

Enhancing the socio-economic well-being in Egypt by harnessing the capabilities of e-Learning programs along with promoting Islamic teachings and values

Abdul Rahman bin Ahmad Dahlan, Jamilah Osama Rashid, Zerina Camdzic

Abstract— This work aims to evaluate the implementation of e-learning platforms in schools in Egypt along with promotion of Islamic values. E-learning has been a topic of increasing interest in recent years. In this paper we suggest to combine the areas of e-learning and Web services, by providing electronic learning offerings as (individual or collections of) Web services as well. We elaborate on this by showing how content providers and content consumers (i.e., learners) can communicate appropriately through a Web service platform with its common description, publication, and retrieval functionalities. Since Egypt has been known as a country where many children are not able to have an appropriate education, e-learning platform would provide students with the ability to study even if they live in remote places. Moreover, the integration of new technologies in the classrooms opens new possibilities for the teaching and learning process. Technologies such as a student response system are getting popularity among teachers due to its effects on student learning performance. In this study, our primary objective is to investigate the effect of e-learning platform with combination of Islamic teachings on students learning performance. We also observed the benefits of interactivity between the teacher and the students and among classmates, which positively influences collaborative learning and engagement of students in the class. The results of our study reveal that collaborative learning and engagement of student in the class improves student learning performance. We highly recommend these tools in educational settings to support the learning process.

Index Terms— e-learning, students, school, well-being

I. INTRODUCTION

Literacy is a global commitment. In the world of today, besides reading, writing and numeracy, much other literacy are simultaneously needed for functioning effectively. The fast changing world demands that neo-literates be able to acquire new skills and engage in a process of lifelong

Manuscript received April 07, 2015

Abdul Rahman bin Ahmad Dahlan, Kulliyah of Information & Communication Technology, International Islamic University Malaysia

Jamilah Osama Rashid, Kulliyah of Information & Communication Technology, International Islamic University Malaysia

Zerina Camdzic, Kulliyah of Information & Communication Technology, International Islamic University Malaysia

learning. The changing world, in which the role of ICT is central, now envisages a society where literate societies will be the norm rather than the exception. Therefore, education should be for all in the society including for under privilege groups such as disabled people, senior citizen, and people living in remote area, low income people and employees who prefer to complete their study. This paper aims to provide e-learning program for the people through the process of technology that would contribute to the field of education in terms of the series of huddles that may deny access of others to learn especially in the recent time of sophisticated technology. Through the proposed solution, the writers of the present project would hope to promote the teachers and students along the e-learning continuum and enact 21st century e-classrooms. In the present global time where the development of e-communication and using of internet have escalated to eradicate the problem of learning and study across the globe. Many researchers such as Ally (2004) and Kim and Bonk (2006) highlighted that educational are always inline towards the use of eighteen Malaysian journals of distance education. The internet technology plays a remarkable role in making different and interest of individual from other methods forms of educational technology and possibility for computer-mediated communication. Therefore, the writer observed that a single way to overcome the need of education in the society is through technology based e-learning. The e learning format is to promote a lifelong learning and to focus on the people social-economic well-being. for those learners who are unable to access to the formal education due to their circumstances.

II. BACKGROUND OF THE PROJECT

The information technology educational programs at most universities in Egypt face many obstacles that can be overcome using technology enhanced learning. An open source eLearning platform has been implemented at many public and private universities in Egypt, yet schools have not been included in it (El-Seoud et al., 2013). Therefore, the strategy, however, was less effective in poorer and more rural districts where illiteracy is highest. The term e-learning has been used for over a decade now; still the field of educational research has not given enough attention to the effect of e-learning on students' motivation. M. Elkhouly (2010) stated that 46% of individuals using the Internet for educational purposes, while 25.7% of individuals using the Internet in Egypt engage in communication-related activities, including sending and receiving e-mail, chatting and Internet phone communication. Thus, there has to be given more attention to emphasize on e-learning benefits and the impact on school students. Egypt Human Development Report 2010 showed

Enhancing the socio-economic well-being in Egypt by harnessing the capabilities of e-Learning programs along with promoting Islamic teachings and values

that in Egypt, the ratio of registered university students to the estimated number of illiterates is about 1:6, and the number of registered high school students to illiterates 1:5, indicating that if all registered high school and university students taught five illiterate people, illiteracy above 15 years of age in Egypt would be completely eradicated. It is also possible to focus the campaign on a smaller sub-category of illiterates, namely those aged (10-35) 5.8 million illiterates according to the latest census. The present project would contribute to reduce and eradicate the sense of illiteracy among the people in Egyptian society to and ensure that resources are available to progress the advantages of e-learning for all students, and that accessible electronic learning environments remain a central priority. Everyone would have an access to the education through the technological process.

III. PROBLEM STATEMENT

According to the research done by The United Nations, about 22% of Egypt's population is in school age, that is between the ages of six and seventeen, another 10.5% are in the age group 18 -22 of whom fully one third in higher education. This age structure places enormous pressures on the education system. Despite the great strides made to achieve universal education, issue related to inequality of access to education and educational quality remain central. Sorondo, Malinvaud and Léna, 2006 stated that the system in Egypt provides differentiated quality of schooling and that the poor consistently perform poorly in education. They have low enrolment rates, leave the school early, or they are tracked to major of people that have second rate learning and labour market outcomes. The *Egypt Human Development Report 2010* stated that socio-economic status and family background and disability are considered as the main predictors of education achievement in Egypt. Those that earn them are the ones living in comfortable conditions that allow them to study and concentrate on their lessons.

IV. PROJECT OBJECTIVES

The main aim and objective of this project is to enhance public literacy in Egypt by harnessing the capabilities of e learn portals to harmonize technical and general secondary education, enhance literacy – the first step towards lifelong learning, expand provision of different educational delivery systems, and institutionalize effective decentralization and accountability, and introducing a systemic transformation of education.

V. LITERATURE REVIEW

Egypt Human Development Report 2010 revealed that securing employment for the ever-increasing pool of labor supply is one major challenge facing policy. To meet this challenge, the Egyptian government is developing a National Action Plan to focus on youth as an asset. As part of the plan, the School to Work Transition Survey was conducted and analyzed to help develop sound policies for young people. The survey analyzes the employment and education situation of young people through the school to work transition concept, designed to assess the ease with which a young person moves from school to his/her first 'career' job: The survey used a sample of 4000 youth, found in 5520 households around the country. The scope covered 10

governorates randomly selected representing urban, rural, lower and upper Egyptian governorates. The survey design ensured an adequate representation of males and females. An additional 300 employers were interviewed representing both formal and informal enterprises. Of employed respondents, 22% are skilled agricultural workers, 21% craftsmen and a mere 3.4% are clerks. 78% of the unemployed reported that the main reason for not finding a decent job was the lack of current job opportunities. Almost 50% of sampled employers find applicants' practical training received at school and ability to apply training to be very poor. 7% of the young employees/self-employed youth had received training for their current activity. Of the small percentage of self-employed youth, 77% did not receive help from friends and family to establish their business and 90% said their activity was profitable. On the ease of transition from school to employment, most employed youth in the agriculture/fishing sector experience an easy transition, while the majority of transited youth in all other occupations experience a difficult transition, particularly those in higher skilled jobs. Since the early 1990s, the Government of Egypt demonstrated a commitment to eradicate illiteracy through a set of policies and programs.

It is well accepted that ICTs have become a dominant tool for educational reform in more developed countries. ICTs however have had a slow adoption rate in less developed countries, in particular North Africa (Liverpool, 2002). Adoption of the ICTs such as Internet has been a challenge in Africa as a whole for two main reasons. First, much of Africa is predominantly a cash-based economy with little impetus to adopt credit card use. A cashless economy is pivotal to buy goods and services online. Second, Arabic Internet sites are limited both in quantity and quality (Hassanin, 2003). Although a lack of a credit-based economy and a lack of Arabic Internet sites impact the North African country of Egypt, its situation is somewhat different than the African continent as a whole. For example, in Egypt, 100% of private schools and 99.7% of government schools have computers. The Ministry of Communications and Information Technology (2009) has maintained free Internet access nationwide since 2002 where more than 15,000 ports serving two million Internet users have been set up. Users pay for only local dial up phone tariffs which is approximately USD \$0.25 per minute (Hassanin 2003). The Egyptian Ministry of Education (MOE) has been diligently working with international development agencies on a variety of ICT-focused education projects. The MOE launched the Egypt PC 2010 initiative in December of 2003. The goal of this project was to provide a computer to every home by 2010. Computers were sold at a discounted price and paid for in monthly installments starting at LE 43 (USD \$7.00) per month (Ministry of Communications and Information Technology 2009). Another popular program was the USD \$52 million project funded from the U.S. Agency for International Development (USAID) called the Integrated English Language Program II (IELP-II). The educational objectives of IELP-II included ICT in education components: (1) train teachers in the use of technology; and (2) train teachers via the use of technology.

In the late 1990s and early 2000s, interest in e-learning, both scholarly and commercial, increased substantially, particularly in the United States, Canada, and Australia. Studies of American students in virtual programs at both the

elementary and secondary level led researchers to tout e-learning's many benefits, including but not limited to its flexibility in geography and scheduling, its ability to address various learning styles, and its overall expansion of educational access to people in remote communities. While some of these studies have since been criticized for not being based on "robust [enough] research" (Barbour and Reeves, 2009) the general impression of, and evidence for e-learning as a paradigmatic shift in the field of education remains basically intact. Indeed, according to a 2009 report on the state of online-based e-learning in U.S higher education (Allen and Seaman, 2010) over 4.6 million American students took at least one online course during the fall 2008 academic term – a 17 percent increase over the number of students reported in fall 2008. With student participation in e-learning increasing in this way, a number of educational researchers – particularly those interested in post-secondary education – have attempted to explore variations in e-learning programs' curriculum designs, delivery modes, social communities, and instructional training methods (Bawane and Spector, 2009; Maher, 2009; Stewart, 2004; Bates, 2001). Furthermore, over the past five years, such explorations have gradually but distinctly shifted the geo-cultural scope of e-learning discussions beyond the boundaries of the North American and Australian higher education systems, and into the higher-education options of students in regions such as South Asia, the Netherlands, East Asia and Latin America (Hamuy and Galaz, 2010; Scagnoli, 2009; Cambell, 2008; Stewart, 2004; Valente, 2003) As a result of this widening and deepening of twenty-first century e-learning research, more results have also emerged in critique of the so-called "benefits" of certain e-learning models and components. For example, several authors have published recent papers highlighting the hidden costs of bringing e-learning to new countries' higher education systems, from the cost of putting in place a widely accessible national telecommunications infrastructure to those costs associated with the establishment of national accreditation agencies for e-learning programs and institutions (Bollag, 2001). Such discussions of cost are particularly significant to researchers investigating the potential and/or presence of e-learning programs in the most economically-challenged developing countries, and will likely play an important role in bringing together researchers interested in e-learning pedagogy with those who are more broadly interested in ICTs and global socioeconomics.

VI. CONCEPTUAL SOLUTION

E-learning way of teaching is a most unique program that focuses on increasing literacy among the students in High school as well as enhancing socio-economic wellbeing. The system really concerns on web site and application, but also, it will focus on the improvement of E-learning portal. The system is easy enough that does not require professional skills to use it. This system also can generate some direct and indirect benefit to users such as accessing past exam papers for free.

Customer segments

The targeted audience of E-learning portal will be the majority poor citizens living in South Sinai. They are around 177,000 people in the South Sinai. They need to register to the system to gain access to the special web site created for the E-learning portal. They also can use the system to chatting

between online users in the E-learning portal. They can use some application to answer some question such as age, marital status, income level, type of disability, and cause of disability.

Customer relationship:

The professional developed e-learning provides a good and cordial relationship with the users especially the beginners, pre-intermediate, intermediate and advanced learners of how to operate the e-learning programs. Thus, the students have a strong access to the website through their computers, I pads and android mobile phones. Learners also able to contact their personal tutors for emergence help.

Channels:

The present project uses several ways to convey the lesson to the respondents and users of this valuable e-learning. One strategy that is mostly used consists of video and audio recorders. The users should listen to video or watch audio from their various site. All users are access to consult any of the tutors about their causes taking through online messages and phone to phone contact. Other than that, the e-learning program involves face to face teaching where all the registered learners have access to attend a group conversation through the web.

Value proportion:

Egypt recognizes that computer literacy is a world-wide language required to participate in today's competitive global marketplace. Unfortunately, the poverty level in Egypt means that only a small percentage of its 71.2M citizens can afford a computer. Looking at low PC penetration rates (2.3%), the Egyptian government saw an opportunity to help their citizens embrace new technology. With support from private international funding partners and local manufacturing plants, the Ministry of Communications and Information Technology (MCIT) developed a plan to put technology within reach of this vast population. However, this project is for free to create the ability from inability of people. Every individual would have opportunity to the website.

Key activities

- Focus on knowledge rather than focusing on information.
- Focus instead on the conclusion of inference.
- Web network is a web based learning, providing possibilities and services provide a rich source of information and a renewed.
- We can be to interact with the site and suggest the name of I HELP.

Key resources

The aim of these valuable teaching resources is to improve the ability of individual to learn easily. Thus, tutors are the most important elements that play a significant role in the following project because some of the users were not familiar with it. The tutor firstly explains the uses and applications to the users then call them for group discussion. Therefore

1. Users e-learning portal can gain access to more information.
2. Their activity will be easier.
3. E-learning process will be more interesting.

Key partners:

To get a full access to the proposed project, the writer seek for the assistance from some of the educational organization

Enhancing the socio-economic well-being in Egypt by harnessing the capabilities of e-Learning programs along with promoting Islamic teachings and values

and other talented people that have a broad view in the ability to group the people residing in the selected area.

Cost structure:

To determine the need services in the proposed project, some preparations are done to overcome the financial constrain that are to be faced during the project preparation such as cost of the required software and hardware.

Revenue Streams:

The deployment of technology in schools requires a substantial budget, often requiring community investment and funding. However, taxing property owners to pay for large education expenses in the year they are incurred produces large hikes in tax rates and wide fluctuations in tax bills from year to year. As a result, local government bonds are traditionally used for funding large capital expenditures in the school system. Although bonds can offer a large monetary investment and foster community involvement, there are some obstacles that may impede schools trying to fund their technology initiatives. They may face difficulty in passing bond elections, particularly in economically depressed areas or those with falling enrollment. Furthermore, overburdened staff must prepare a large public campaign to secure the passage of bonds. Even if a bond is passed by voters, this financing method has limits set on the total amount schools can borrow, usually expressed as a percentage of their assessed property value. Overall, the decline in the proportion of living in South Sinai. Some of the houses in that area do not have any connection with internet area. Few teachers who are proficient technological skills needed for e-learning in South Sinai. Rising prices of electronic devices with quality and ease of use.

CONCLUSION

The present provided e learning portal gives a space and place for the users to search for any valuable information across a multitude electronic resources which are centered to be electronic books and many other useful skills links. The provided portal is one of websites that are unique and normally provided a broad information to the users and help them to develop their career. This project exists to assist students to find information on the World Wide Web. The purpose of this web is to be a major starting site for users when they enroll they are connected.

REFERENCES

- [1]. Ally, M. (2004). *Foundations of educational theory for online learning*. Retrieved from <http://desarrollo.uces.edu.ar:8180/dspace/bitstream/123456789/586/1/Theory%20and%20Practice%20of%20online%20learning.pdf#page=227>.
- [2]. Asoka, S. (2008). *Online learning in higher education in Sub-Saharan Africa: Ghanaian*
- [3]. University students' experiences and perceptions. The International Review of Research in Open and Distance Learning, 9(3). Retrieved from <http://www.irrodl.org/index.php/irrodl/article/view/586/1130>
- [4]. Barnard-Bark, L., Len, W. Y., & Paton, V. O. (2010). *Profiles in self-regulated learning in The online learning environment*. The International Review of Research in Open and Distance Learning, 11(1). Retrieved from <http://www.irrodl.org/index.php/irrodl/Article/view/>

- 769/1480.(Bawane and Spector, 2009; Maher, 2009; Stewart, 2004; Bates, 2001). *Understanding E-learning*.
- [5]. Bollag, 2011. *The Global Challenge and Marginalization*. El-Seoud, Samir A.; Naglaa Seddiek; Islam A.T. F. Taj-Eddin; Pauline Ghenghesh; Ann Nosseir and Mahmoud M. El-Kholy. *A research study on the Effect of E-Learning on Higher Education*.
- [6]. International Journal of Emerging Technologies in Learning (iJET), Vol. 9, No. 2, 2014. ISSN: 1863-0383
- [7]. Kim, K. J. and C. J. Bonk. 2006. *The future of online teaching and learning in higher Education*.
- [8]. Liverpool, L. S. O. 2002. *Information and communication technology in teacher education*. Paper read at First Teachers' Summit, at Kaduna, NTI.
- [9]. Hamuy and Galaz, 2010; Scagnoli, 2009; Cambell, 2008; Stewart, 2004; Valente, 2003. *Exploring e-learning development: studies of ICT access and educational usage in Latin America*.
- [10]. Hassanin, L. 2003. Africa ICT policy monitor project: Egypt ICT country report. *Association of Progressive Communications*. Retrieved from http://africa.rights.apc.org/research_reports/egypt.pdf Accessed on March 1, 2010.
- [11]. Robin, M. 2003. Information portals: *Casting a new light on learning for universities*. Campus-Wide Information Systems 20(4): 146–151.
- [12]. Sorondo, Malinvaud and Léna, 2006. *Globalization and Education*.
- [13]. Weller, M. 2002. *Delivering learning on the Net: The why, what & how of online Education*. London: Kegan Page.