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# ATTITUDES OF LIBYAN STUDENTS TOWARDS ICT'S APPLICATIONS AND E-LEARNING IN THE UK

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## ABSTRACT

The use of virtual learning technology has increased rapidly in university teaching. The introduction of e-learning has led to rapid change which has impacted both the learners and the educators. The increasing use of technology in all aspects of life, as well as in the education sector, motivated Libyan universities to update their processes and make the technology the main factor in their education systems. This paper will analyse students' feedback for some Libyan students who studied abroad, thereby evaluating the e-learning environment as an effective support to face-to-face learning. The actual research was conducted with 30 Libyan students; the findings reflect the fifteen percent who responded to the questionnaire. The questionnaire comments and suggestions reported by students on e-learning are also reflected in the results. The reported findings focus on participants' attitudes towards and their satisfaction with technology. The article concludes by commenting on the prospects of e-learning in the UK.

## KEYWORDS

E-learning; Libya; Information and communication technology (ICT); student attitudes; student satisfaction.

## 1. INTRODUCTION

Many authors have discussed the method in which on-line learning can be used to deliver assessment, training and support. E-learning offers the flexibility to deliver courses without the need to attend classes or follow the lesson in the lab, as well as saving the institutions' money. This problem is very important for learners who usually have limited money and also for tutors to reduce their expenses of different resources, for instance books, journals and other sources. E-

learning is a method that comes from technology, which is sometimes, called distance learning, which takes place virtually instead of in a traditional classroom [1]. On-line learning began when a computer was developed and was used at the same time for personal use [2]. Distance learning was developed by using computer as a tool to deliver courses which made distance learning easier than before, as the use of the computer has increased due to the availability of such technology [2]. Using on-line learning as a tool provides students with the opportunity to use all applications and communicate through the available forms of technology; this truly indicates that on-line learning plays an important role in supporting students from different classes with different abilities. The value of on-line learning for academic communities offers: access to digital sources and references which are not available locally or in hard copy; the ability to communicate with learners and tutors remotely without needing to be present in the classroom; access to interactive tutorials; and it is also easier to obtain educational games and some equipment for creation and designs [3]. However, the biggest benefits of e-learning were that the students had access to the material at any time and did not have an excuse for missing courses, unless they did not have an Internet connection [4]. On-line courses give students the opportunity when they cannot attend the class to follow the lesson regardless of their location or time. Students can obtain announcements, access assignments, take notes, contribute to discussion boards, chat and study with other students, and create their own schedules.

E-learning has had a significant impact on the development of education, as it can be used anytime, as well as anywhere, and can be practiced in almost any discipline, in various sectors, whether public or private, and in education or business. Higher educational

institutions, such as universities, experience e-learning in everyday teaching and studying activities. Students are using a 'blackboard' system for information relating to their studies, such as hand-outs, enrolment status, teacher's notices; and they communicate with their colleagues and teachers without having to go to university. On the other hand, business organisations use e-learning to provide training to remote or mobile employees, and to advertise their products and services to customers [5].

## **2-SIGNIFICANT PROPERTIES OF ONLINE LEARNING IN UNIVERSITY TEACHING**

The main features in e-learning are: a computer with internet access, the university along with some applications, and software to use and control the system efficiently. Students can present their work in the e-classroom from anywhere, at any time reputation and quality are important for higher education institutions, so they regularly update learning material and create new opportunities for students. Number From an organisational point of view, a stakeholder is someone who is directly involved in an organisation [6] Stakeholders from an online environment are individuals who are affected by e-learning. The following sections will describe stakeholder groups, and their feelings of both concern and enthusiasm for e-learning.

**Students:** Students are the main consumers of e-learning; they can be graduate or under-graduate students who are enrolled at college or university.

**Motivations:** E-learning can be a component of traditional learning or may be combined with online learning. Students are encouraged to achieve qualifications in higher education by using e-learning, especially those who are located far away from the institution E-learning can also be inexpensive and time-saving as well.

**Concerns:** Since e-learning introduced a totally new learning environment for students, it meant that different skills were required in order to succeed Students' critical thinking and research skills are developing because they have to deal with a huge amount of information from a

variety of sources in a short period of time .

**Instructors:** In a virtual environment, as in a face-to-face situation in a classroom, instructors take on the role of being the ideal guide to a student's educational experiences. Depending on the teaching method an instructor uses in an online environment, he/she can choose whether or not to have direct communication with their students.

**Motivations:** Instructors can be motivated to create a virtual environment for a number of different reasons: For example, they may be encouraged by their institutions; they may wish to reach a large number of students; or they may have an interest in the advantages of technology, as it would help them to deliver information effectively.

**Concerns:** E-learning has changed instructors' views to thinking that their students need to gain new training and skills to achieve success .In virtual learning, an instructor's role changes from being the primary source for their students' knowledge, to being the manager of resources for knowledge .[7]

### **Educational Institutions**

In the higher education sector, (which includes colleges and universities), e-learning is becoming more popular, which may lead HEI's to create 'online only' educational institutions.

**Motivations:** Educational institutions provide distance learning, including e-learning, to create access to staff and students, particularly if they are involved in more than one department. An upgrade to e-learning depends on the technological infrastructure in the institution, which can lead to expensive upgrades .E-learning requires different types of technological involvement, including the Internet, course management software, fully equipped classrooms, and proper computer and information technology facilities for students .Generally, institutions need more trained staff if the use of technology is set to increase .

**Employers:** Often, there is a tendency for employers to review online education, and to establish e-learning facilities to educational institutions, so that they can develop the

infrastructure of the technology and upgrade them regularly. Employers have a wide range of services to provide, from learning the management system to installing hardware components.

**Motivations:** Employers are becoming more motivated to invoke e-learning in their establishments, as an alternative to the traditional education system; denying the value of e-learning would restrict their pool of potential clients. Employers are motivated to provide learning environments that will result in effective learning for students and make a profit for their business. Employees are encouraged to embrace e-learning to achieve qualifications in higher education for the purpose of advancing their career. On the other hand, unlike the traditional way of learning, e-learning will save money and time.

**Concerns:** E-learning providers should be concerned about the demise in communication skills in the teaching of various courses. It depends on the employers as to whether they choose to emphasise the technical or interpersonal skills in e-learning.

### **Attitude, Awareness, and Motivation of Libyan Users**

Although introducing e-learning to Libya faces very hard challenges, the government has been concentrating on ICT, which has consequently opened up an opportunity to adopt e-learning for the higher education sector. The government started a 60 million e-learning pilot project in September 2009, as a sign of approval and support. There was another sanction for the Development of Administrative Centres (ODAC) to improve Libya's ICT infrastructure, and to expand its economy and improve the quality of life for the community, which is considered to have created a positive effect on the online environment initiatives in Libya.

Due to the advantages of ICT, several traditional structures are shifting towards the online environment. The increasing growth of technology has led to a broader expansion of knowledge transfer. This trend is very important for the developing countries, as there is a lack of technological infrastructure, resources and

mentality to adopt new technology to implement an advanced educational system.

### **Changing Student Expectation**

Students' expectations are changing with the progress of e-learning in higher education institutions in Libya. According to the Aljabal Algharbi University in Gharian in Libya [8] e-learning responded to several problems identified by the students, as they discovered that they could have direct contact with tutors and fellow students. They also found that several learning sources provided them with the opportunity to work as a group, and it also helped other students by providing feedback on their assessment tasks. [8] found out the students' response in her research: "It appeared that the traditional classroom setting is not sufficient to assure effective and efficient communication between instructors and us and that other means of communication and education have to be found." "We do not have a wider choice of resources and modalities of study materials." "The possibilities to collaborate in group work assignments are too limited to work at fixed times in the day; we could not work when we are in different places. When ones misses the class session he/she will face difficulties to understand the lesson because the only key learning materials are the instructor notes on the class." Consequently, it is clear that Libyan students admit that there are problems in the Libyan education system, and they accept alternatives such as e-learning to gain a better standard of education. To convince the students about the benefits of e-learning, the e-learning provider should employ well-trained teachers with positive attitudes.

### **3-CURRENT CHALLENGES IN E-LEARNING – PARTICULARLY IN LIBYA**

Libya, one of the Arabic countries, has a great number of literate citizens, where they also enjoy a high standard of living and education, among the African nations. The higher education sector in Libya widely uses ICT in their daily teaching and learning. Also, the government is introducing new projects to develop ICT structure. Like other developing countries, Libya has a significant challenge in online education because of the linguistic and cultural background of the teacher and students. Moreover, there is

no proper e-learning infrastructure, or much awareness of technology, and there is also a lack of Libyan experts to develop an online learning and teaching environment. After reviewing the e-learning literature during researching, there is a list of most important challenges in Libya in higher education context are:

### **Language and Culture Barrier**

Introducing any new technology to a cultural group is a great challenge, because different people have different views when adapting to new technology. In some come cases, people are afraid of change in the system. In the context of ICT and e-learning system development, it should be a priority to consider the cultural aspect of the user groups, which may lead the e-learning to a diverse dimension .Designing a common e-learning system interface for learners worldwide would involve cultural communication, which would therefore influence the adaption of the IT adoption .Libya is a modern and literate Arabic country, where the main language is Arabic; however, the standard of the English language is very poor. In terms of linguistics, Arabic is different to English, i.e., they do not have anything in common. For example, English is written from left to right, and Arabic is written from right to left. Moreover, most of the e-sources, like software and web contents are in English, which makes ICT and e-learning in the Libyan education system more difficult.

### **Technological Challenges**

Having proper technological resources is a primary feature in developing the e-learning system, which involves the need for communication networks, hardware, software, computers, radio, audio cassettes, video, and Internet access. The e-learning framework depends on the technological infrastructure, including planning, hardware and software. Since software interface refers to the overall front-end look of the e-learning system, it implies that the design of the interface should be easy to use, and understandable to the target group of the user .Moreover, the e-learning system is designed to help the pedagogy, so it should be easy to use and manage, and support the learning models. Maintaining e-learning is a

great challenge in the implementation and integration of ICT and e-learning in an education system [8].Libya faces a number of technological challenges because there is no proper technological infrastructure, although several infrastructure plans are currently in progress. A computer laboratory is available in every higher education institution in Libya, but the insufficient network facility puts serious restrictions onto the Internet access. Moreover, availability of educational software products is very limited and most of them are in English, and very few are in Arabic. Also, there is no software development environment, no trained developers, and a lack of technical departments, which leads to delays in operation and installation software.

### **Management Support**

According to Mapuva: “Institutional leaders are a determinant factor, given their decision-making roles, which could either make-or-break the e-learning projects by either facilitating or impeding its implementation within their institutions.” [9] So, organisational support is essential to motivate teachers, although they are always committed in their role to support, they would gain more confidence with the support of administration, which is the key element to enable ICT into the process of the educational system. This implies that Libyan higher education institutions are suffering from the lack of a skilled management team.

## **4- RESEARCH METHODOLOGY**

The researcher is pleased that the qualitative and quantitative data suited her study needs; the mixed models research has been selected in within-stage to gather these data. Therefore, the researcher used a questionnaire tool to collect both qualitative and quantitative data by providing open and closed questions. The use of a questionnaire is supported by research done by Johnson and Christensen (2007) [10] which stated that, “An example of within-stage mixed model research would be where you used a questionnaire during data collection that included both open-ended (i.e., qualitative) questions and closed-ended (i.e., quantitative) questions”. Mixed methods were selected to suit study needs in within-stage to gather data, the

researcher used a questionnaire tool to collect both qualitative and quantitative data by providing open and closed questions. To collect data, a questionnaire was sent to Libyan students by e-mail and different areas in the UK. 200 questionnaires were distributed, 30 out of 200 questionnaires were received.

## 5- FINDINGS

### **The computers using by mode of study and age:**

As could be expected, analysis of using computers by age of students discloses strong links with the mode of study, as younger students (especially students aged 21–35) were full-time students. As the graphs below illustrate, full-time students used a computer every day and had a strong tendency to using technology compared with other students, such as part-time students. Especially, there were important differences for:

- Very rarely, if ever (12% compared with 73%);
- Occasionally (19% compared with 18%);
- Every day, I'm addicted! (69% compared with 73%);

However, there was quite a similar number for occasionally (19% compared with 18%); notably, younger students were more likely to use computers for different reasons compared with students aged 35+

### **Usage of Computers by Gender**

The analysis of data revealed a set of significant differences in the way males and females who were using computers, males were more likely than females to use computers. These differences in using computers among males and females could be related to the different subjects which students tended to study. The study stated that males were more likely to study subjects which related to usage of computers, which require students to use computers for different reasons. For instance, Advanced computer science, Accounting and Engineering (54% compared with 15% female). In contrast, females were

more likely to study Chemistry (23% compared with 15% male) and English (31% compared with 8% of males)

Most students from female and male have been using computers for over ten years ago. The percentage was 67% compared with other students who stated that they have been using computers from two years, other said five years and the rest said they have been using computers from eight years ago, those students were age 35+years, The majority of students were confident using computers as illustrated in the graph below; about half (47%) stated that they were so confident in using computers for many tasks, whereas 38% of students said that they were good at using computers. Males were more likely than females to be confident; 37% of males compared with 10% females. Age was a significant element, with older students less confident than younger learners, 10% of students aged 35+ felt confident compared with 41% 21–35-year-olds as shown below. Students studying Advanced Computers Science and Engineering were the most confident in using computers, whereas students studying Business, English, Chemistry and Health Social Care were the least confident in using computers. Full-time students stated more confidence in using computers than part-time students, 70% of Libyan students found e-learning interesting; they liked the online environment and wished to take another online course. In addition, 60% would recommend the online environment to Libyan students who study in Libya. Only 23%, were not interested in the online environment. Interestingly, 90% agreed that if traditional learning is blended with e-learning, it shall be more useful,

## 6- DISCUSSION

Based on the findings, the main factors analysed, tutor support, learning styles, and time management, do influence student satisfaction; however, gaining knowledge was the most impact factor in determining student satisfaction with online learning. Moreover, the general opinion of e-learning is that flexibility and tutor support were the main reasons for students' satisfaction. The majority of students in this research were comfortable and confident concerning usage of computers as well as the

online environment in general, most students spent over ten hours per week on the Internet in their home or other places, also most of them had experience using computer over ten years, and the majority of students recommend blending this environment with traditional learning. Also, some of them recommended the online environment to Libyan students who study in Libya. However, a few students preferred traditional learning to online learning, the main reason was lack of skills to learn and lack of time to access to the online environment.

The findings showed that Libyan students had positive attitudes towards e-learning; our findings achieved research objectives and answered the research question (research hypotheses) which was 'Does e-learning replace face-to-face learning or does it support learning?' The findings showed that e-learning supports traditional learning methods, the results based on the respondents' gender, educational level and age. The findings showed that E-learning is also an effective teaching method to motivate students to learn and encourage them to continue in further education. Thus, technology plays an important role in improving and developing teaching methods as well as giving students wider opportunities to learn.

## **7- RECOMMENDATION**

The following section aims to present recommendations about how higher education institutions should implement e-learning in case of a lack in skilled manpower, and lack of adequate resources to establish e-learning:

### **Institutional Leadership**

The responsibility of institutional leaders is vital in the implementation of e-learning in the HEIs, since they make the decision of whether or not to invoke a programme, such as e-learning within their institution. Therefore, it is important to explore these leaders' attitudes because they will indicate either an adoption or rejection of e-learning in their institutions. Other influential factors are the institutional structures and organisations that they implant within their institutions for the execution of policies. A study has shown that the success or failure of an e-learning operation depends on the structure of

organisation that is expanded by an institution's leaders, to prepare for the adaptation of e-learning, in order to improve teaching and learning methods. It is also necessary to investigate HEI organisational structures, which enable the adoption of e-learning.

### **The Changing Organisational Structure**

Bringing in new technology such as ICT and e-learning into HEI's has an influence on the re-arrangement of organisational structure, and also changes their approach to education. This also affects organisational structures which had to be aligned in preparation for the adoption and use of ICTs in the HE sector, primarily for the purpose of skills-development. The introduction of e-learning has had a direct impact on the organisational structure, on both tactical and strategic levels. On the other hand, lecturers have to take on a challenging role in this changeable teaching and learning environment, and in the design of e-learning. Although there are obvious unwanted effects, the implementation of distance learning techniques can emphasise university structure. The modern university has to be adaptable, and able to embrace new teaching methods through e-learning, and that teachers also play a significant role in the execution of e-learning within HEIs.

### **Training Teaching Staff**

Teaching staff play a vital role in higher education institutions when they adapt to any new technology, since they are the people who deliver information to the students. In the implementation of e-learning, teachers need to be trained appropriately by the institution's staff development facility. Schuler and Jackson described a 'primary stop' where teachers enhance their knowledge and skills that are required for desired work-related performance. Lecturers play an essential role in ensuring the implementation of e-learning in HEI's, but they are not the only group to adopt and implement this successfully. Students will experience a positive learning environment if the lecturer is well-trained, with a positive attitude, along with traditional learning as well as e-learning. Since staff development training is the main concern for institutions in implementing any form of new learning methods, it is essential to focus

lecturers' training on how to use hardware and software .Lecturers with inadequate training of e-learning in the real educational environment can pose a problem in balancing the learning process, and can create problems in the application and practice with students .

## References

- [1] Fichter, D. (2002). Intranets and e-learning: a perfect partnership. Online, 26(1):68-71.
- [2] White, M. (2007). History Of Elearning - A Brief History Of E-Learning And Distance Education [Online] Available at: <http://www.elearning-avenue.com/e-learning-rise-the-rise-of-e-learning-why-2/> [Accessed 9 January 2010].
- [3] Laurillard, D .(2004) .E-Learning in Higher Education Available at [https://www.adelaide.edu.au/...elearning/E-Learning\\_in\\_Higher\\_Education.doc](https://www.adelaide.edu.au/...elearning/E-Learning_in_Higher_Education.doc) access at [18/June/2010]
- [4] Porter, CE (2004). A Typology of Virtual Communities: A Multi-Disciplinary Foundation for Future Research. Journal of Computer-Mediated Communication, November, 10 (1)
- [5] Mubarak, H. (2007). Attitudes towards E-Learning. Available: <http://www.scribd.com/doc/2931290/Attitude-towards-Elearning> . Last accessed 8 Jan 2010.
- [6] Thompson, A.A., & Strickland, A.J. (2001). Crafting and Executing Strategy: Text and Readings, New York:McGraw-Hill
- [7] Wilson, D. (2002). The future of learning management, learning technologies© Principal Media Ltd. Online: [www.learningtechnologies.co.uk/magazine/article\\_full.cfm?articleid=19&issueid=5&section=1](http://www.learningtechnologies.co.uk/magazine/article_full.cfm?articleid=19&issueid=5&section=1)
- [8] Rhema, A. & Miliszewska, W. (2005). Towards E-Learning in Higher Education in Libya< Towards E-Learning in Higher Education in Libya > [Accessed 17/6/2010]
- [9] Mapuva,J .(2009).Confronting challenges to e-learning in Higher Education Institutions, , International Journal of Education and Development using Information and Communication Technology Available at <
- ijedict.dec.uwi.edu/include/getdoc.php?id=3477&article=732> access at [18/June/2010]
- [10] Johnson ,B,& Christensen (2007).Educational Research: qualitative, quantitative ,and Mixed Approaches. Available <<http://www.southalabama.edu/coe/bset/johnson/studyq/sq14.htm> >Access at 5August 2010