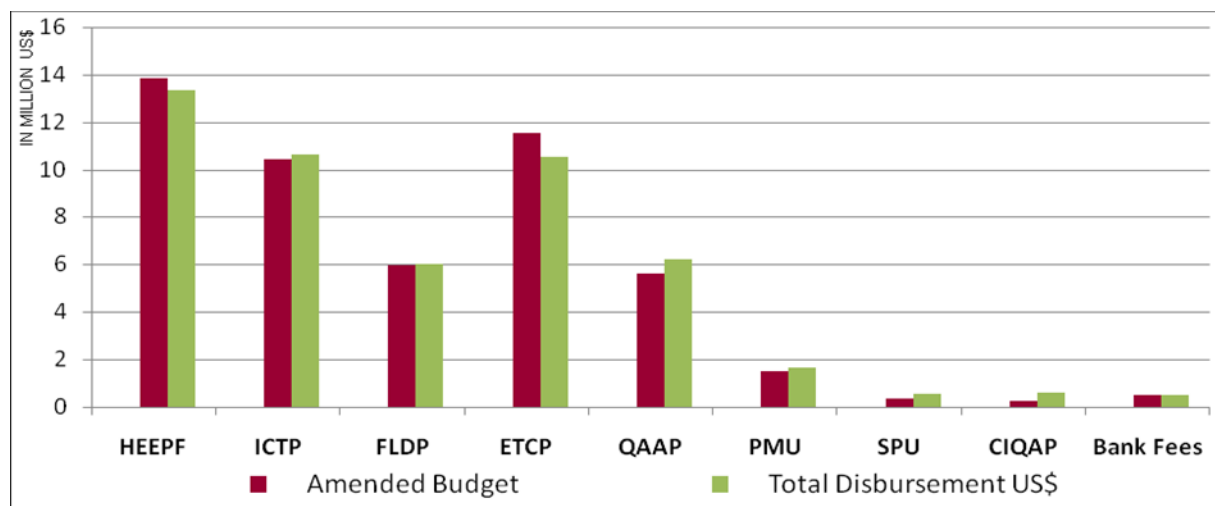
Projects	HEEPF	ICTP	FLDP	ETCP	QAAP	PMU	SPU	CIQAP	Bank fees	Total disbursement US$
■ Amended budget	13.85	10.45	5.95	11.55	5.60	1.50	0.35	0.25	0.50	50.00
■ Total disbursement US$	13.34	10.64	6.00	10.51	6.20	1.67	0.53	0.61	0.50	50.00
% Of total disbursement from total loan budget	26.69%	21.29%	11.99%	21.02%	12.39%	3.35%	1.06%	1.22%	1.00%	100.00%

■ Amended Budget   ■ Total Disbursement US$

EEP Quarterly & Cumulative Disbursement
Faculty Of Education Enhancement Project (FOEP)
### (November 2002 – December 2006)
IDA Credit Account N 008-0-EGT

Total IDA Loan 10 Million SDR corresponding to 13 Million US$
Total Loan disbursement 12,50 Million US$
Disbursed as follows:
Goods: 9.2 Million US$ 74%
Consultants: 3.3 Million US$ 26%

Disbursements	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
• Quarter	0.00	0.00	0.01	0.00	0.00	0.00	0.03	0.06	0.03	0.96	2.33	0.96	1.86	0.68	1.00	0.88	3.68
■ Cumulative	0.00	0.00	0.01	0.01	0.02	0.02	0.05	0.11	0.14	1.10	3.43	4.40	6.26	6.94	7.94	8.82	12.50

2002   2003   2004   2005   2006

HEEP Yearly, Cumulative & Planned Disbursement

(July 2002 – March 2009)
Local Funds Corresponding To IBRD Loan No. 4658 - EGT

*10 Million US$ corresponding to 46 Million L.E. (1US$ = 4.6 L.E. at the onset of the Loan agreement)
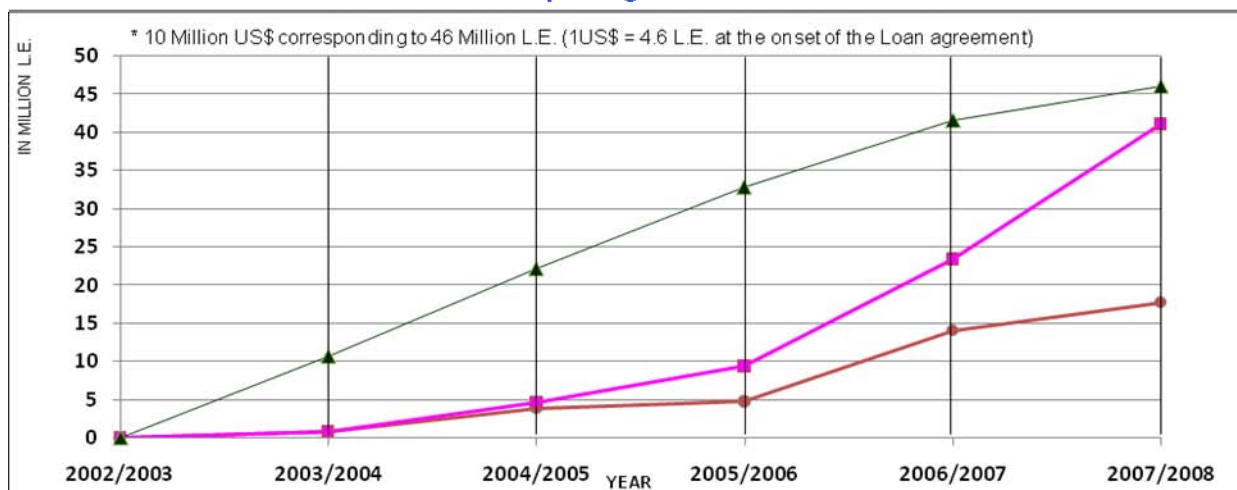
	Record	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007	2007/2008
Actual disbursements	• Yearly	0.05	0.73	3.85	4.69	14.07	17.71
	■ Cumulative	0.05	0.78	4.63	9.31	23.39	41.09
Corresponding to IBRD Loan	▲ Planned	0.00	10.66	22.13	32.79	41.59	46.00

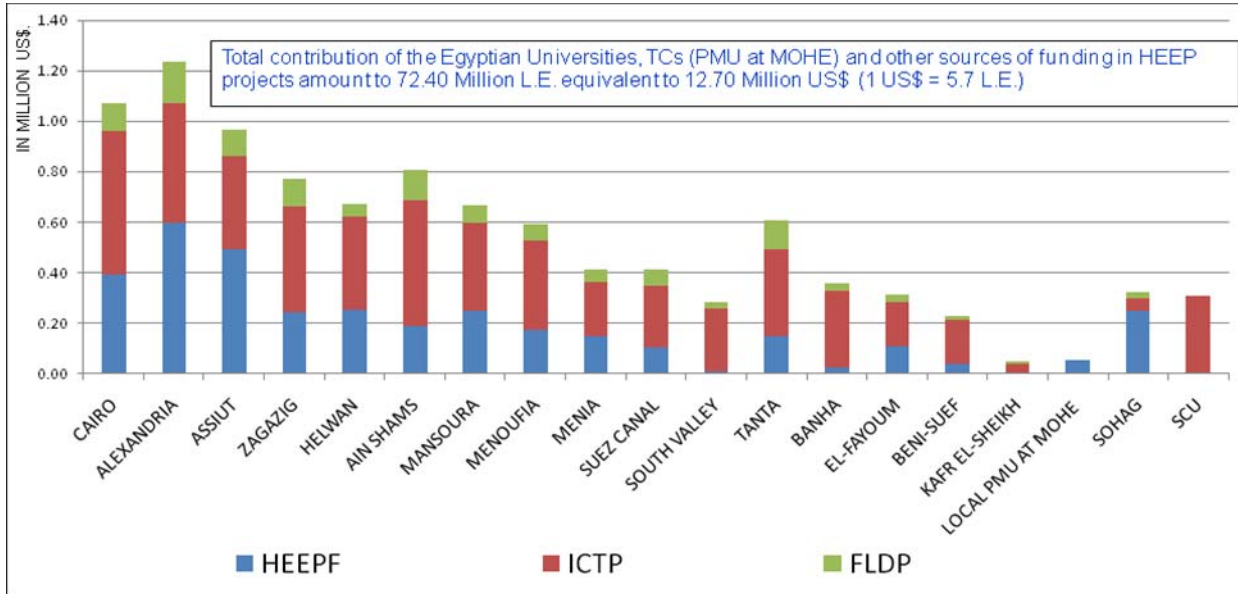## Total Transfers From Each HEEP Projects to Universities and TCs (PMU at MOHE)
(July 2002 – March 2009)
IBRD LOAN NO. 4658 - EGT

Amount of total transfers 36.18 Million US$ equivalent to 206.22 Million L.E.

95
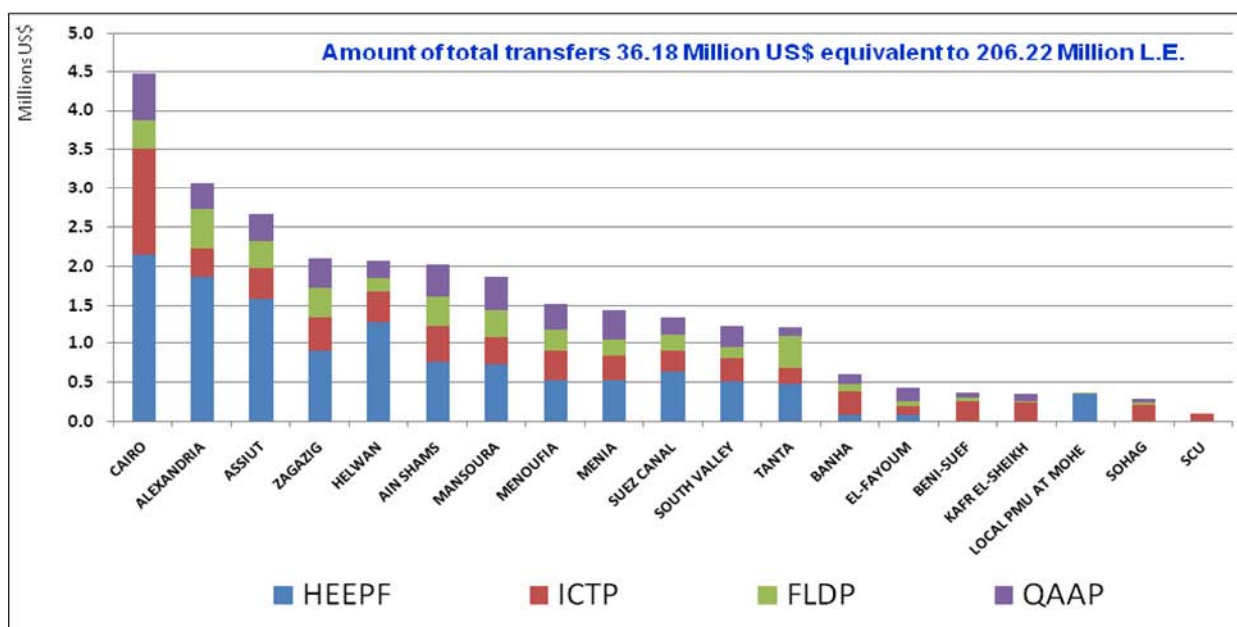
**Contribution of the Egyptian Universities and TCs (PMU at MOHE)
In HEEP Projects
(July 2002 – March 2009)
IBRD LOAN NO. 4658 - EGT**

Total contribution of the Egyptian Universities, TCs (PMU at MOHE) and other sources of funding in HEEP projects amount to 72.40 Million L.E. equivalent to 12.70 Million US$ (1 US$ = 5.7 L.E.)

■ HEEPF   ■ ICTP   ■ FLDP

* Contribution from other sources of funding to the Local PMU at MOHE amount to 14.66 Million L.E. equivalent to 2.57 Million US$ were directed to the Reform of the Missions Sector.

Direct and Indirect Disbursements to Universities and TCs (PMU at MOHE) Benefiting from the Loan Proceeds
(July 2002 – March 2009)
IBRD LOAN NO. 4658 - EGT

US$

Details		HEEPF	ICTP	FLDP	ETCP	QAAP	SPU	CIQAP	Total	% Disbursement to Loan Budget
Total Loan disbursement in Universities and TCs (PMU at MOHE)	Direct	12,580,084.68	8,299,540.27	4,911,110.16	9,526,885.05	4,534,350.69	0.00	0.00	39,831,930.85	79.66%
	Indirect	783,425.76	2,344,016.08	1,085,454.36	981,501.69	1,660,709.18	529,661.21	609,532.27	7,994,300.55	15.99%
Total		13,343,490.44	10,643,556.35	5,996,564.52	10,508,366.74	6,195,059.87	529,661.21	609,532.27	47,826,231.40	95.65%
Expenses for managing HEEP projects (Projects Management Unit)									1,673,768.60	3.35%
Bank Fees (World Bank)									500,000.00	1.00%
Total									50,000,000.00	100.00%

* Direct Disbursement :

1- Projects transfers to Universities.

2- Civil Work (the work of rehabilitation and construction of non residential buildings in TCs (PMU at MOHE), etc.).

3- Goods (purchase of machinery and equipment for language and computer laboratories and establishing University PMUs, etc.).

4- Consultancy work (technical consulting - engineering - development of MIS for Universities, etc.).

* Indirect Disbursement :

1- Consultants (based on the follow-up implementation of projects in Universities, peer reviews assistance to management of HEEP projects, etc.).

2- Workshops (awareness of HEEP projects, training Universities PMU staff, workshops related to capacity building & implementation of HEEP projects, etc.).

3- Other expenses related to the successful implementation of HEEP projects.

Annex 8. Comments of Cofinanciers and Other Partners/Stakeholders

Annex 9. List of Supporting Documents