UTILIZING E-LEARNING SYSTEMS IN THE LIBYAN UNIVERSITIES: CASE STUDY; TRIPOLI UNIVERSITY, FACULTY OF ENGINEERING

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ABSTRACT

E-learning in teaching and learning considered as the easy way to use information and communication technology by using of the internet. With the support of E-learning higher education can be delivered anywhere and at any time. Although E-Learning is very importance in Libyan higher education, It's implementation is facing many challenges in the Libyan universities. This paper focuses on the implementation of E-learning in Libyan Universities. The main aim of this paper is to discover the implementation of E-learning in Libyan higher education and to identify the factors affecting the use of its technology. The research findings and recommendations will benefit the Libyan policymakers and the stakeholders.

KEYWORDS

E-learning, Higher Education, Libya.

1. INTRODUCTION

During the last three decades, researchers have started to pay extensive attention to learning styles such as those working in the field of computer science who have adopted the idea of using learning styles in education, one of these ideas is E- learning in teaching and learning which can be defined as information presented and learned by using a network or Internet.

E-learning used in colleges and universities to make learning more accessible and efficient. It gives students the chance to learn at anytime, anywhere, and at their own. Accordingly, e-learning improves the learning process by offering a different way of delivering education. This is does not prevent the fact that some People find it easier to understand a new concept by reading a textbook or verbal explanation.

Despite the importance of E-Learning in higher education (HE), in Libya, a number of challenges still face the implementation of E-learning in Libyan universities such as ICT infrastructure; Leadership; Culture; and E-learning strategy.

In order to achieve effective adoption and implementation of E-learning technology and to gain the potential advantages from employing this technology, this research will investigate the potential benefits of using e-learning in Libyan Higher Education and identify the factors affecting the use of E-learning technology, to make recommendations regarding viability and potential implementation. Recommendations of this study will benefit the teachers and learners as well as the policymakers who are planning and designing the Libyan HE system.

2. LITERATURE REVIEW

E-learning has started in many developing countries in order to convene the increase of the requirement for education and meet the increasing decline of trained teachers, (UNESCO, 2006).

2.1 E-learning

There is a wide range of definitions for E-learning. It can be defined as learning facilitated and supported through the use of information and communications technology. Lahwal et al., (2009) clarified that E-learning is a kind of learning supported by Information and Communication Technologies (ICT), it is an interactive learning in which the learning content is available online and offers feedback to the student's learning activities. Khan (2001) stated that E-learning can be thought of as anything that includes technology with interactivity to support learning, training and communication between groups and between individuals. It included web-based learning (WBL); internet-based training (IBT); advanced distributing learning (ADL); and online learning (OL).

E-learning also can be easily operated for large groups of students such as online each group for instance can be in different place. Since in some instances of E-learning tools and materials, the lecturer and the learner can modify the learning materials to their own needs and suitability, students have more control over the learning process and have the possibility to better understand the material leading to a faster learning compared to instructor-led training.

2.1.1 E-learning Challenges

E-learning can be a sensible example of useful use of technology in life and this effective learning culture may meet the growing need of flexibility in facilitating education to the population. However, many challenges facing E-learning shows its growth in the world, different factors such as technical, economy, political and cultural conditions are the challenges to implement E-learning in different countries.

Kenney et.al, (2005) clarified that E-learning was seen as a chance to cut costs and make savings in space and human resources, which are unlikely to be realized in the short term and development of E-learning by the government through funding allocations. In developing countries, it is difficult to provide different facilities and opportunities required to establish E-learning environments. On the other hand, some researchers believe that E-learning is not an appropriate way of teaching. For instance, Lytras and Pouloudi (2001) stated that it is a waste of time because E-learning courses often fail to support value of creating processes both for teachers and learner and their recognition requires huge efforts.

Bleimann (2004) added that isolation by no social contact, missing part of the informal social communication and face to face contact of traditional classroom training, also, it may cost more to develop; it needs new skills in those who create course content.

Sims and Sims (1995) stated that many challenges facing higher education institutions that increase the pressure on them, e.g. retaining enrolment, providing adequate resources, sustaining quality, raising funding, and strengthening the curriculum. Rhema and Miliszewska (2010) clarified that a number of technological challenges faces Libya, such as lacks in the required technological infrastructure, while availability of computer laboratories are available in most Libyan higher institutions, the network facilities is lack and makes a serious limitations on Internet access. Also, the limitation of using the educational software within institutions, and the technical support is almost unavailable in Libya.

2.1.2 E-Learning in Libyan Higher Education

According to Rhema and Miliszewska (2010) the implementation of E-learning and the use of ICTs in Libya are still in an early stage similar to in most developing countries. Although Libyan Universities still use the old method of education that depends on face-to-face communications between students and teachers in, and outside of, classroom, in campus. Some Libyan universities, such as Tripoli University, Benghazi University, and Academy of Postgraduate Studies and Economic Research, have the basic ICT infrastructure (such as computers, Internet access, and a local area network).

Kenan et al., (2011) clarified the barriers of implementing e-learning in Libyan HEIs as E-learning in Libyan institutes is in early years, and still there are many challenges that affect the adoption of E-learning that can be categorised as: Technological, mismanagement, Cultural and other issues. They provided a set of recommendations for students and instructors to improve e-learning in Libyan HE institutions as follows:
• Improve students' computer skills before enrolling E-learning course;
• The content of the e-learning course should be designed to meet the National Qualifications Framework (NQF) and Libyan Qualifications Authorities (LQA) requirements.
• The attitudes towards e-learning should be taken into consideration.

- Teachers should support learners and institutions should employ an adequate staff members.

The authors provided recommendations for institutions as follows:

- Senior managers should support the implementation of e-learning and allocate a fixed budget.
- Instructors should be offered adequate training and course developers to be updated on changes to software and hardware. And tools should be kept up to date at all times.
   Some recommendations for governmental HE policies have been addressed by the authors as follows:
- Share coordination and resource between different institutions and encourage the successes institutions, to share their success with other institutions.
- Develop partnerships between government, and the private sector.

3. METHODOLOGY

A semi-structured, face-to-face interview technique used to collect the necessary data from the Libyan students and lecturers from Tripoli university faculty of engineering department of architecture in order to explore their opinions, as well as to give their advice about how to find solutions to the problems of implementing E-learning in Libyan higher education. Furthermore, to understand their opinions of current and traditional way of studding in Libyan higher education institutes. Also, researchers used one students' study group to make an argument about some points related to using E-learning in higher education, and find out the problems and solutions to the problems.

4. MAIN FINDINGS

4.1 Summary of the Students' Main Findings

- Most of students are using software, social media and internet in their study as a kind of E-learning.
- Almost all students believe that E-learning is an appropriate way of teaching and studding.
- All students have chosen the all benefits addressed in the literature, the most benefits of using E-learning are because it provides a flexible learning and help built self- knowledge and self- confidence after that mange time, improve preservation and reduce cost.
- Most of students have used E-learning in some courses.
- All students believe that E-learning services in the Libyan higher education are not good.
- Students have chosen many reasons of the limitation of using e-learning in Libyan institutes such as: Limitation of using E-learning in Universities; lack of ICT infrastructure; lack of personnel qualified; Limitation of using the educational software within institutions and resistance to change from teachers.
- Students selected the all options of E-learning challenges collected from literature, the highest rate went to the lack of implementing e-learning by government and lack of public awareness about ICT, after that the limitation of basic infrastructural resources and people do not accept the concept of E-learning.
- Most students are using social website to communicate with the University.
- The majority of students preferred to use computer in presenting lectures.
- Most of students prefer to use computer for doing homework.

Other comments raised by students about the benefits of using E-learning are:

- Enable people to teach anytime and anywhere and save more time.
- Help student to do research for homework
- Need computer to log in into university web site and don't need to carry papers or documents

4.2 Summary of the Lecturers' Main Findings

- Although Universities did not provide any kinds of E-learning, most lecturers are using computer, world wide web, and software such as PowerPoint to deliver lectures.

- E-learning can be used for many purposes: delivering courses, lectures and instructions, learning over distance, conferences, communications between lecturer and students.
- There were computer labs for students, and internet access for teachers before the revolution of 17/2/2011, but because of the armed conflict, many things are broken.
- E-learning in general are very useful way to teach and learn in all learning stages for many reasons summarised as follow:
  Most E-learning programs can be taken when needed; Spread and share knowledge and saves the students time, effort and cost; E-learning ensures that all learners receive a consistent message of the target learning; E-learning can accommodate the various learning styles to get the message more effectively by using audio, visuals, interactivity, and simulation; It's self-paced as most E-learning programs can be taken when needed; Easy way to find information, references, lessons etc.. and Flexibility to join discussion areas at any hour, or meet with colleagues and instructors in chat rooms.
- Libraries in Libyan Universities are still using the tradition way, however, the department of architecture provided an electronic library includes materials collected by lecturers and students.
- The University web site, have got a registration in many electronic libraries and scientific journals for teachers and postgraduate students.
- The University communicate with teachers and students through the University electronic gate web site.
- communication between the department, teachers and students are by using facebook and e-mail
- Barriers of implementing E-learning in Libyan Universities as follow:
  Weak infra structure (servers, internet reliability, lines expensive); Political issues; Administration; Lack in physical resources, including accommodation, computer and other ICT related resources, connectivity and access for those people with individual needs; and Shortage in information advice and guidance, to ensure that learners are on the correct learning programme at the right level, advice on progress into new learning programmes, monitoring, assessment and on-programme support.
- Lack in learning management and use of management information in order to improve the quality of content and teaching.
- Many points to improve and apply E-learning in Libyan higher education as follow:
  Provide a generous funding and lots of careful planning and expertise; Offer good management and administration; The right person in the right position; Improve ICT infrastructure; Connect with advanced resources over the world; Provide qualified staff and Improve students' computer skills; Changes should be taken gradually in a correct manner; and Employ people who have skills.
- The future of Libya will be excellent, because Libya have got many things could make it one of the best countries in the world.

5. CONCLUSION AND RECOMMENDATIONS

The findings of the study suggest some useful recommendations that could be used in achieving the aim of this study which is to analyse the opportunities for E-learning in Libyan Universities, in order to assess the viability and benefits of its introduction in present and future developments. A variety of points, suggestions and recommendations are highlighted in this section. The objective is not to create a definite strategy but to recommend some general principles.
  Recommendations for lecturers and students to improve E-learning in Libyan Universities as follows:
- Improve the methods of teaching and learning and follow the world's education market.
- The content of the E-learning course should be designed to meet the National Qualifications Framework (NQF) and Libyan Qualifications Authorities (LQA) requirements.
- Instructors should support learners and encourage them to use E-learning in their study.
  Recommendations for institutions as follows:
- Improve learning management, including the management of the curriculum, staff and use of management information.
- Senior managers should support the implementation of E-learning and allocate a fixed budget.
- Instructors should be offered adequate training and course developers to be updated on changes to software and hardware.

- Tools should be kept up to date at all times.
- Connect with advanced resources over the world.
- Provide a qualified staff and changes to e-learning should be taken gradually in a correct manner..
- The attitudes towards E-learning should be taken into consideration.
- Better training to students and staff, and better ongoing technical support from the system vendor
- Provide appropriate training at different levels,
- Make researches to gather data for future developments;
- Libyan institutions have to accept E-learning and to fulfil the potential of ICT and to get quick technological development, Libyan institutions may follow a neighbouring countries' experiences for teaching and learning.
  Recommendations for governmental higher education policies as follows:
- Improve physical resources, including accommodation, computer and other ICT-related resources.
- Provide a generous funding and lots of careful planning and expertise.
- Improve ICT infrastructure.
- Share coordination and resource between different institutions and encourage the successes institutions, to share their success with other institutions.
- Increase partnerships between government, and the private sector.
- Convince the community and the learners' needs,
- Integrate E-learning in the education system.
- Libyan government should pay more attention and great effort to ensure the development and motivation towards e-learning and suitable responses.

Finally, it can be summarising that students and lecturers indicated a positive attitude towards E-learning. E-learning in Libyan higher education institutions as in many developing nations is still remains an unexplored entity and further research is needed to discover and determine the types, and challenges of educational settings as associated to ICT and E-learning in higher education institutes in Libya. It is wished that the findings of the dissertation will be as a source of information for academics, and decision-makers involved the implementation of E-learning in Libya. Clearly indicate advantages, limitations and possible applications.

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