

# A review of adoption of e-learning in middle east countries

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## ABSTRACT

E-learning has provided men with new opportunities in teaching-learning procedures. A historical review of educational systems literature reveals that e-learning has spread out among people much faster than any other learning methods. E-learning, as a state-of-the-art technology, has caused great innovations in materials development in those societies in which new methods and procedures could hardly ever been accepted. Technological innovations and the development of telecommunications such as Television Stations and Channels, Satellites, Mobile, and Internet have made it possible for the children and teenagers in the Middle East to access to the latest news and information. Of course, these developments have endangered both political and educational systems in some aspects. The present paper while pointing to some of the recent developments in the field of e-learning in the Middle East, tries to examine the political and educational systems reactions to this phenomenon.

**Keywords:** e-learning ; technology; culture; learning; higher education; educational systems;

## 1. INTRODUCTION

E-learning (Electronic Learning) is the unifying term to describe the fields of online learning, Web-based training, and technology-delivered instruction. The widespread accessibility of the World Wide Web and the ease of using the tools to browse the resources on the Web have made the e-learning technology extremely popular and the means of choice for distance education and professional training. The concept and the use of e-learning were adapted in the mid 1980's by several institutes in the United States. Approximately 1.9 million learners participate in e learning at institutes of higher educations, a million of which are from Australia, New Zealand and the United Kingdom. The number of people applying for e-learning courses all over the world increases at a rate of 25 percent each year [1].

Some of the middle-east countries have introduced and are successfully running e-learning in their educational institutes and business organizations. The Middle East countries education system is somewhat under stress to provide additional educational opportunities for increasing population and to boost the literacy rate. With over 50% of these countries population under the age of 20 and one of the highest birth rates in the world, higher education institutions have been facing a growing demand for enrolment.in this paper tries to show the review of e learning in middle east countries .

## 2. E-LEARNING

E-learning has not only affected youth's methods of learning but also has modified the relations between social structures and young generation. The application and genesis of mass communication and its outcome which is Electronic Learning has made some sorts of information accessible to the young people [2]. For centuries, being grown up and experienced was a basic and needed factor in the Middle East to gain access to such kind of information. Nowadays, this modification in an ancient area is to such an extent fundamental that everybody should give priority to that. During the last century, emergence of Radio, Newspaper and TV had a kind of tremendous effect on the connections between grown up young generations of society. The history of 50 years of social transformation in the Middle East distinctly shows how each one of these new medium has increased anxiousness and tension in parents, teachers, politicians, and clergymen. It has also widened the extent of misunderstanding among generations. Today, we are confronting with a new phenomenon called the genesis of Internet and E-learning. These new technologies have affected security of traditional societies in the Middle East. As a result, the act of learning has turned into a national - security issue [3].It has been turned into a security issue because the sense of equilibrium which has been prevailing in the relation between last and new generation, has been lost. Parents do not feel secure anymore because their kids, quickly and before the appointed time become familiar with the relationship between different sexes. They believe that their children communicate with strangers and play a number of games which are not only time-killers but bothersome and annoying. Politicians do not feel secure because they are not able to exercise their influence on young generation as the only eternal political source. They have to fight with their political opponents both in the field of practice and the virtual world. To the politicians, in this critical region, nothing is more perilous than the minds of the young people crammed with

opponents' ideas. Finally, these are the teachers and educationalists that will not be considered as the only right sources and criteria for gaining knowledge. They can surpass their teachers in acquiring new information.

### **3. EDUCATIONAL SYSTEM**

Amalgamation of citizens in this part of the world shows that children and young people form a considerable part of age pyramid of population. Educational system is one of the first among social structures which is under the impact of this constitution. During the last two decades, educational systems have seen the increase of registration in all academic levels. For example, girls form more than 60% of all university students in Iran and more than 90% of graduate students in high schools of UAE register at colleges and universities [4]. Anyway, increase in usage of e-learning is not limited to the universities only. We can see the access to e-learning even in people with lower levels of age. Available citations show that educational systems of Iran, Kuwait, UAE, Israel and Turkey are under the influence of global privatization and therefore the number of kindergartens, elementary and secondary schools connected to the Internet are increasing [5].

Today, teachers in the Middle East are observing that Internet has been gaining popularity among young people, though at a much slower pace than television and radio. In addition, experimental evidence shows that in the Middle East there are so many more computer-literate young people than adults indicates the younger generation's greater interest in and aptitude for technological advances. Educational system should make an attempt for not being retarded from children and young people.

### **4. E-LEARNING IN MIDDLE EAST COUNTRIES**

E-Learning in the Middle East, none of the current ways of teaching and learning is considered more fascinating than E-learning. The reason is poor economic condition, cultural and social impediments and lack of an able and fascinating method of learning. Historical experience in developing countries such as Middle East countries shows that lack of financial sources in procuring costly installations is the main reason [6] but the increase in the oil price in 1970s, made some of the countries in this part of the world enabled to solve this problem to some extent. These countries compare to other developing countries have been empowered to build new schools and equip them with new technologies [7].

The second impediment for the acceptance of these new technologies is the social and cultural prevention of these societies. Opposing to new technologies, overestimation of negative aspects of their application, and disinclination of families are some inextricable specifications of the societies in the Middle East. Surprisingly, it should be acknowledged that internet has created an ideal ambiance for all children, juveniles, girls and women of all classes of society. It has given this chance to young generation to not only observe traditional limitations of their societies but also make contact with others easily. They believe Internet has been able to present a new view and meaning for some of Islamic concepts such as Hijab (Veil), Meraj (Ascension), Hijrat (Migration), global brotherhood, equality of women. Consequently, it should be said that E-learning has overthrown cultural and social obstacles to some extent. It has been accepted quickly among families and instructional settings. As a matter of fact, in compare to other educational technologies, there are two reasons for young generation's enthusiasm towards learning through Internet. These are: little cost and lots of attraction.

In spite of some shifting views among adults about children and the Internet in the Middle East, the overall responses continue to supply a broad range of strongly positive views about the benefits of Internet use especially about its value as an information source, and its growing use for involvement in online communities [8]. Because of social, cultural and economic restrictions in traditional societies such as Middle East, old information methods could not provide people with appropriate learning opportunities. This problem has been resolved by e-learning. During a period of 7 years (2000-2007) Middle East countries have got a considerable growth in usage of internet. Their growth is equal to four times global growth at the same period. In fact, the Middle East is an upcoming market as experts suggest today, even though major western e-learning and IT suppliers expanded their boundaries into the Middle East years ago.

#### **4.1 Learning in kingdom of Jordan**

The Hashemite kingdom of Jordan is located in the heart of the Middle East with 6.316 million population size. His Majesty King Abdullah II strongly believes that the Information and Communication Technology (ICT) sector offers great potential to positively shape the future of education systems in the kingdom[9]. This is demonstrated through the Jordan education initiative project (JEI), which was launched in 2003. This focused on a partnership development with Cisco systems to create an effective model of internet-enabled learning [10]. It is evident that large expenditure and substantial effort has been made by the Ministry of Education in Jordan to

successfully implement e-learning developments in schools. While Jordanian school students recognize the potential of e-learning to support teaching and learning, infrastructure often limits student-student and tutor-student interactivity[11] Jordan has rapidly expanded its higher education system although it has not yet produced a sufficient qualitative leap[12].

Reflecting the world's University sector moving forward with e-learning, Jordanians higher education institutions are responding accordingly. E-learning offers alternative approaches to Jordanian traditional higher education institutions, encouraging them to re-evaluate the way they operate. In doing so, it provides potential to accommodate new information and communication technologies to enhance the student learning experience. The demand for e-learning in Jordan is expected to rise in the next few years [13]. This is due to the sharp growth of internet and mobile users and the high literacy rates considered to be the highest among other countries in the region. Owing to these booming advances in information technology, it is important for higher education institutions to embrace the technological developments, redesigning teaching trends and developing researchers in the educational domain[14]. The increased demand from students to change teaching methods in traditional lectures pushes higher education institutions to consider e-learning to provide online courses and e-training programs. Jordanian students realise that information technology is the future and, therefore, they are looking for more flexible opportunities of learning that help them to develop their skills and the educational outcomes. Accordingly, many Jordanian institutions have adopted e-learning to meet the increased demands for enhanced and flexible teaching methods.

#### **4.2 E- Learning in UAE**

Tertiary education institutions in the UAE are preparing students for a rapidly changing information and technology driven world. The UAE needs graduates who are ready for the workplace and who have a high level of knowledge and confidence in the use of technology to help them in their lifelong learning. The UAE is a small country of approximately 4 million inhabitants, situated at the toe of the Arabian Peninsula and is bounded by the Kingdom of Saudi Arabia and the Sultanate of Oman. Driven by oil discoveries, the UAE's vibrant economy has experienced unprecedented economic growth in the last 10 years. Described as one of the most-wired countries on earth [15] the UAE has been brought into the globalized world over the last 30 years since being an impoverished region of small desert principalities to becoming a modern independent country.

Universities and Higher Colleges of Technology in the UAE are increasingly using online learning or e-learning as it is more commonly called, as part of the curriculum. E-learning is the currently fashionable term used to describe the diverse use of information and communications technologies to support and enhance learning, teaching and assessment- from resource-based learning (in which students carry out face to face tasks supplemented by a range of online resources) to fully online courses [16]. Online learning is often used interchangeably with the term e-learning. Brennan et al. [17] describe online delivery as computer technology which enhances, extends and replaces traditional teaching and training practices.

A small number of studies have been carried out in the UAE to investigate the use of e-learning in tertiary education. The majority of studies have focused on the perceptions of the educators about how to integrate the new technologies into their teaching and learning, along with their perceptions of the value or not of e-learning in the UAE context. Other local studies focus on language competence and language use to access the Web [18], and the impact of globalism on Arab and Higher Education. A recent study being carried out at Zayed University in the UAE by Birks, Hunt & Martin [19] researches the use of information literacy web resources by Arabic students. Findings are yet to be released. This study aims to focus on the actual lived reality of students as they participate in the world of e learning. Our goal is to ensure that we understand the barriers for students which impact on the effectiveness of their e-learning experiences. It is anticipated that findings will enable the researchers to make suggestions for improving the e-learning and teaching environment for students in the UAE.

#### **4.3 E -learning in Qatar**

The first e-learning initiatives in Qatar were developed in Education City among the U.S. satellite campuses. For example, the new building of Weill Cornell Medical College Qatar (name changed to Weill Cornell Medicine – Qatar) has been equipped with completely online and blended resources since its inception in 2002-3. Due to shortages of specialty faculty to teach highly technical courses, live video feed courses are run from the main campus in New York City. One course, Psychology 101, is taught by recorded lecture from the Ithaca, New York campus while a Teaching Assistant in Doha manages the Qatar classroom and responds to questions and administers exams. With the availability of low or free cost VoIP suites and videoconferencing software such as Skype or Face time all higher education institutions in Qatar have some teleconferencing capabilities, with WCM-

Q, Georgetown SFS – Qatar, and Texas A & M – Qatar having fully equipped state-of-the art teleconferencing theatres. In K-12 education, the earliest e-learning initiatives were K-Net and e-schoolbag implemented by ictQatar and Infocomm Development Authority of Singapore (IDA).

E-schoolbag was launched as a pilot project at Al Wakrah Independent School for Girls in 2006. Over two hundred 7th grade students received Tablet PCs with “e-contents on science, maths, and English, which will be used by teachers as ready-to-use materials mapped to the Qatari curriculum standards and allow them to customize and add their own materials to fit their students’ needs” [20]. Knowledge Net, based on Microsoft products and implemented by ITWorx, has been described as “a three-way educational portal that connects students, parents, and teachers any time, day or night. Utilizing a unique Learning Management System, Knowledge NET provides teachers with instructional tools and resources; parents with instant access to teachers, coursework and upcoming tests; and students with the ability to communicate with peers and submit homework assignments. Knowledge Net improves content delivery, facilitates accessibility, enhances communication and expedites administrative tasks” [21]. By 2011, Qatar had made impressive gains in ICT implementation in education, with the following milestones: 93% of primary and secondary schools in Qatar had broadband Internet access, with 98% of schools with some form of Internet access; 100% of all educators in Qatar and 96% of students could access a PC for personal or educational purposes; and 71% of K-12 teachers had received general ICT training [22].

Another government pilot project was a specially built e-Maturity Diagnostic and Self Assessment Tool so that “Schools can evaluate their current e-maturity level, compare themselves to other schools, and develop targeted action plans to update and improve their technology”. Qatar University’s Continuing Education Office (CEO) signed an e-learning MoU partnership with Malomatia in 2015. Malomatia, a government technology and services provision company based in Qatar, will provide e-learning support, programmers and training for the CEO [23]. The Connected Learning Gateway (CLG) of the Egyptian-based ITWORX Education has been used throughout Qatari schools. CLG is a K-12 social media based Virtual Learning Environment that supports mobile devices [24]. E-learning has also impacted the Qatari workplace and most major companies are now using e-learning for skills upgrading (online self-paced short courses).

Qatar Islamic Bank (QIB) requires all of its new employees to complete an e-learning course on operational risk to help develop a robust and vigilant risk-management culture at the bank. The largest and most successful e-learning project implemented by ictQatar is the Qatar National e-Learning Portal ([www.elearning.ictqatar.qa](http://www.elearning.ictqatar.qa)), developed by Malomatia. Offering standard Business, Nursing, Management, and IT security courses, individual courses and learning plans are accredited by such organizations as the National Association of State Boards of Accountancy, The Six Sigma Program, Board of Registered Nurses and Association for Operations Management. Technical deficits in workers in all areas of government has been widely recognized as a serious issue. Only one decade ago, many ministries recorded public data in large books by hand and many offices were not computerized.

Thus, the International Computer Driving License (ICDL) was a common training programme offered through online modules to government employees to teach basic computer skills. Although e-Learning Portal courses are available to any citizen or holder of a Residence Permit (RP), as of 2016 individual registration is not open, only organizational access. In a related project, Malomatia partnered with the International Human Resources Development Corporation (IHRDC) in 2015. IHRDC, a training and consulting company serving the petroleum industry, will offer workers in the oil and gas industries access to its four major e-learning libraries as well as web-based tools for assessment and competency management. Although not specifically an e-learning platform, Qatar’s Hukoomi government e-portal which delivers electronic public services has propelled the nation from an international rank of 62 in 2010 to the rank of 44th in 2014 in the United Nation’s e-governance maturity and readiness survey entitled “E-Government for the Future We Want” [25].

#### **4.4 E-learning in Iran**

Iranian ministry of research and science established Payam Noor University in 1988 with the aim of which was offering distance education and part-time degree programs. The decision proved to be fruitful as it paved the way for many subsequent similar programs offered at other higher education institutes in Iran. In fact, “history of e-learning in Iran at present time does not exceed more than 10 years, yet from a realistic point of view we might say that e-based learning in Iran has had an eight year experience and even younger”[26].

In 1991 distance education program was placed on the agenda of University of Tehran. The university started to offer nine courses to incoming students and newly matriculated students. In about the meantime, Iranian ministry of research and science and technology (MSRT) declared that the first virtual university would be founded accredited by the Ministry as a non-profit institution [27]. Despite all the effort, time and energy, as well

as the contributions from both private and governmental sectors, e-learning and e-teaching in Iran are still at their initial stages of development and there are only a few accredited online programs available. Amirkabir University of Technology, Iran University of Science and Technology, Shiraz virtual University and some Islamic virtual colleges and centers like Islamic virtual centers and Faculty of the Science of Hadith offer accredited online academic programs. E-learning can be seen as a tool for extending the scope of higher education, especially to geographically remote places and underprivileged rural areas. However, the challenges of virtual learning continue to persist.

#### **4.5 E- Learning in Kingdom of Saudi Arabia**

To support the implementation of e-learning in Saudi Arabia, a National Centre for E-learning and Distance Learning was established in 2005, with the aim of creating a complementary educational system that uses e-learning technologies. Many outstanding projects have been adopted by this center to assist in the transition to a digital society and support the implementation of e-learning in Saudi Arabia, such as the Saudi Digital Library Project. Despite the growing availability of educational technology (mainly e-learning) and the awareness of its potential contributions to enhance learning outcomes, teachers still face complexities in using existing e-learning material, and the implementation of successful e-learning and online instruction in Saudi Arabia's educational system is still very limited. Even in cases where e-learning has been applied in Saudi Arabia, there is no measurable evidence of its effectiveness for students' learning outcomes, and no clear framework or policy to implement e-learning in Saudi schools [28]. Saudi Arabia needs to generate a clear plan for implementing new technology in the educational setting. Strong evidence emphasizes that previous efforts were unsuccessful not because of the lack of effective efforts, but because the implementation was not planned thoroughly [29]. The implementation of an effective e-learning system in the Saudi educational system is a vital step towards accomplishing government policy in the information technology area.

#### **5. CONCLUSION**

We could not forget this reality that many children and youths in the Middle East appreciate Internet contents that deal credibly with topics they may find difficult to discuss with parents or adults, such as personal relationships, sexuality, AIDS, drugs, self-esteem, etc. In addition, the youth in countries with widespread poverty, corruption and political turmoil also seek realistic, relevant and meaningful content to help them understand and cope with hardships they face in their daily lives. This fact demonstrates that youths do not bother more about parents, political or religious leaders' confirmation. Also, through avoiding any exaggeration – either positive or negative – on the effects of Internet, regional differences should be taken into account. As a matter of fact, family income has a major effect on the level of literacy of the people to information technology and also to their access to Internet. Use of Internet requires a fairly complex set of skills and technology which is not always available for many youth people. Therefore, we should avoid of exaggerating about Internet affects on youths in the Middle East.

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