



The Impact of Reform Projects in Higher Education: The Case of Egypt

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Abstract

Egypt has been engaged in a major system-wide reform of its higher education system over the past decade based on a dynamic long-term strategic reform plan that caters for, and is adaptable to, any changes as needs arise. The outcomes of the implementation efforts made by all concerned stakeholders involved in the reform process is starting to pay back and flourish, influencing the overall performance of Egyptian higher education institutions.

The objective of this paper is to give an overview of the Egyptian higher education reform initiative the first phase of which has been ongoing for the past six years, focusing on the efforts made to measure the impact of the reform projects, individually and collectively, at different levels. A review of the three phases of piloting, developing and implementing the impact assessment framework is presented. A review of one of the pilot projects developed and implemented in one of the Egyptian Public Universities to measure its impact, is presented and discussed. The assignment for this pilot project was further extended to develop an impact assessment framework for universities and higher education institutions to use as a guide to implement it in their own institutions. Results of the impact assessment studies conducted by the seventeen public universities based on this framework are also reviewed and discussed.

In addition, the World Bank has selected the Higher Education Enhancement Project (HEEP), as one of its most successful projects implemented worldwide, as stipulated in their biannual project performance assessment reports (Aide Mémoire), to develop for the first time what they call a learning ICR (Implementation Completion Report) in which impact assessment is a mandatory portion. Preliminary results of the ICR impact assessment studies conducted by the Projects management Unit (PMU) at the Ministry of Higher Education (MOHE) in collaboration with the World Bank on a pilot scale applied to three public universities selected to establish baseline data for the second phase of reform, is also reviewed and discussed. Lessons drawn from implementing the overall Higher Education Reform Strategy (HERS), together with those drawn from the impact assessment studies are followed by concluding remarks.

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It is hoped that, the outcome of this paper will help other countries in the region, and globally, to benefit from the lessons drawn from the Egyptian experience and to avoid mishaps that confronted the Egyptian higher education reform initiative.

I. Introduction

The Egyptian higher education system has been for long-suffering from many problems inherent in overcrowding, overly centralized governance and widespread inefficiencies, low quality of university education and poor quality and relevance of mid-level technical education. The Government being cognizant of the challenges facing the higher education sector initiated serious steps to deal with these issues. A high-level consultative committee was appointed by the Minister of higher education to identify the needs for higher education sector-wide reform. Issues considered by the committee included the change and/or modification of regulations applied to governance structures, institutional autonomy, the degree of control institutions exercise over budgetary resources, and their capacity to mobilize extra budgetary resources. Efforts of this committee culminated in the development of a comprehensive Higher Education Reform Strategy (HERS) that addressed all deficiencies.

The objective of this paper is to give an overview of the Egyptian higher education reform initiative the first phase of which has been ongoing for the past six years focusing on reviewing and discussing the initiatives made to measure the impact of the reform projects, individually and collectively, at the institutional level.

II. Overview of the Egyptian Higher Education Reform Strategy

1. The Egyptian higher education system

The author (Said, 2003) presented a detailed historical review of the Egyptian higher education system, including comprehensive statistical data reflecting on the size and structure of the system and summarizing the efforts to develop the overall strategic reform plan before its inception. The author (Said et al, 2008) further updated the statistical data, and reported on the progress in the implementation of the first phase of the strategic reform plan.

The most recent statistics of the Egyptian higher education system reported for the academic year 2007 - 2008) by the Supreme Council of Universities (SCU, 2009) and the Strategic Planning Unit (SPU, 2009) at the Ministry of Higher Education (MOHE, 2009) entail an aggregate of around 2.5 million students enrolled and supported by over 80 thousand faculty members and their assistants. The breakdown of the higher education system includes seventeen public universities, six branches of which will become independent within the coming two years, encompass over 1.5 million students enrolled in regular undergraduate programs as well as programs entailing new modes of delivery. Over 65 thousand faculty members and their assistants affiliate to these public universities.

Seventeen private universities are already offering their educational services and several others are in the pipeline to start offering their programs meeting the government directives to expand on enabling community contribution to the higher education system as government alone cannot cater for all levels of education that meet quality requirements. Slightly over 50 thousand students enroll in all the newly established private universities representing just over 3% of the total university enrollment. Al-Azhar University, the oldest in the world, alone caters for more than 420 thousand students enrolled in diverse specializations other than Islamic ones.

Community college education has been totally restructured by clustering the existing 45 public Middle Technical Institutes (MTIs) into 8 Technological Colleges (TCs) catering for about 125 thousand students, in addition to eight private MTIs catering for around 30 thousand students. Graduate students enrolled in postgraduate studies exceeded 180 thousand in the academic year 2007- 2008 with over 45 thousand graduating from the year before. It is worth mentioning that one of the major challenges facing the Egyptian higher education system is the enrollment of over three quarters of the student in humanities and social sciences specializations leading to an increase in unemployment because of the surplus of graduates exceeding the needs of the labor market. The Egyptian government represented by the Ministry of Higher education is giving utmost priority to resolve this problem by encouraging enrollment of students in science and technology related specializations to meet the labor market needs, with the hope to reverse the percentage of enrollment.

The enrollment rate of students of the age cohort 18 - 23 years into higher education is currently around 28% with government plans to enable access to higher education to accommodate 35 - 40% of the same age cohort by the year 2022 according to the MOHE strategic plan (SPU, 2009) as forecasted by the increase in population. The budget spent by the government during the academic year 2007 - 2008 on higher education was around 8.35 billion Egyptian pounds at an increase of about 10% than the budget spent in the previous academic year. Recently, the government announced a major increase in the coming academic year's budget by over 20% for education at large realizing the need to support its national recognized priority.

The above overview of the Egyptian higher education system, classified among the largest higher education systems worldwide, presents an insight about the challenges that face the system and the reform efforts needed to meet these challenges. A brief review and reference of the reform efforts, implementation priorities, achievements and lessons learned follow.

2. Higher Education Reform Strategy (HERS)

The Higher Education Reform Strategy (HERS) developed by the Ministry of Higher Education (MOHE), and endorsed by the National Conference in February 2000 (MOHE, 2000), consisted of 25 projects addressing the diverse areas of reform. The HERS aimed 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 of the 25 projects were identified and bundled into six integrated sub-projects and given priority in the first phase of the HERS (2002 – 2007), namely:

- 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

(A competitive mechanism to support universities, faculties and/or individual/group faculty members' developmental needs)

Following is a brief account on each of the six priority projects.

1) Higher Education Enhancement Project Fund (HEEPF)

Website: <http://www.heepf.edu.eg>

HEEPF aims to enhance quality, relevance and efficiency in Higher Education through establishing

a sustainable competitive mechanism among Egyptian universities and Technical Colleges (TCs), creating mechanisms characterized by effective administration and transparency to finance, support, follow-up the implementation, appraise the performance, and ensure the sustainability of higher education enhancement competitive projects. Starting with the basic foundation of educational institutions to achieve the high quality, efficiency, and effectiveness of higher education in the national universities and institutes through enhancing administration systems, restructuring, academic enhancement, and community engagement to qualify graduates that satisfy the needs of the labour market and compete locally, regionally and globally.

2) Information & Communication Technology Project (ICTP)

Website: <http://www.ictp.org.eg>

ICTP is a fundamental project supporting the University's mission-critical activities: research, teaching and learning. It focuses on implementing efficient technology infrastructures and effective information systems; providing excellent information services, and access to information and quality technology resources; and delivering responsive support service to students, faculty, and staff. ICTP also aims at preparing the academic community to deal with these technological revolutions. Activities entail improving the overall efficiency of the IT network infrastructure, creating Management Information Systems to automate the administration within all public universities, linking public universities to the National Network for Scientific Research and making available a digital library that contains all the needed journals and periodicals, and creating a platform for e-learning courses. In addition, extensive certified training for IT capacity building of faculty members, administrators and students were conducted at different levels.

3) Egyptian Technical Colleges Project (ETCP)

Website: <http://www.etc.edu.eg>

ETCP addresses one of the most problematic areas of our higher education system. During the past five decades, 45 Middle Technical Institutes (MTIs) having two years of study, distributed over 18 governorates were established in Egypt. These institutes established to provide technical cadres to meet the needs of the labour market in the industrial, business, tourism, hotels, and other fields, were clustered geographically into 8 technological colleges (TCs). ETCP aims at improving the performance and upgrading the capabilities of the TCs to improve the quality of their graduates to satisfy the ever-increasing demand of the labor market for efficient employees in the intermediate job level, to establish effective links with the society and the business sectors, and to reduce the unemployment rate among the TCs graduates. Improving governance and performance of TCs and enhancing their capabilities to graduate administrators and technicians with skills to meet the relevant international level of skills standards. Certified training centers established in the TCs to offer services for the community and surrounding industries to help improve quality.

4) Faculty of Education Project (FOEP)

Website: <http://www.foep.edu.eg>

The project aims at achieving a comprehensive modernization of faculties of education, to go in tandem with world scientific and professional development, taking into consideration the Egyptian cultural dimension in general, and each faculty's environment in particular; on a systematic basis, that guarantees effectiveness of teaching and learning, and total quality as an approach to reform. Achievements were made by creating an appropriate environment for

development that supports the mission and conceptual framework of these faculties of education, preparing new by-laws for FOEs to use as a model to develop their own based on newly revised curricula, reforming teacher preparation system at all levels with a view to technology and training, enhancing professional development of teaching staff and their assistants, improving infrastructure quality of the faculties of education labs and equipment, ensuring quality performance of the faculties of education, adopting faculties' self-reform approach, associating project activities with public schools and other enhancement projects, and establishing a follow-up and evaluation system.

5) Faculty and Leadership Development Project (FLDP)

Website: <http://www.ncfld.org>

FLDP aims at enhancing institutional and professional potentials of higher education institutions (HEIs), along with developing the skills and competencies of faculty members, administrators and leaderships to enable them to cope with developments of the era, to face competitiveness, and to increase the efficiency of higher education outcomes. The achievements of FLDP fulfilled through: identifying the training needs of HEIs, developing training strategies by universities/HEIs, conducting Training of Trainers (TOT) workshops to create core teams of certified trainers within each university/HEI, establishing sustainable training and development mechanisms, supporting the establishment of training centers in each public university to ensure sustainability of the continuous training process, setting training priorities, prioritizing training groups and developing annual training planners, executing all training activities within the training centers established in each university/HEI, and performing periodic evaluation and impact assessment of the training programs in accordance with quality assurance and accreditation requirements.

6) Quality Assurance and Accreditation Project (QAAP)

Website: <http://www.qaap.net>

The strategic objective of QAAP is to prepare universities/HEI to qualify for accreditation by developing a national QAA system/body to ensure that the quality of graduates from universities and HEIs makes them compete nationally, regionally and internationally. The project activities entail: developing an Internal Quality Assurance System in universities/HEIs, establishing National Academic Reference Standards (NARS) and Benchmarks, establishing QA centers/units in each university/faculty to overlook QAA related issues, assisting universities/HEIs to develop their own strategic plans as a mandatory requirement for accreditation, introducing the culture of quality by raising the awareness of universities/HEIs and the community at large building their capacity through focused training and organizing workshops, developing a national database for peer reviewers and experts in the area of QAA, and conducting peer review visits as a rehearsal for the accreditation visit(s).

These six priority projects were collectively implemented under the Higher Education Enhancement Project (HEEP) funded from World Bank diverse sources (IDA and IBRD); 13 million US\$ IDA (International Development Agency) soft loan agreement to support FOEP, and 50 million US\$ IBRD (International Bank of Reconstruction and Development) loan agreement to support the remaining five projects. In addition to other sources of funding such as the European Union (EU), The Ford Foundation (FF), The British Council (BC), and USAID, the GOE complemented the World Bank funds with a 10 million US\$ for ineligible expenditures under World Bank regulations and guidelines, such as taxes, custom duties, etc.

The design of the Higher Education Enhancement Project (HEEP) focused primarily during the first

phase of its implementation (2002 - 2007 extended to 2008) on following a top-down approach for many reasons. Universities were not ready to accept change due to lack of confidence, the need to create a critical mass of involved stakeholders to affect change, the need to create the necessary environment and culture for accepting the change and avoiding resistance, and the absence of a competitive transparent mechanism to encourage participation, were among the main reasons. To meet these challenges, HEEP aimed at laying the foundation for improving the quality of the higher education system in Egypt, through legislative reform, institutional restructuring, establishment of independent quality assurance mechanisms and monitoring and evaluation systems.

HEEP had three main components; the first component supports the Government's efforts to restructure system governance and management, so that conditions are in place to support improved sector efficiency, and quality. More specifically, this component included reforming legislation governing higher education; rationalizing funding allocation practices - financing international technical assistance for resource allocation across higher institutions; establishing a national quality assurance authority, guided by technical assistance in establishing the performance standards for an accredited system of higher education. Management training, capacity building, as well as the establishment of an integrated management information system, are among the activities supported by providing funds for higher education institutions to improve teaching/learning abilities. The second component focused on improving the quality, and relevance of university education, through the establishment of an information technology (IT) integrated computer, and network infrastructure, and finance in-service training to develop competencies in the application of computer technology, particularly in teaching methodologies. Finally, the third component targeted the improvement of the quality, and relevance of mid-level technical education, by consolidating 45 MTIs into 8 TCs, designing relevant curriculum, and training instruction, and strengthening academic administration and management.

Achievements, pitfalls and lessons learned under the above-mentioned three components of the HEEP six sub-projects are reported in detail elsewhere (Said et al, 2008), (World Bank, 2009), (EUN, GOE, HEEP, MOHE, PMU, SCU and SPU, 2009). Furthermore, the author reported on the progress and outcome of the HEEP reform activities focusing on governance and finance (Said 2008), on Egyptian quality assurance and accreditation related initiatives (Said, 2005), (Said et al, 2005-a, 2005-b) and (Said et al, 2006 1st Ed and 2nd Ed 2008). In addition, the author also reported on government efforts towards the internationalization of higher education (Said, 2007) and (Said et al, 2008). These references give the reader a comprehensive and detailed idea about the accumulated experience to reform the higher education system over the last decade, as it is beyond the scope of this paper to review further the outcome of the Egyptian reform model. However, to give an idea about the overall sustainable achievements of HEEP on the institutional level, the National Authority for Quality Assurance and Accreditation in Education (NAQAAE, 2009) now established for over a year and started offering its accreditation services to qualified schools. NAQAAE has been since its inception concerned with developing National Academic Reference Standards (NARS) for different specializations, and will be engaged in the peer review visits to universities/faculties for their institutional accreditation at the beginning of the next academic year 2009 - 2010. Quality assurance centers/units at universities/faculties to administer QAA related issues, Faculty-Leadership development Centers (FLDCs) to develop and implement training programs based on competencies and skills acquisition, and University Projects Management Units (UPMUs) to administer all reform activities, all are already established as a sustainable part of the organization structures of all public universities. The three entities



provide support for reform activities within each university, thus institutionalizing the reform process. In addition, a National Center for Faculty-Leadership Development (NCFLD, 2009) established as the third branch for the International Board of Certified Trainers (IBCT) in the US, with its second branch in the Netherlands to cover EU countries, offers its training services to certify master trainers, training materials, and training labs, covering 22 countries in the MENA region, Africa and Asia. NCFLD also operates as a hub networking the FLDCs established in all public universities to coordinate training activities and ensure that they conducted in accordance with international good practice and certification requirements.

Readers concerned to learn more in-depth about the Egyptian experience and the outcome and achievements of its reform efforts are highly advised to visit the resourceful project website (HEEP, 2009), to navigate through the Egyptian higher education system at large learning everything about it, and to have direct access to other related information, and/or concerned entities/stakeholders.

It is worth mentioning that after the successful implementation of the first phase of HEEP, the Government of Egypt (GOE) allocated an aggregate budget of 2.7 billion Egyptian pounds (L.E.), equivalent to about 480 million US\$ at the current prevailing exchange rate (1 US\$ = 5.7 L.E.) for the second phase of reform (2007 – 2012). The focus of the second phase is on preparing our universities/faculties to qualify for accreditation, and to continue reforming technical education. This GOE commitment reflects a political will to improve the quality, relevance and efficiency of the Egyptian higher education system.

The Egyptian higher education reform model culminates by developing and implementing several impact assessment initiatives, details of which follow.

III. Impact Assessment Initiatives

The concept of a comprehensive, well-structured Impact Assessment (IA) study was nearly absent from any of the reform projects implemented under the Ministry of Higher Education (MOHE). However, dispersed monitoring and evaluation efforts to evaluate the projects outputs/outcomes were ad hoc with no structured methodology and baseline data to compare with. Among these evaluation efforts were those conducted by external reviewers such as the World Bank biannual supervision missions, the Association of Egyptian American Scholars (AEAS) in the US, the British Council, as well as universities and beneficiaries of the Egyptian higher education system, details of which are reported elsewhere (HEEPF, 2009).

The Ministry of Higher Education in collaboration with the World Bank realized the importance of measuring the impact of their efforts to reform the Egyptian higher education system to assess the performance of reform projects, collectively and individually, to take the necessary corrective actions as needed during the consecutive phases of the reform activities. This unforeseen mandatory requisite, realized halfway during the implementation of the first phase of the higher education strategic reform plan, led to the absence of baseline data to compare performance and reform outcomes. As a result, several initiatives took place to assess performance starting on a pilot basis and ending with a university system-wide implementation of an impact assessment structured methodology developed based on the pilot results. To start with, the World Bank organized a workshop in coordination with the MOHE inviting one of the world-renowned authorities in the realm of impact assessment to talk about international good practices and to train some of the concerned Egyptians on the methodology to develop and implement a comprehensive impact assessment framework.



It is worth mentioning that all the impact assessment efforts were based on criterion referenced-evaluation that depends primarily on meeting the predetermined objectives for the reform projects. Interviews were conducted internally within the institutions, classified as intermediate and short-term IA and thus cannot be considered conclusive evidence of impact, as is the case when implementing norm referenced-evaluation based on external dialogues with concerned stakeholders, classified as long-term IA. However, these IA efforts are preliminary steps towards the establishment of an evidence-based system-wide impact assessment mechanism that takes into consideration criterion and norm referenced evaluation to help institutions evaluate their performance and output. Following is a brief account of these impact evaluation/assessment initiatives.

IV. Development Phases of the Impact Assessment Strategy

Impact assessment initiatives developed over a period of nearly four years in three distinctive phases, namely; piloting phase, development phase, and structured and system-wide implementation phase. The piloting phase started in 2005 under one of the HEEPF funded projects at Zagazig University, one of the 17 Egyptian public universities, to measure the impact of the project on the concerned beneficiaries from the project outcomes (El-Badawy et al, 2006). The scope of the pilot study was further expanded to assess the overall impact of HEEPF funded projects within Zagazig University on the main beneficiaries within the university.

The development phase started after the successful implementation of this pilot IA study, with the same team contracted by the Projects Management Unit (PMU) at the Ministry of Higher Education (MOHE) to develop a comprehensive framework for an impact assessment strategy for the overall reform activities conducted in Egyptian public universities. The outcome of the methodology followed during this development phase is three fold; the first is a final report containing the framework for the IA of the Higher Education Enhancement Projects (HEEP), together with the results of implementing this framework at Zagazig University using sample representative colleges (El-Badawy et al, 2007-a). The second fold was an Operational Manual developed to guide universities and higher education institutions on how to implement structurally the IA methodology (El-Badawy et al, 2007-b). The operational Manual was further developed (El-Badawy et al, 2007-c) into an Impact Assessment Handbook based on well-established methodologies and criteria (Kusek et al, 2004) and (Mosse et al, 1996).

Finally, the structured and system-wide implementation phase entailed applying the IA framework developed on a selected sample of universities and then on a university system-wide basis. This was the first attempt to establish a system-wide IA on the public universities level with the hope to establish baseline data for the second phase of reform that extends to year 2012.

Following is a brief account of each of the three phases of development of the impact assessment strategy, including review of the methodology followed and the outcomes, bearing in mind that IA is intended to provide answers to the four main questions; reach who, change what, change how much and reach how many.

1. Piloting Phase

The first impact assessment efforts initiated within Egyptian universities started with an assessment of outcomes of one of the projects funded under HEEPF at Zagazig University (El-Badawy et al, 2006). The impact assessment study had three specific objectives, namely; to develop a sustainable impact assessment system as a model to replicate in other universities, to

assess the individual and collective impacts of HEEPF, and to pinpoint problems and drawbacks associated with its application.

The framework of the IA study covered the activities/inputs that HEEPF was able to develop or update, and the output/outcome as seen by beneficiaries and non-beneficiaries. The framework methodology focused on selecting a sample of faculties at Zagazig University stratified into three strata according to the number of HEEP projects in each faculty, and from each stratum, one faculty selected. The selected faculties were medicine with five projects, faculty of engineering with two projects and faculty of commerce with no projects. The target groups included 43 high-level administrators, Deans, Vice-Deans, Heads of Departments and Professors; all questioned through in-depth interviews. A group of beneficiaries of 15 faculty members and 7 students, and non-beneficiaries of 16 faculty and 13 students, were all interviewed through focus group discussion. Another group of beneficiaries including 146 faculty members and 533 students, and non-beneficiaries of 154 faculty and 606 students, all were subjected to structured-interview. Selected beneficiaries and non-beneficiaries were identified according to a specific criterion.

All data collection was conducted in Arabic since it is easier and does not need any interpretation, and thus ensures standardization. Both qualitative (focus group discussion and in-depth interview) and quantitative measurement (checklist and structured interview) methodologies were used. Tools developed were formed of; questions for the implementation of the focus group discussions and the in-depth interviews, checklists to collect data about infrastructure and documentation, structured interviews, one for beneficiaries and one for non-beneficiaries. Questions used in qualitative and quantitative interviews were complementary and covered the different aspects of the HEEPF projects' impact. A scale of six ratings used by the World Bank to avoid the tendency of interviewees' to choose the happy medium in the usual scale of five ratings, was adopted in all the questionnaires, whenever applicable, to ensure that the interviewee would have an opinion stand

Recruitment and training of team members was essential from the onset of the impact study to ensure that all participating team members were oriented about the meaning of impact assessment and trained on different approaches for data collection. Developed tools were first tested among team members and among a small sample of beneficiaries and non-beneficiaries (about 30 questionnaires); revision of the forms and its finalization was then carried out. The time needed to fill the questionnaires was estimated to be from ten to fifteen minutes.

a. Data Collection, Management and Analysis

The data collection was carried out concurrently from the three faculties in order to save time, and it took about three weeks to revise the forms, data entry and analysis.

The most important findings of the individual and collective impacts of the IA study at Zagazig University are reported in terms of activities/inputs and outputs/outcomes (El-Badawy et al, 2006). The activities/inputs group entails awareness, infrastructure/ documentations, capacity building of faculty members and dissemination of information about the project and its activities. It was evident that the level of awareness about HEEPF is defective especially among non-beneficiaries. Among them, only 9.8% of staff and 3.0% of students have heard about HEEPF. This lack of awareness is an important issue as it can hinder any effort for improvement and can limit the impact of any project to those only involved.

b. Outputs/Outcomes

Academic environment, students' achievement and faculty performance were among the elements used to measure impact. It was found from the responses to questionnaires posed on HEEPF projects related to transparency, performance, efficiency, funding, monitoring and

evaluation, that the overall effect of HEEPF on the faculty was found by more than 60% of beneficiaries to be good to very good. Moreover, almost all non-beneficiaries (97.9%) believe that competitive projects are needed. The Impact Assessment study (El-Badawy et al, 2006) concluded that HEEPF projects were able to introduce and change to a large extent attitude, behavior, skills acquisition, and overall performance of beneficiaries, faculty and students. Nevertheless, awareness, sustainability and limitation of the projects to only beneficiaries were among the areas identified in the study that need to be further addressed and dealt with.

2. Development Phase

One of the main outcomes of this study was to develop a generic IA framework model that can be used on a wider basis by universities and higher education institutions as a routine assessment procedure. The system developed (El-Badawy et al, 2007-a) covered the necessary methodology including the sampling, the data collection methods and tools, the needed team, training and statistical analysis, report writing, time and frequency of application and finally problems encountered and drawbacks. A manual for the IA system was also developed (El-Badawy et al, 2007-b) explaining all details for developing IA tools and for conducting an IA study in other universities. For in-depth details about the IA framework and methodology to develop the tools and implement them on a system-wide basis, the reader is encouraged to refer to and access the references (El-Badawy et al, 2007-a, 2007-b and 2007-c).

3. Implementation Phase

a. Impact Assessment for the HEEP ICR

As part of the requirements for the HEEP Implementation Completion Report (ICR), a workshop was organized with the objective to provide the MOHE and the World Bank with feedback from the main concerned stakeholders; namely, universities, Technical Colleges (TCs), students, employers, MOE, Ministry of Planning, Ministry of Labor, etc. on project outcomes/impact, implementation issues, lessons learnt, and future support from the Bank to higher education. The workshop addressed three major themes articulated around the project components:

- 1) Reform of higher education governance and management for better efficiency
- 2) Improving the quality and relevance of university education
- 3) Improving the quality and relevance of mid-level technical education

The workshop gathered a limited group from the abovementioned stakeholders (around 60) to work in groups for two days and allow participants to provide feedback on the several aspects of the HEEP reform projects. Details of the Workshop sessions, how it was conducted, the speakers and the views of the of the main stakeholders participating are reviewed and analyzed in the HEEP ICR Stakeholder's Report (El-Sawah et al, 2008).

b. Survey Study for the HEEP Implementation Completion Report (ICR) on the Perceptions of the Project's Beneficiaries

This study took over three months to be completed (El-Mahdi et al, 2009) and constitutes one of the main components of the ICR. The main objective was to assess the results included in the output reports presented by the directors of the different HEEP project components, namely FLDP, QAAP, ICTP, HEEPF and ECTP. The evaluation process was conducted on four main groups of beneficiaries, namely, faculty members, assistant faculty members, undergraduate and postgraduate students.

Because of the distinctive nature of some projects, the survey study was conducted in three phases, the first phase included the first three projects FLDP, QAAP, and ICTP that share common

features, the second phase included the ETCP dedicated for technical education and the third phase covered a selected sample of the HEEPF projects.

Extensive and detailed statistical data collected and analyzed in the survey study (El-Mahdi et al, 2009) reflect the following conclusions:

- In general, there is sufficient evidence to conclude that there have been positive results achieved due to the implementation of HEEP as indicated by all groups of beneficiaries. However, satisfaction of the interviewed beneficiaries engaged in the implementation of HEEPF-funded projects was higher compared to the level of satisfaction from the other development projects included in the study ICTP, QAAP, FLDP and ETCP. This could be related to the competitive nature of the HEEPF projects, which target a specific category of beneficiaries and have specific goals; unlike the other four projects, which are more general in nature and need a relatively longer time to achieve their desired objectives.
- With regard to ICTP, FLDP and QAAP projects, the beneficiaries declared that there is a moderate degree of positive results achieved; this degree is higher among staff members and their assistants, while they were lower among students.
- Moreover, there are evident higher positive results derived from the implementation of ICTP, compared to FLDP and QAAP implementation. This phenomenon could be explained by the fact that FLDP went through many stages of development, namely, the training matrix, and the training of faculty members to qualify them as certified trainers responsible to conduct training programs within their respective universities. Moreover, the nature of QAAP needs more time to achieve a significant impact.
- With regard to ETCP, there is generally a noticeable degree of development achieved, due to the positive impact from integrating the 45 MTIs into eight technological colleges. This decision helped in improving the management and administration structures and efficiency. Despite establishing and upgrading the computer and language labs, there are still difficulties of internet access, which are felt by staff members and students. Moreover, there was a relative decline in the degree of positive results achieved within the commercial education compared to the industrial education and the tourism and hotels education.
- In view of the absence of a “situation analysis study” to establish baseline data for an impact assessment study at the inception of HEEP implementation, the results of this survey study can be considered as benchmarks for the implementation of similar studies aiming to follow-up on the achieved development within higher education over time.
- Regarding the methodology of selecting the sample of universities and faculties included in this study, there was a bias towards choosing the universities and faculties with largest number of implemented projects, while taking into account the representation of the three main regions in Egypt, namely, the Metropolitan areas, Lower-Egypt and Upper Egypt. This decision agreed upon prior to the beginning of the implementation of fieldwork, reduces the degree of random choice and decreases the possibility of generalizing the results. Hence, in future similar studies, it is essential to select randomly amongst universities and faculties to have better representation of both humanities & social sciences and science specializations.
- The most important obstacles encountered in this survey study were; the limited time available to conduct the study, beneficiaries’ commitment to overlook mid-year exams, and the lack of cooperation from some faculty coordinators (employed to help in applying the IA study) in a way that would ensure sufficient number of beneficiaries to select for interview.

- In addition, the shortage in time hindered the team from using qualitative methods in the analysis, such as the focus groups and in-depth meetings.

c. Universities Impact Assessment Study: Preliminary Results

Using the impact assessment (IA) methodology developed and tested on a pilot basis to prove its validity and reliability (El-Badawy et al, 2007), all the 17 public universities available in Egypt were invited to implement the IA system to assess the impact of HEEP projects on the main beneficiaries in their respective universities. Only 16 out of the 17 universities presented the results of their IA studies with an aggregate sample of 104 faculties, 4172 staff members, 5626 postgraduates and 24233 undergraduate students. The universities used almost the same methodology as that in the previously referenced pilot study. The methods of data collection focused on five main sources, namely:

- Reviewing documentation at the level of the universities, faculties and departments included in the study, to get the full data concerning faculty members, graduates and number of students enrolled. Number of foreign students joining the university, documents about all aspects of the teaching, examination methods, the learning facilities such as computer labs, digital libraries etc., were among the data collected.
- Conducting in-depth interviews among high-level authorities to get their opinions on the achievements fulfilled through the implementation of HEEP.
- Organizing focus group discussions with staff members, graduates and students to get as their impressions well on the needs fulfilled through the HEEP.
- Carrying out structured interviews with a representative sample from staff, graduates and students to get their perception about the changes that can be attributed to HEEP.
- Using an observation checklist to identify the quality of performance of the faculty members as a result of implementing HEEP.

The data collection within each university was closely coordinated between HEEP management team at the central PMU and the management of the respective university PMU (UPMU) because of the time limitation to complete the study. Different sets of questionnaires were developed to suit the different stakeholders considered (students, graduates, faculty) focusing on aspects such as the quality and diversity of postgraduate studies, the use of faculty internet, use of new modes of delivery such as e-learning, distant learning and self-learning, using new technology in teaching, teaching methods, assessment and examinations, as well as student satisfaction about faculty performance and faculty-student relationship.

The collective review and analysis of the IA reports received from the 16 universities revealed the following conclusions:

- Participation in HEEP was high among university faculty members (above 67% in all universities with the exception of one university "South Valley" reporting only 45% and the highest participation rate reported was 98.8% at Zagazig). Figure 1.
- For postgraduate studies, about 50% of faculty members believed that the topics of thesis were not repeated and of good quality, the references were up-to-date and the methodology was correct and these aspects showed a significant improvement after the implementation of HEEP. Figure 2.
- Percentage of faculty members who obtained foreign degrees varied considerably with southern universities having the highest percentage because of limited postgraduate studies. Percentage of faculty members having International publications varies from 5% to 65%. However, the number of faculty members having international publications may be much higher in universities having lower percentage such as Cairo University. Figure 3.

Figure 1

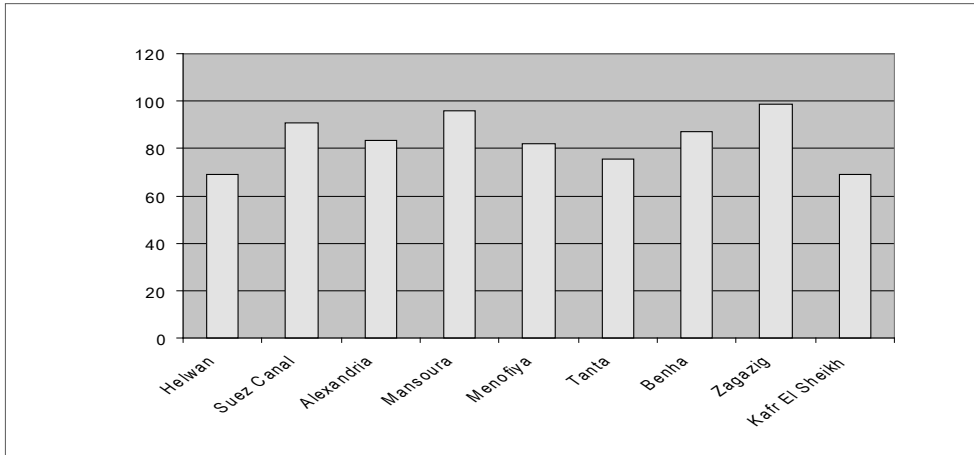


Figure 2

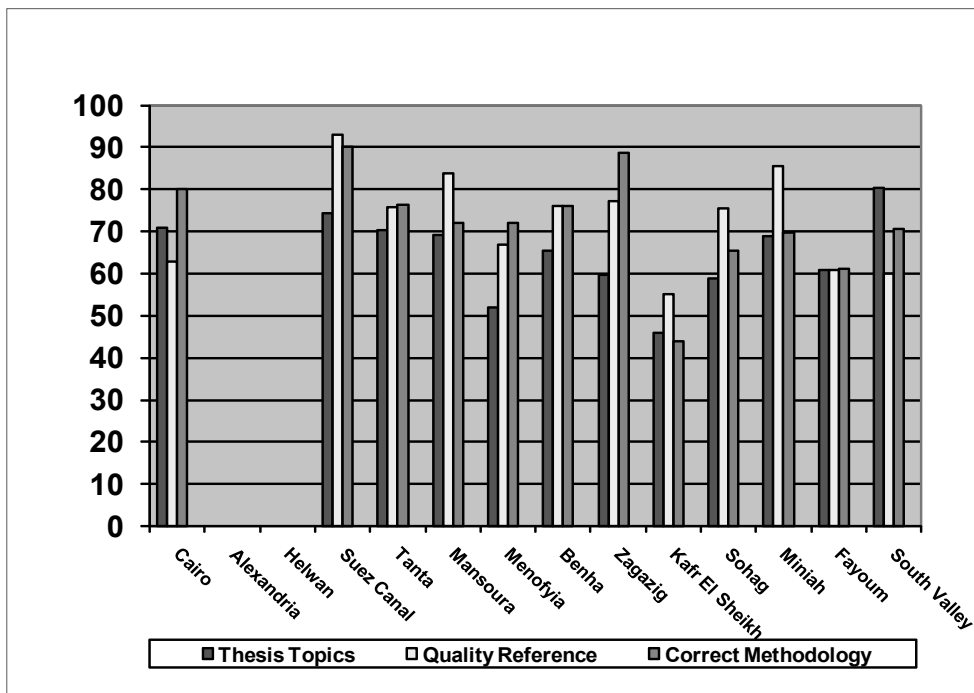
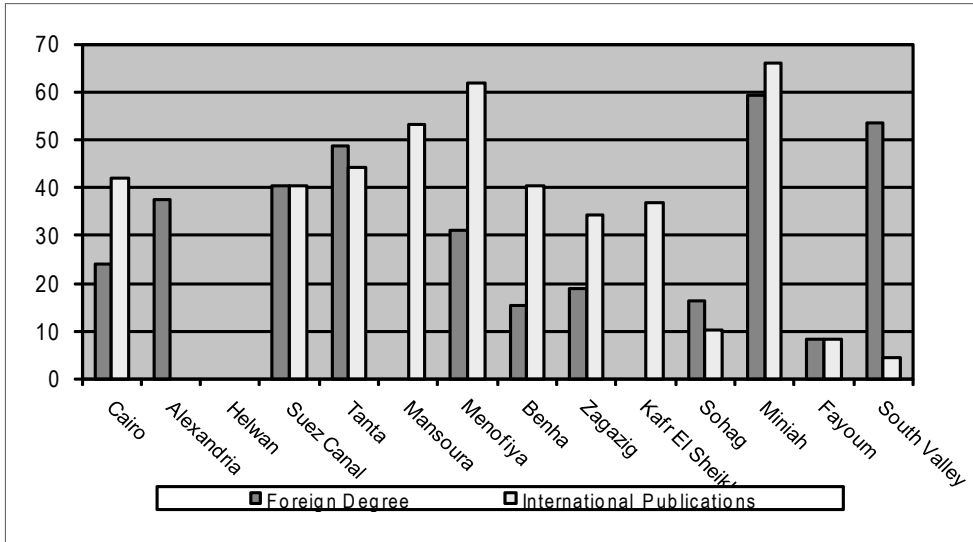


Figure 3



- Distant learning and self-learning were not used much and were present clearly in only 8 universities out of the 16. Figure 4
- The HEEP implementation has created in the universities a competitive environment that has led to increase in participation of faculty members in other projects. In 10 universities out of the 16, the faculty members stated that they are engaged in other projects (variation levels 20% to 85%). Figure 5.

Figure 4

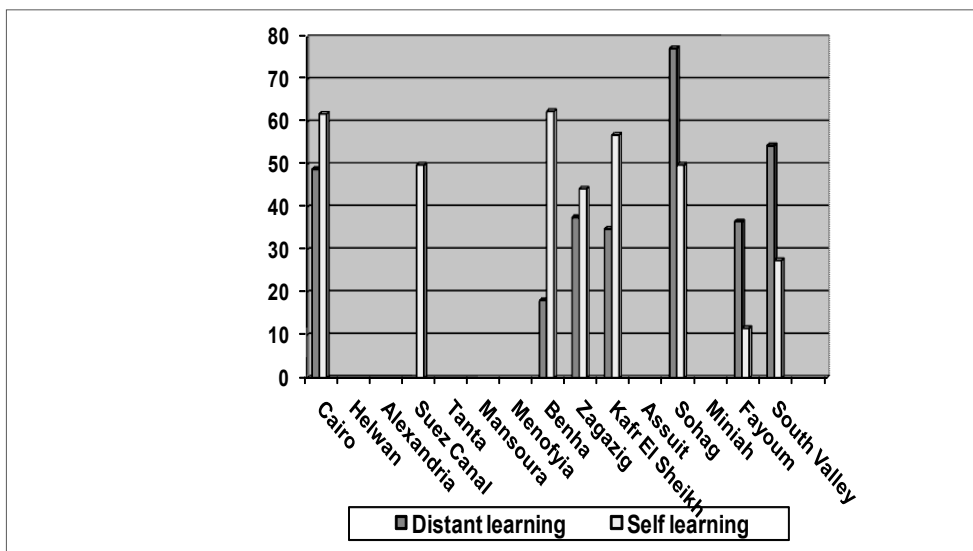
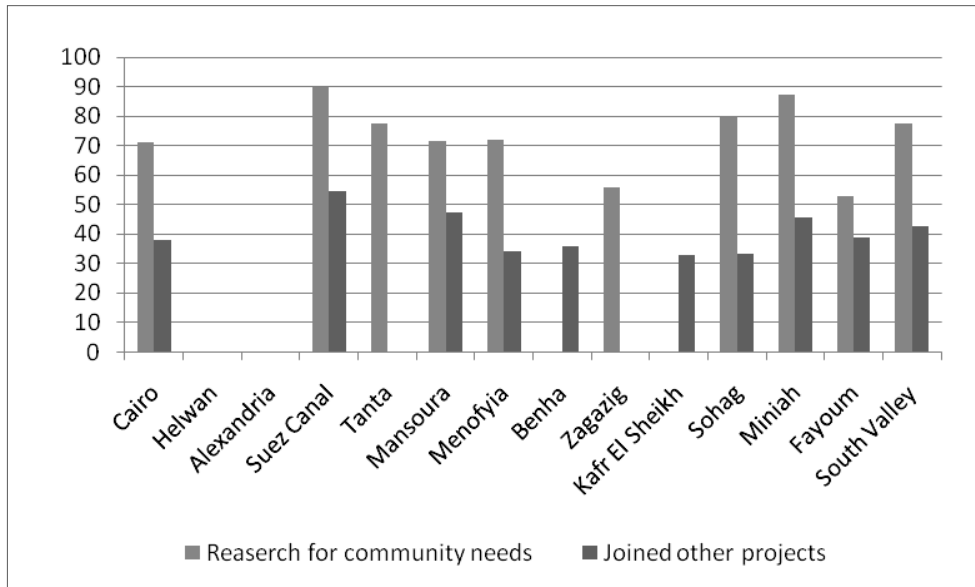


Figure 5



- The use of the electronic network from universities has showed improvement. Faculty members are using it now during and outside working hours with variable degree (20% to 85%) and its use for e-mail ranged from 15% to 80%. Figure 6
- Graduates and students use of their university network was less, in some universities it was only 10%. Figure 7.

Figure 6

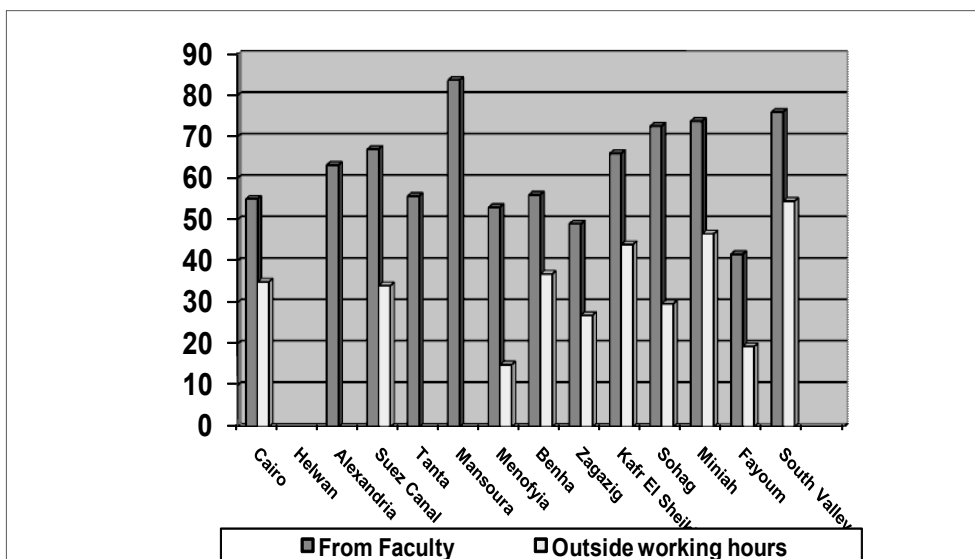
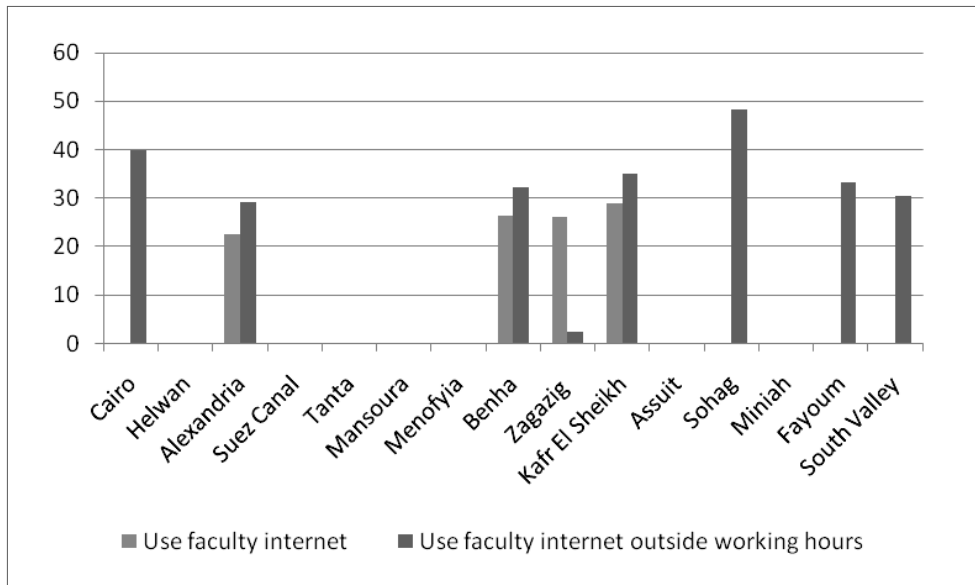


Figure 7



- E-learning is still at its beginning (10% of students had e-learning courses) while the use of digital libraries is still not high. Figure 8.
- The change in the curriculum writing, using of new methods of teaching and new methods of exams was more obvious. As an example of this change, about 50% to 95% of faculty members have written course specification, applied teaching in small groups and used data show. For using multi-choice questions (MCQs) in exams, the level ranged from 35% to about 80%, and the problem solving approach ranged from 50% to about 70%. Figure 9.

Figure 8

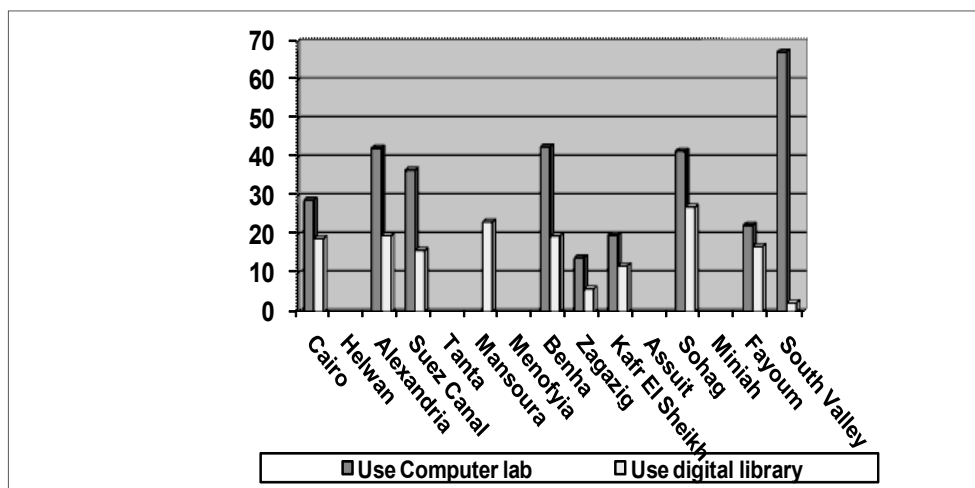
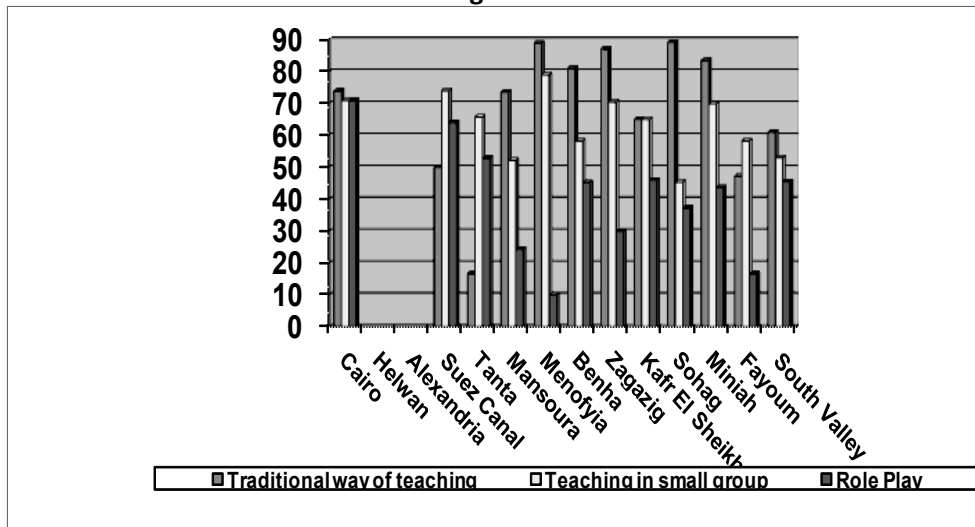


Figure 9



- Students' satisfaction of their relationships with staff members ranged from 30% to about 65%.
- As for faculty members' awareness of the presence of vision, mission and objectives in their faculty/department, it was obvious that there was a significant improvement and the lowest level was about 70%. Figure 10.
- Faculty members' administrative capabilities showed significant improvement, and their performance as reported by only two universities showed a satisfactory level among more than 50%.

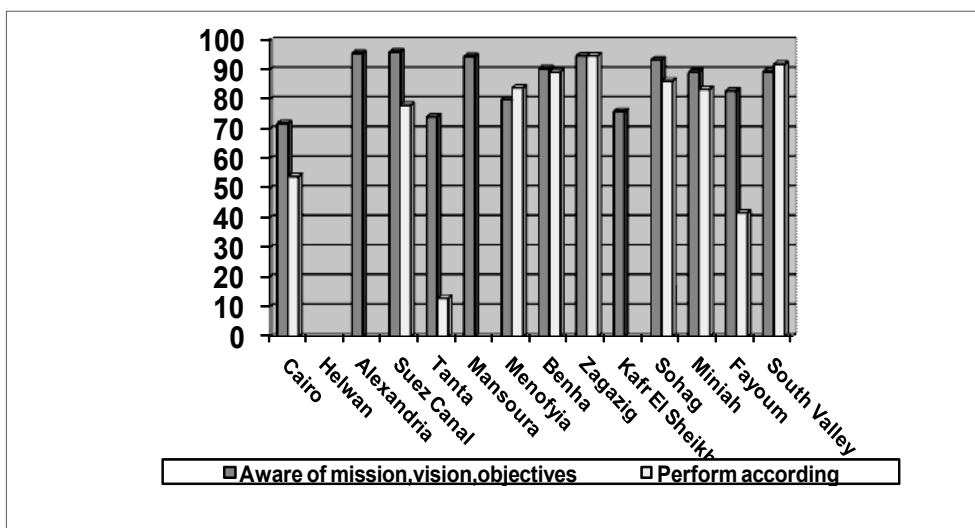




Figure 10

In spite of some of the drawbacks such as the absence of baseline data and target results, we still can state that preliminary results of the impact assessment has shown some significant changes that were recognized by faculty members more than the graduates or the students. The results presented in this paper are by no means exhaustive as the IA studies are extensive and for further details, the reader is advised to refer to the relevant report as referenced.

V. Concluding Remarks

The impact assessment strategy followed under the MOHE strategic reform plan was an extensive learning process systematically developed for concerned stakeholders to apply. Many lessons drawn from the IA development process include the feasibility of its implementation on a higher education system-wide basis, with ownership by all Egyptian universities and higher education institutions. Impact assessment of reform projects or any project in general, has become a mandatory requirement endorsed by the SCU to implement by universities periodically.

Results of the IA in universities indicated that faculty members are satisfied with the level of quality of theses as regards topics selected, quality of references and research methodology. However, there some variability between universities regarding the study abroad, international publications, postgraduate curricula, vocational training and participation in other projects. E-learning and self-learning are thought to be weak and need further support. The use of faculty internet facilities by faculty members, graduates and students varied between universities, however, it was highest among graduates and lowest among faculty members who prefer working at home, for many faculty members the IT personal infrastructure made available by institutions is not adequate and they prefer working at home or elsewhere. There is clear evidence that there is use of new approaches in curriculum writing, teaching methods, use of teaching aids and assessment/exams. Impact assessment also revealed that the HEEP reform efforts have clearly reached the majority of faculty members and to a lesser extent the students and graduates.

The outcome of the impact assessment efforts reflect the need for further IA periodic studies to expand the loop of beneficiaries to include concerned stakeholders from the community at large and to continue refining the impact assessment tools to ensure reliable results reflecting the reality of the higher education system in Egypt, or elsewhere. The lessons learned from the preliminary efforts to implement IA studies during the first phase of the Egyptian strategic reform plan, directly benefit the second phase of reform to establish the baseline data, and to continue refining the IA framework to comply with the overall objectives of the second phase, and the plans for higher education development.

Finally, the impact assessment initiative presented in this paper is a worthwhile model to adapt and replicate elsewhere, locally, regionally or globally, and the extensive resources referenced in this paper makes it easy for concerned stakeholders to draw lessons learned from the Egyptian experience and to avoid mishaps that confronted the higher education reform endeavors.

Acknowledgement

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for their dedication and commitment throughout the years of implementation that led to the recognition of concerned stakeholders of the impact of HEEP on the overall higher education system. The collective efforts of all those engaged in the reform activities made this work a reality.

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