Chapter 4
Egypt

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Abstract This chapter surveys the development and current state of e-learning in the Arab Republic of Egypt. The author surveys the general social, economic, historical, and demographic background of Egypt and provides a review of its educational system. Analysis and statistics on the Information and Communications Technology (ICT) infrastructure, usage of ICT in the country, and challenges and barriers to ICT implementation in education, business, and government are also provided. The chapter further explores in detail the major e-learning platforms, initiatives, and projects throughout the country. Information is additionally provided on accreditation, teacher training programs, and regulatory framework of e-learning. Finally, the author speculates on the future development of e-learning in Egypt. A comprehensive bibliography on e-learning scholarship related to the country, including government reports and websites, appears at the end of the chapter.

Keywords Egypt · E-learning · Web-based learning · ICT · Internet · Education · Distance learning

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Source: CIA World factbook, https://www.cia.gov

Country Profile

Egypt, sometimes referred to as the "Motherland of the World," is famous through-out the world for its ancient civilization and 7000-year history along the Nile River. It is an important political and cultural center of the Middle East. Egypt's govern-mental system is separated into three branches. The executive branch is led by the President, who serves as the head of state. Parliament is made up of the Shura Council (upper house) and the directly elected House of Representatives (lower house). The judiciary operates as an independent branch of government, subject only to the law and no other authority. The acceleration of a long reform program and continued economic recovery, particularly in the retail and energy sectors, made 2016 a transitional year for Egypt. Table 4.1 provides some selected socioeconomic indicators for Egypt.

Table 4.1 Socioeconomic indicators

Indicator	
Ethnic groups	Egyptian 98%; Berber, Nubian, Bedouin, and Beja 1%; Greek, Armenian, other Europeans (primarily Italian and French) 1%
Religions	Muslim (mostly Sunni) 90%, Coptic 9%, other Christians 1%
Languages	Arabic (official). English and French widely understood by educated classes
Population	91.1 million (January 2016)
Age structure	• 30.1 million young people under 15 years old (15.4 million males/14.7 million females) • 58 million persons between 15 and 64 years old (29 million males/29 million females) • 4 million persons above 64 years old (1.8 million males/2.2 million females)
Internet users	30.3 million (2016)

Source: http://countrymeters.info/en/Egypt

Education System in Egypt

Pre-university Education System

The schools in the secular system are organized as follows: primary school (6 years), preparatory school (3 years), secondary school (3 years) (university track), and 3- or 5-year vocational schools. Figure 4.1 represents the education system in Egypt.

In Egypt, two types of public secondary schools are available. The first type of school is government run and uses the Arabic language as a first language, and students at these schools study all subjects in Arabic. However, the English language is the second language. These schools account for more than 90% of secondary schools in Egypt. The other type of school, which may be government run or private, uses the English language as a first language; therefore, these schools are called "language schools." Students at these schools study in English. These schools are estimated to constitute less than 10% of secondary schools in Egypt (Alaa 2006). The formal education stage in schools ends with a general exam that is similar to that of the High School Graduation Exam in many countries known as the *Emtehan Thanaweyya Al-Amma*. This exam is national and allows students to move from secondary to higher education or to continue in technical and vocational education (Elshayeb 2012).

The Ministry of Education holds jurisdiction over all levels of education through secondary school. Each of the 27 governorates has its own governance system. The state Ministry of Education is responsible for the planning, policy formulation, quality control, coordination, and follow-up for all levels of public education, including the universities. The state government is responsible for most of education financing for both educational systems.
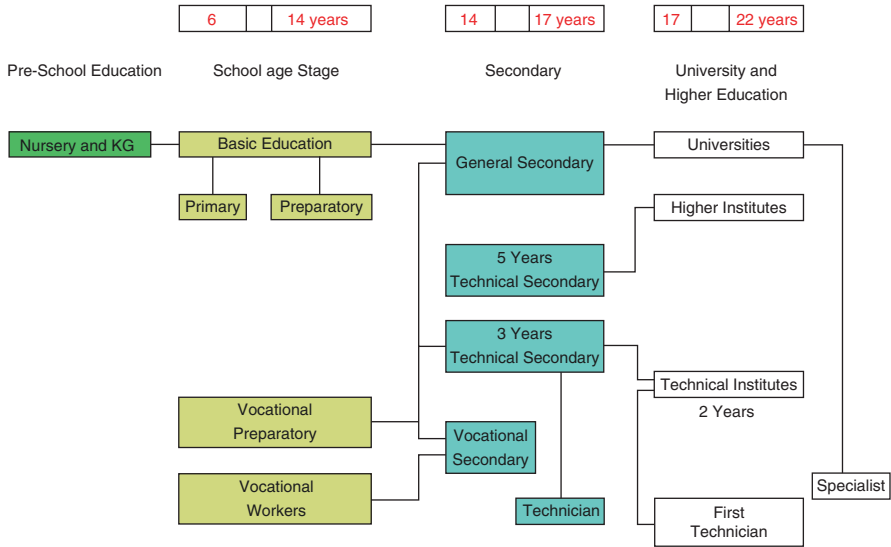
| 6 | 14 years | | 14 | 17 years | | 17 | 22 years |

Pre-School Education   School age Stage   Secondary   University and
                                                                                Higher Education

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Nursery and KG  ──  Basic Education ──────  General Secondary ──────  Universities ──┐
                         │                                                            │
                    Primary   Preparatory                      Higher Institutes      │
                                                                                      │
                                          5 Years                                     │
                                          Technical Secondary ──                      │
                                                                                      │
                                          3 Years                                     │
          Vocational                      Technical Secondary                         │
          Preparatory ──                         │          Technical Institutes      │
                                          Vocational          2 Years                 │
          Vocational                      Secondary                        Specialist │
          Workers ──                            Technician    First                   │
                                                             Technician ──────────────┘
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Fig. 4.1 Educational system in Egypt

Higher Education in Egypt

Higher education in Egypt is considered one of the world's oldest educational systems which dates back to 988 AD since the creation of Al-Azhar University by the Fatimids. Higher education is classified into two main sectors: the public (governmental) sector and the private (nongovernmental) sector. The governmental university sector is more dominant and larger than the private one with fewer students enrolled (El Sebai 2006). Governmental higher education in Egypt is also classified into two parallel educational systems (Loveluck 2012): the *secular system* which includes 22 public universities with 335 faculties and 100 higher education public nonuniversity technical institutes and colleges and the *religious system* represented by Al-Azhar University, which encompasses 64 faculties and 420,000 students (NAQAA 2012), specialized in offering academic degrees in Islamic Theology, Islamic Law and Jurisprudence, Arabic Grammar, Islamic Astronomy, and Early Islamic Philosophy.

On the other hand, nongovernmental higher education started with the establishment of the American University in Cairo (AUC) in 1919 (AUC Egypt 2012). However, Egypt only legalized Egyptian private universities in 1992 allowing the establishment of more private universities. The first four private universities were open to students by 1996 (Johnstone and Marcucci 2007). Private universities can be divided into two main categories. The first consists of highly prestigious and extremely expensive private universities, which are commonly developed under particular agreements between the Egyptian government and the government of another country or a partnership between Egyptian investors and a prestigious

non-Egyptian university. The second group consists of less expensive and lower-quality universities. As a result, less than 3% of the total number of university students in Egypt enroll in private universities. Besides, private higher education institutes are seen by many institutions as *sellers* of higher education certificates to only those who can afford it, which contradicts the principle of equal access to educational opportunities for all citizens, in which the ability to pay fees should not restrict access to higher education. Therefore, governmental higher education institutions in Egypt are considered to suffer from more pressures than private higher education institutions. These pressures force institutions to try to overcome significant challenges arising from attempts to compromise between delivering reasonable educational services and the high demand on higher education. The higher education sector in Egypt has 2.4 million undergraduate students, 250,000 postgraduate students, and 63,000 staff members. It comprises universities and institutions of technical and professional training.

The higher education system is made up of 22 public universities, 20 private universities, 12 technical colleges, and 115 private institutions. Industrial, commercial, and technical institutes provide 2-year courses leading to diplomas in accountancy, secretarial work, insurance, computer or health sciences, and electronics. Graduates of the 2-year middle institutes can proceed to university education according to their field if they receive a minimum grade of "good"; they are admitted into the second year at the university (i.e., the 2-year diplomas will count toward the university degree as 1 year). Technical education schools provide 4- or 5-year courses leading to advanced technical education diplomas in commercial, industrial, and agricultural fields (Johnstone 2009). Depending on the field, a *license* (for humanities, arts, and law degrees) or *bachelor's degree* (for sciences, professional and technical degrees) is obtained after 4–7 years of study. The *master's degree* usually requires 2–3 years of study beyond the *bachelor/license* and typically requires a thesis. The highest degree is the *doctorate*. It takes at least 3 years including 2 years of research, beyond the master's, and a dissertation (Johnstone 2009).

Distribution of Educational Responsibilities

The main educational regulating body in Egypt is the Ministry of Higher Education, which is responsible for setting higher education policy and insuring its implementation in the various universities. It is in charge of higher education and supervises and coordinates all post-secondary education: its planning, policy formulation, and quality control. It also oversees teacher training for secondary education. The Ministry is aided by three executive bodies:

- The Supreme Council of Universities (composed of the presidents of the public universities, in addition to five members from the civil society), founded in 1950, formulates the overall policy of university education and scientific research in universities and determines the number of students to be admitted to each faculty in each university.

- The Supreme Council of Private Universities (composed of the presidents of the private universities, in addition to some public figures and civil society representatives).
- The Supreme Council of Technical Institutes (composed of the chairmen of the technical institutes in addition to public figures from the civil society).

The Private Universities Council develops the overall policy of private university education and determines the number of students to be admitted to each university faculty, the maximum tuition to be charged, and the admission criteria. In order to meet the needs of the increasing numbers of students and to fulfill the requirements of the job market in a period of communication and knowledge revolution, the Egyptian government considered introducing e-learning, especially in higher education, where most educational problems originate (Abdel-Wahab 2008). Although e-learning seems to be a promising opportunity for increasing educational equality, the acceptance of stakeholders is an important factor that could limit further e-learning developments in Egypt.

Financing

Although the cost of higher education is rising in most institutions worldwide, governmental higher education is still free in Egypt. Free governmental higher education led to a speedy increase in enrollment rates and consequently a decline in the quality of teaching and learning. Large number of students per class, underfunding of universities, and insufficient or poor equipment were the top reasons (Richard 1992; Rossiter 1997; Beckstrom et al. 2004).

The underfunding of public universities has also affected academic staff. According to Fahim (2009), about 75% of current public expenditure in higher education goes to wages. The ratio of academic to nonacademic staff is relatively high (1:0.7), which shifts a large share of current expenditures away from academic staff. Consequently, professors are neither paid enough nor rated on their performance or results of the grades at which their students pass or fail. There is nearly no motivation to attain a high standard of teaching excellence, thus leading to a low-quality level of teaching and learning. Learners are consequently faced with insufficient guidance and supervision (El Sebai 2006). Alternatively, setting up private tutoring programs in universities is a common method for mutual benefits to professors and students. It is an alternative route for gaining extra income for educators and achieving a better educational service for students (Richard 1992; Holmes 2008). Low funding levels for universities also limit the ability of institutions to play their role in spreading education and knowledge. Therefore, high levels of expertise are limited to specific fields only (Loveluck 2012), which can be seen in the high ratios of graduates from humanities disciplines compared to the low ratios of applied scientific disciplines (Issa and Siddiek 2012).

Admissions and Curricula Content

In Egypt, access to university is determined by the final secondary education exam called the "Thanaweya Amma." All students passing that national exam are ranked according to their grades and are given a choice of disciplines to choose from. A central management body, named "Maktab tanseeq," is then responsible for distributing students to faculties and universities, according to their choice, grades, and proximity to universities, with no further admission exams, except for some faculties, e.g., the Applied Arts faculty. Upon agreement of the Supreme Council of Universities and its committees, programs and course contents are developed at the faculty level. This involves determining the main outlines of the course contents and allowing the people in charge of the course relative freedom to choose reference books, course topics, etc.

Some Challenges Facing Egypt's Education System

In order to determine whether the further introduction of e-learning would improve the higher education experience in the Egyptian context, questionnaires were collected from the Egyptian E-Learning University (known as EELU) which was chosen to research e-learners; 371 were returned with valid answers from on-campus students and 27 were returned from e-learning students. The results show that existing problems of higher education in Egypt from the perspective of higher education students have been investigated first. The lack of practical work (77.5%) and lack of innovation in programs (62.2%) were the top higher education problems as reported by on-campus private and public higher education students, respectively (El-Gamal 2014a, b). On the other hand, both categories of students (public and private on-campus) denied that free education is considered one of the main higher education problems. Results reported for the latter point were 58.5% and 44.1%, respectively (El-Gamal 2014a).

Strains on Infrastructure

Investment in school facilities has not kept pace with the rapid increase in the numbers of students, resulting from high rates of population growth and rising enrollment rates in institutions. Overcrowding – with classes regularly containing between 50 and 90 children – and poor facilities do not create an environment conducive to learning. To alleviate the pressures caused by both of these factors, many schools operate in shifts, with students only attending for part of the day.

Poor Teaching Quality and Dependence on Private Tutors

In Egypt today, the teaching profession tends to be associated with a low social and economic status. This notion is reinforced by the meagre salaries – rarely amounting to more than EGP 1600 (USD 200) a month – and the poor quality of training. The poor quality of state-provided schooling has led to the emergence of an educational "informal sector" where private tutoring is used to fill the educational gaps left by the formal schooling system. According to CAPMAS (Egypt's Central Agency for Public Mobilization and Statistics), over 60% of investments in education are spent on private tutoring. It is prevalent in all types of school and leaves those students whose parents cannot afford private lessons at a disadvantage relative to their classmates. In this respect, it can be seen as another factor entrenching the social inequalities and stratification in Egypt to which the formal educational sector is already contributing. The prevalence of private tutoring also acts as a disincentive for teachers to complete their lesson plans. Many teachers double their jobs as private tutors in order to supplement their salaries. This creates a conflict of interest, as excelling in their state-funded lessons would reduce the incentives for students to pay them for additional support.

Poor Textbook Quality and Dependence on Private Books

As the result of the above two problems, students try to get high marks by all means to keep their parents happy; therefore, they try to solve exam problems from previous years to get familiar with the style of the test. However, the ministry textbooks do not provide previous exams nor do they adequately present the topics. This situation led private publishers to provide parallel textbooks for all levels of study. These publishers played an initial role in disseminating e-learning concepts, as they started to distribute CD-ROMs with interactive learning styles with their textbooks and eventually supported the textbook with websites that incorporate a learning management system (LMS).

Negative Attitudes Toward Vocational Training

A strong belief in the determinative nature of examination results has implications for the type of student who goes on to undertake vocational training. The majority of students attending Egypt's technical colleges are those who have failed to win a university place. There is an obvious correlation with the quality and capacity of those who pursue this track. One can argue that those who have pursued technical and vocational training are effectively "tracked out," with limited opportunities for further learning.

Inadequate University Access, Funding, and Research Capacity

In recent decades, the Egyptian state has channeled very low levels of funding into university research, limiting the ability of academic institutions to play an important role in the generation and dissemination of knowledge within Egypt and further afield. As a result, levels of expertise tend to be highly concentrated in a few centers of excellence (Loveluck 2012).

E-Learning in Egypt

Opening alternative e-learning educational tracks could be considered as a solution that would address many of the challenges in Egyptian education previously discussed. The electronic nature of online education provides a good chance for offering educational opportunities to students without the pressures associated with conventional higher education. However, the skills required to design and deliver an e-learning course as well as the skills desired by students to handle ICT issues effectively could act as a barrier to e-learning in higher education.

E-learning has been applied in Egypt in a number of projects that took place mainly in basic and undergraduate education (Fayek and Magda 2004; El-Khouly 2010), which adopted parallel distance learning tracks to the main present regular systems. The concept of establishing a complete e-learning university was not advanced in Egypt until 2009 when the Egyptian Ministry of Higher Education made its first attempt to launch Egypt's first electronic nonprofit university. It is assumed that introducing e-learning in Egypt could eliminate problems such as overcrowded classrooms and limited resources. The adoption of the new learning platforms in Egypt can provide an economic and more suitable solution to higher education problems by filling in the gap between the number of university places available in Egypt and the growing demand for higher education.

Since Egypt is taking its first steps in adopting e-learning in higher education, it could also be expected that the acceptance of online graduates by the job market might not be an easy task. Similarly, official plans and strategies must be adopted and announced in order to increase the awareness of the Egyptian society, including the job market's attitudes toward e-learning and its benefits. These plans should take into consideration the rules and regulations on which e-learning tracks are built and followed by online universities. Assuring the job market about the quality of e-learning graduates may have the potential of overcoming the cultural factors. Students may be willing to accept e-learning if the acknowledgment and appreciation of employers are guaranteed and vice versa.

It could be assumed that e-learning is seen by students and educators as a compromise solution between the deteriorating governmental higher education system and the high tuition fees of private universities. This solution seems to be clear to students on the one hand and has the potential for encouraging parents to encourage the pursuit of e-learning for their children's education on the other hand. Students

believe that the effectiveness of the programs offered are the most important criteria required to encourage e-learning adoption, along with the presence of a reliable Internet connection. Unlike traditional students, students supportive of e-learning consider the accreditation of an e-learning-based certificate as highly important. It seems that e-learning students believe that the effectiveness of e-graduates in the workforce will help them in gaining the acknowledgment and appreciation of society regardless of the accreditation of the certificate (El-Gamal 2014a, b).

History of E-Learning in Egypt

The Egyptian government promotes ICT in education as it helps to improve the instructors' and learners' motivation to learn. In Egypt, e-learning results in a significant growth in the application of technology to facilitate learning (Hegazy and Radwan 2010). Since 1985, Egypt as a developing country has invested in constructing its ICT infrastructure (Kamel and Hussein 2002). Egypt has 52 universities, 22 government universities, and 20 private universities. However, these universities are not sufficient to serve all of the Egyptian population. The number of Internet users is rapidly growing, with access for 35% of the population in Egypt; however, the bandwidth in most locations is still less than 2 Mb/s (Ayad 2013). Internet access has been available to the public in Egypt since 1993. The Egyptian Ministry of Education (MOE) encourages the development of e-learning. In 2008, the Egyptian Ministry of Communication and Information Technology (MCIT) established plans for the infrastructure required for enhancing e-learning, including provision of universities with high-speed Internet networks, establishing videoconference links at all the universities, implementing wireless campus pilot programs, creating 52 e-laboratories in Helwan University as a pilot model (20 learners/computer), establishing e-content development labs in each university for helping staff produce e-learning materials, training both staff and administrators in efficient use of information technology, and inviting both international and local experts to review the current capabilities and technical materials for e-learning (MCIT 2010).

Afifi (2011) pointed out that Egyptian universities are taking advantage of some of the opportunities regarding e-learning method, namely, easing the overloaded classes in the Egyptian universities and flexibility in respect of time of learning, enhancing the students' ability regarding acquiring knowledge by themselves (autonomous learning), improving information retention, delivering education for local students in remote areas, increasing the number of enrolled international students, reducing the costs of education per student, and serving students with special needs. In addition, the study by Adams and Seagren (2004), cited in Mohammad (2008) stated that Egyptian universities should realize that e-learning will overcome limitations in time and space compared to traditional offline classes, expand an institution's geographical reach, provide the possibility of multiple learning practices based on self-regulated learning for adults, improve educational quality, provide interactivity in the process of communication, increase efficiency for institutions

and students, and achieve customer satisfaction and cost-effectiveness compared to traditional classroom-based teaching and learning. Nevertheless, in e-learning research, learner motivation has recently received little attention in Egypt. Therefore, there is a need to understand and overcome the barriers to e-learning to be able to adopt this concept (Nooura 2015).

Egyptian E-Learning University (EELU)

In September 2005, the Ministry of Higher Education prepared a preliminary study for starting the project of the Egyptian E-Learning University (EELU) (http://www.eelu.edu.eg). In November 2006, an action plan was prepared for the university establishing the project's activities, phases, and tasks, as well as an implementation schedule and estimated budget. In June 2007, the Cabinet approved the establishment of the Egyptian E-Learning University. The presidential decree was issued in August 16, 2008, No. 233 establishing the first ever qualified Egyptian university for distance learning whose systems and technologies were completely based on e-learning. In October 2009, the university started its educational activities with two programs: "Computer and Information Technology and Business Administration" in three centers inside Ain Shams University, Tanta University, and Assiut University (EELU 2014). The Continuing Learning Center (CLC) of the university was opened in 2011. The university offers undergraduate programs in Information Technology and Business Administration and postgraduate programs in Masters of Education in E-learning, Masters in Software Engineering, as well as an MBA program.

Egyptian Education Initiative (EEI)

In May 2008, a significant step was taken when Egypt, at the World Economic Forum on the Middle East, celebrated the launching of the Egyptian Education Initiative (EEI) under the umbrella of the Global Education Initiative aiming to reform the Egyptian education system by using information and communication technology. The EEI was meant to address several challenges including overcrowded classrooms, unsatisfying teacher-to-student ratios, and incremental education costs. Thus, EEI aimed to stimulate learning skills; provide equitable and high-quality education for all learners regardless of their number, location, and gender; and transform learning into an interactive experience, which should ultimately support the efforts to foster a knowledge-based society in Egypt (MCIT 2008). To fulfill these aims, the Egyptian government set up a plan in 2008 to establish the infrastructure required for enhancing e-learning, which includes (MCIT 2008, 2010):

- Providing universities with high-speed Internet networks
- Establishing videoconference amenities linking all the universities

- Piloting the wireless campus
- Supplying 52 labs in Helwan University as a pilot model (20 students/ computer)
- Establishing an e-content development lab in each university for helping staff produce e-learning materials
- Training both staff and administrators to use information technology efficiently
- Inviting world-class specialists and local experts to check the current availabilities to ensure that technical materials are sufficient, efficient, and in place (Afifi 2011).

The National E-learning Center of Egypt or NELC (http://www.nelc.edu.eg) represents the backbone of e-learning in Egypt, offering a wide range of services and support facilities for the university staff members to begin engaging with e-learning. The NELC includes several sections and provides various services for staff and content developers, such as instructional design course builder, virtual labs portal, learning style identification system, e-courses production management system, workshops and seminars, open source educational material resources, course development training programs, and external courses. Despite the various services provided through the center, the amount of e-content that has been developed and is being developed is still too small. The center uses Moodle VLE as the learning platform, but in 2009 it only contained 14 courses, which do not include content being taught across the 17 universities in Egypt (El-Zayat 2009).

Other Projects

RITSEC: The Regional Information Technology and Software Engineering Center (RITSEC) (http://www.ritsec.org.eg/) was established in January 1992, as a joint project between the United Nations Development Program (UNDP) and the Arab Fund for Economic and Social Development (AFESD), and is hosted by the Government of Egypt's Cabinet Information and Decision Support Center (IDSC). RITSEC provides e-learning programs which include Arab Child of the 21st Century and Little Horus Regional Distance Learning Program.

AOU: The Arab Open University (http://www.aou.edu.eg/) opened in 2003 and offers degrees via distance learning in an environment of supported open learning. It relies on course lectures laid out in well-prepared textbooks and supporting media such as audio and video cassettes, CDs, and websites. AOU has eight campuses in the Middle East and is affiliated with the UK Open University. Degrees may be awarded in the Faculty of Business Studies, Faculty of Educational Studies, Faculty of Information Technology and Computing, and Faculty of Language Studies (English language).

E-Learning Competence Center (ELCC)

The E-Learning Competence Center (ELCC) (http://www.mcit.gov.eg/) initiative between MCIT and Cisco was set up to create a national e-learning program, establishing an organization to lead and coordinate all e-learning projects in Egypt. The e-learning initiative will primarily upgrade the local corporate culture and support the private sector-driven economy. The ELCC will actively take steps to enhance workforce performance through high-quality, practical, state-of-the-art e-learning and human resources development activities in accordance with the evolving needs of the government and business communities (Hegazy 2010). It has several programs:

Content Development and Localization
The ELCC develops a wide array of e-learning content in different disciplines to provide organizations and individual learners with knowledge and skills needed to stay on the cutting edge of technology and leadership. The center also works with and coordinates the efforts of sector-specific, in-country agencies and independent subject matter experts, consultants, and translators to localize the curricula of learning material in a variety of disciplines in a way that captures the essence of the concerned culture/context and fully engages learners.

Lifelong Learning
The professional development and lifelong learning program of the ELCC focuses on enhancing the technical, professional, and entrepreneurial skills of the largest segments of citizens who have finished their formal education. Increased access, scalability, and outreach are at the heart of the center's lifelong learning program which is made possible through the tactical and efficient utilization of the latest e-learning tools and techniques.

National Delivery Network
The ELCC has created a nationwide delivery network through implementing a scalable plan to leverage and optimize the use of IT clubs all over the nation to act as outlets for the delivery of web-based content, online assessment, student performance tracking, hands-on labs, instructor training, and support and preparation for industry standard certifications. To date, the center has established around 700 local academies across the country where over 60,000 students, instructors, and administrators have participated in the program.

Research and Development (R&D)
The center's R&D program is responsible for the development, review, evaluation, and dissemination of quality e-learning standards among stakeholders involved in capacity building, content development, quality assurance, and infrastructure development in order to ensure sustainable and relevant e-learning for all.

Portal Development
The ELCC has a full portal development, web design, and web content management capacity of portals and has built expertise in designing, developing, and managing web portals using the latest ASP.NET and Web 2.0 technology and in accordance

with internationally identified and recognized portal development and web content management guidelines and standards.

Entrepreneurship Education Program
The ELCC is certified as an official training center for Cisco Entrepreneur Institute to help Egyptian entrepreneurs start and grow their own businesses based on practical and professional strategies using the institute's content and know-how to deliver its programs to SMEs through local institutes that are established by the center all over the country. In this capacity, ELCC has developed and localized Cisco's Business Essentials Course (iExec) and delivered training to 3000 entrepreneurs and 260 SMEs, certified 40 instructors as facilitators of the program, and certified 6 NGOs as official training centers for the program (ELCC 2017).

Private Companies

Nahdet Misr Publishing Group
Nahdet Misr (http://www.nahdetmisr.com) is a famous publisher in Egypt and was selected by IBM company to produce the content for the IBM Electronic University where the E-learning Educational Project (Electronic University) was implemented in collaboration with the Egyptian Ministry of Higher Education.

Arab Academy for E-Learning and Training
This academy exposes the new concepts of educational technology and different modern teaching methods to Arab speakers. Their site (http://elearning-arab-academy.com/) allows trainers to share their experiences and their knowledge in Arabic with academics and trainers from various categories who are trying to develop methods of teaching in their home institutions and to adopt the means of various modern technologies.

E-Learning Education Programs, Degrees, Associations, Certifications, and Accreditation

The Faculty of Science of Alexandria University created the first e-degree online in Egypt, a master's degree in neurobiology. The project was launched in December 2008 with the support of the AUF (the agency of French-speaking universities). The program of study started in October 2009 (Osmane 2010). In October 2009, EELU started its educational activities with two programs: "Computer and Information Technology and Business Administration" in three centers inside Ain Shams University, Tanta University, and Assiut University. In October 2010, an e-learning program was added which awarded the postgraduate diploma in this discipline. In February 2011, the university opened the Continuing Learning Center (CLC), which

offers professional training courses to a wide variety of different Egyptian society sectors. Throughout the past 5 years, ELCC's National Delivery Network program was an overall success, resulting in:

- 690 local academies certified under the ELCC as e-learning delivery centers
- 58,000 participants trained (3260 instructors certified, 56,410 students trained)
- The ELCC established centers for e-learning delivery among:

    - Ministry of Education (schools) – 473 centers
    - Ministry of Higher Education (universities) – 24 centers
    - Nongovernmental organizations (NGOs) – 181 centers
    - Small and medium enterprises (SMEs) – 6 centers.

Future Development

The development of Egypt's education system is a national priority given the importance of education to development and progress in all fields. MCIT in cooperation with the Ministry of Education, the Ministry of Higher Education, the Ministry of Scientific Research, and other stakeholders has adopted various strategies and initiatives over the years supporting education development (2013). The primary objectives of the initiatives are:

- Strengthening the national commitment to building a model of educational reform that can be replicated in other Arab and African countries
- Promoting research and development and supporting scientific research in the field of ICT for education
- Establishing a culture of e-learning among public and private educational institutions and developing e-courses for use in state education
- Developing regulations and mechanisms covering the production and use of e-learning materials by educational institutions and determining standards for the evaluation of such materials
- Developing e-learning and content management systems for the Internet
- Developing multi-track e-learning packages for different learner levels, tailorable to individual needs
- Establishing social networks using cloud computing that enables the education community to open channels of dialogue and create a virtual community that promotes the exchange of information and enriches Arabic scientific content
- Providing 2G Internet technology
- Developing and promoting the use of simulation software and applications for educational use to provide users with an enhanced learning experience
- Providing an e-learning program customizable to the educational level of learners and promoting continuous learning based on adaptive and personalized learning techniques, which allows teaching and learning anytime and anywhere.

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