



University of HUDDERSFIELD

University of Huddersfield Repository

Kenan, Thuraya, Pislaru, Crinela, Othman, Aisha and Elzawi, A.

The social impact and cultural issues affecting the e-learning performance in Libyan Higher Education institutes

Original Citation

Kenan, Thuraya, Pislaru, Crinela, Othman, Aisha and Elzawi, A. (2013) The social impact and cultural issues affecting the e-learning performance in Libyan Higher Education institutes. *International Journal of Information Technology & Computer Science*, 12 (1). pp. 50-56. ISSN 2091-1610

This version is available at <http://eprints.hud.ac.uk/id/eprint/19339/>

The University Repository is a digital collection of the research output of the University, available on Open Access. Copyright and Moral Rights for the items on this site are retained by the individual author and/or other copyright owners. Users may access full items free of charge; copies of full text items generally can be reproduced, displayed or performed and given to third parties in any format or medium for personal research or study, educational or not-for-profit purposes without prior permission or charge, provided:

- The authors, title and full bibliographic details is credited in any copy;
- A hyperlink and/or URL is included for the original metadata page; and
- The content is not changed in any way.

For more information, including our policy and submission procedure, please contact the Repository Team at: E.mailbox@hud.ac.uk.

<http://eprints.hud.ac.uk/>

The social impact and cultural issues affecting the e-learning performance in Libyan Higher Education institutes

Thuraya Kenan, Crinela Pislaru, Aisha Othman, Abdussalam Elzawi

University of Huddersfield

School of Computing and Engineering

Queensgate, Huddersfield HD1 3DH, United Kingdom

Email: Thuraya.Kenan@hud.ac.uk

Abstract:

This paper analyses the social impact and cultural issues which affect the e-learning performance in Libyan Higher Education institutes (HEIs). It is described the development and implementation of e-learning systems in various HEIs with the emphasis on the digital gap in Libya and barriers to successful e-learning implementation in these institutions. Also the social impact of using e-learning packages and Internet by young people in Libya is studied and a SWOT analysis of ICT and e-learning in Tripoli University is performed in order to improve the effectiveness of the use of e-learning systems in Libyan HEIs.

Keywords-component: *social impact; cultural issues; e-learning; education technologies; Libya.*

I. Introduction:

The impacts of social media and the development in Information and Communication Technologies in the Libyan higher education sector which have led to the increase academic staff awareness and improvement of teaching and learning systems and strategies.

The ICTs play a major role in today's education system and the purpose of this paper is to study the social impact of using ICT for the teaching and learning processes in Libyan HEIs. Regarding the implementation of e-learning systems as one of the mediums of instruction in courses offered at their institutions, it has proved to be a good teaching and learning method in some cases while for other institutions there were problems related to the design and implementation phases. Incontestably, delivering courses through e-learning systems will continue to grow in various institutions. In expectation of this growth, the governments, business companies and professional associations can start focusing on applications and the effective and professional implementation of e-learning. The real e-learning is a methodology, one can experience the greatest benefits that e-learning has to offer now and in the future. However, the fact remains that with respect to e-learning, poor quality procurement practices are a barrier to growth and adoption. So it is necessary to make a thorough evaluation when it comes to choose e-learning software for education in order to improve the knowledge of learners, the learning outcomes, the performance outcomes, also the business and policy impact and in order to value the cost spent.

The paper also presents the analysis of the barriers to successful implementation of e-learning systems in HEIs with emphasis on cultural barriers. Finally the results of a SWOT analysis of ICT and e-learning implementation in Tripoli University, Libya are analysed.

II. E-learning in Libyan Universities

Libya does not recognize distance learning and E-learning as valid modes of education and most Libyan universities have not appointed a staff member with formal qualifications in either distance learning or E-learning. In

fact, the Ministry of Higher Education, which is by law responsible for endorsing degrees from foreign universities, will not endorse a degree obtained through either distance learning or E-learning. Without the approval of the Ministry, students cannot gain any advantages in the work place from their degrees. This is of significant importance and could be developed

In 2003, Tripoli University confined its task to providing a video-conferencing service as a step to the distance learning. The main objective of this distance-learning Centre is to shorten the physical distance between students and their lectures. There have been online examinations; similar in structure to the theoretical part of the UK driving test, and as second step in 2004 some universities used them in the assessment of the second stage of their courses. The public perception of distance learning and E-learning is mainly negative [1]. The common belief is that distance learning or E-learning is of a lower quality than traditionally taught course [2]. These barriers are mainly pedagogical, technological and attitudinal according to the showing in [3]. The list below presents issues and perceptions about Libyan e-learning that help to provide a context for this study:

A. Although most Libyan universities provide each faculty member with a personal computer, a significant percentage of faculty members are still computer illiterate, and one might reasonably estimate resistance from those members toward any attempt to adopt an E- learning model in their discipline within the university. Also some of faculty members have difficulty with the English language, and as there is a lack of E-learning applications supporting by Arabic. Teaching E-learning courses would be nearly impossible for these staff, even for those who willing to do so [3].

B. The lack of interests by university administrations regarding the possibilities of E-learning is also a real challenge. According to Abouchdid [2] University decision-makers fear that E-learning would abruptly shift traditional education into a new pedagogical venture for which educators and policymakers are not sufficiently familiar.

C. In Libya a strong power structure governs the relation between learner and educator, and any learner may feel subservient to the educator and this could prove a problem when the student is asked to discuss his/her views freely with the educator [4].

D. The lack of Arabic learning tools and applications for E-learning courses will be a serious challenge implementing E-learning into Libyan HE, peculiarly in the more theoretical colleges where Arabic language is the teaching language. But even for the science based colleges where English is the official teaching language, the lack of Arabic learning applications might cause a problem for a large proportion of students [5].

III. Social impact of using e-learning packages and Internet by young people in Libya

The social impact or the socialisation is seen as a learning process that takes place in the family or community without any formal teaching, the learning that takes place by observing or interacting with other people. Such process can make learning communities work, and learners transform the information they get from instructors and texts into meaningful knowledge through conversations, discussion groups and other real world activities [6].

Libya witnesses an active period for all the networking of the social media, especially among the young generation. BBC_NEWS and many media channels in 2012 declared in “Had it not been for the efforts of young generation and professionalism with social media, had not achieved the revolution of political change in Libya, they are making the world see what is happening in Libya, while most media channels failed to that, and was forced to adopt videos,

which were the jurisprudence of these young generation in several sensitive areas” [7]. In recent years most of Libyan young generation in general (and Higher Education students in particular) have shown that they love using modern technology and their eagerness to use all technical devices through social communication channels. The evidence shows this increased sales of computers and smart phones. Many students in higher education are using these tools to share information, knowledge and discuss issues related to their studies [8].

In Libya, this is the best time to look closely at the ways of the tools that influencing on the social relationships and the education systems, stating by the mail to chat rooms to call phones. The social impacts have to offer the teaching and learning process. Its means to become closely support and might help the students in reaching an understanding of planning actions, acting, noting and reflecting. Also, the natures of social media tools help instill in students not just the motivation but also the opportunity to experience the personal mechanics of action research. The social media played a parallel role with the cultural change; the students like investigating extensions, to strengthen their understanding of the topic and their learning skills. The lecturers face many difficulties when joining the complexity and multiplicity of action research with a sufficient clarity that enables students to learn meaningfully. Therefore, they need to display, share, support and stimulate with other lecturers, experts, and students the potential of social media in the teaching and learning. This paper is encouraging a broader educative practicum for encourages a community of learning; and provides the lecturers and students with opportunities to study more serious critical their teaching and learning process.

IV. The digital gap in Libya

There are other indicators for the spread of Information Communication Technology (ICT) applications in education system computers: the number of computers per hundred students, the number of hours of study in the field of ICT, the number of schools that use the Internet, the average number of Internet sites per school, the speed of the Internet connection, and specialist television and radio broadcasts. These indicators can be used on a global scale to determine whether there is a “digital divide” between countries, since the summary of these measures could be used as a measure of any digital gap.

Rhema & Miliszewska [9] conclude that because the technical and technological level existing in a country largely determines the rate at which IT develops, the developing countries will not catch up easily. Andersson & Grönlund [10] are concerned that developing countries may miss out on the opportunities offered by the information and communication revolution because of an inability to fully participate in all spheres of political, economic, cultural, scientific life provided by the IT revolution of new technology.

Tripoli University conducted a study of web usage in the Middle East. It was shown that although there was an increase in the number of Internet users in the world scale by 43% during the last six years, this represented at the end of 2009. On a world scale, Africa had 3.6% of Internet users from this percentage; the Middle East had 10%, Asia 12.8% while the percentage of Europe 39.4% and North America 67%. This shows that is a substantial digital-gab between countries, which will take time to be reduced [11].

V. Barriers to E-learning implementation in Libyan HEIs.

Kenan [12] studied the resistance to growth of E-learning in Libya and classified the barriers into four main categories as following:

A. Implementation Barriers - increased workload for academic staff; development time; delivery time; lack of extrinsic incentives/rewards; lack of strategic planning and vision; lack of support; lack of training in technological developments; lack of support for pedagogical aspects of the developments [13].

B. Technological barriers - insufficient network and systems infrastructures; weaknesses of E-learning development in HEIs; Security; difficulties in overcoming initial implementation problems; lack of experience in using technology; lack of provision of robust Internet access; lack of specific student services

C. Mismanagement barriers - lack of a general strategy of education linking the different stages of study, with a consequent difficulty in accepting E-learning in HE; lack of common regulations or standards for e-learning in a country, which does not generally approve of such methodology; disapproval from the Ministry of Higher Education for E-learning courses; difficulty in securing accreditation collaboration and lack of cross-institutional collaboration.

The barriers to achieve E-learning in Libya grouped into four categories based into Management barriers, Technological barriers, Cultural barriers and other barriers due to other factors such as cost, etc.

The teaching load in Libyan universities is typically large, e.g. the average number of teaching hours for academic staff is 24 hours/week, and Libyan universities have not yet established a scientific research tradition [14]. Thus, even Professors find it difficult to find the time for research activity and educational development. The postgraduate programmes initiated in 1973 in some faculties in Libyan universities included education (Tripoli University) and literature [15],[12].

D. Cultural barriers - unfamiliarity with the Internet and related technologies results in lack of appreciation and understanding of E-learning and its benefits; opposition to the adoption of the necessary educational changes (e.g. self-regulation, student centered) required for successful E-learning. Cultural barriers or cultural challenges exist where a certain culture or group is unable to accept or adopt a new methodology in an important area of their lives, such as religious beliefs or social customs or habits [16]. This attitude has been reinforced by events because, with the arrival of new technologies, jobs that could previously be done with a minimum of education fast disappeared. Again, a key concept of E-learning is the flexibility of timing for students but certain religions impose a strict daily timetable, and it is also widely known that many universities have schedules are fixed and not at all flexible.

When considering social impacts or cultural challenges that could act as barriers to e-learning, one has to find the reasons why people or individuals might prefer not to learn in an electronic environment. Some of the reasons such as the fear of demonstrating a lack of skill or competence, fear of Webpages contents, fear of isolation from other students, lack of awareness of the need to develop or the opportunities available, blaming others for inadequate performance rather than taking responsibility for one's own actions, lack of personal confidence, and a general belief that people cannot change. hence, fear poses a serious barrier to e-learning, because it is only through exposure and experience that one can master or be comfortable with e-learning.

VI. SWOT analysis of ICT and e-learning implementation in Tripoli University:

An e-learning strategy will offer a framework for the assessment all the things that impact on the E- learning implementation. The strategy should be sufficiently flexible to accommodate changes in the developments in E-learning products, services and technology. The implementation of e- learning in an official setting requires inclusive strategic planning. Changing the educational offering through technology requires utilizing effective implementation

plans and strategies [17]. Implementing any type of process that involves change and alters how people work can present difficulties for an organization. Estimates have shown that up to 70 percent of the cost of implementing a major organizational change effort has been linked to managing employee behavior during the transition [18].

The process of transforming organizations' objectives into strategies that deliver lasting, sustainable change is, to a large extent, dependent on how institutions approach changing everyday processes. When there are major shifts in the processes faculty and staff rely on to do their jobs on a daily basis, senior administration must fully endorse and engage in the planning, development, and launch of the initiative for it to be successful [12].

Once the key players are committed to the implementation process, quality control and measurable outcomes must be considered as part of implementation [19].

However, a SWOT analysis looks at the main environmental issues such as the economic situation, social changes such as the population getting older and technological developments. Kenan et al. [15] undertook a SWOT study on ICT and e-learning implementation in Tripoli University, Libya. The SWOT analysis is an essential step to analyze various factors before implementing an e-learning solution at any institution because the success or failure of an E-learning initiative will be directly related to the quality of strategic thinking that underpins it. One may link the E-learning strategy to a map, supplying the necessary directions for the journey towards implementing E-learning. It is thus important to have an E-learning strategy in place before beginning the implementation process. E-learning initiative must be tied to the institution's core business to ensure that the business objectives are met [20]. The strategic analysis is useful for successful implementations of e-learning; and aims to help the decision makers at the departmental level to decide on opportunities with respect to e-learning. The strategic analysis based on the experiences as well as the perceptions of the instructors, students, administrators, and technical staff about using web-based instruction with the institution.

Kenan et al. [15] present a critical review of research pertinent to a strategic analysis of SWOT e-learning model for Libyan HEIs. The review recommends that the institutions should start working hard on minimizing the weaknesses points such as poor English skills of students as well as instructors, lacking ICT infrastructure, and lack of e-learning know-how. Also, to relieve the threats, they recommend the use of a blended model (a combination of traditional and e-learning methods). The strategic analysis is important commission to analyse various factors before implementing an e-learning solution at any Libyan HEIs.

However, a SWOT analysis looks at the main environmental issues such as the economic situation, social changes such as the population getting older and technological developments. The main conclusions of the SWOT analysis performed by Kenan et al. [15] are as follows:

Strengths points: Using the computers, the enjoying by the Internet websites, availability of educational methods and availability much Software to support.

Weakness points: Libyan ICT infrastructure; Internet access; mismanagement; lack of development in HEIs in the operations of the education and the importance of Libya's geographic and width area of it.

Opportunities points: Language and IT skills acquired; time management; comfortable education and new method.

Threats points: Cultural barriers; lack of dependency the IT industry and lack of employ the e-learning graduates.

The conclusions of SWOT analysis should help the managers and users to choose the convenient e-learning software

packages for education. Also the following aspects should be considered: improvement of the learners' knowledge, learning outcomes, efficiency of the teaching and learning processes and the reductions of costs.

CONCLUSIONS:

E-learning is dependent on technology to deliver the instructional content. The Libyan HEIs must make decisions about technology issues previous to the implementation of the e-learning strategies. Beyond the questions of what type and how much hardware, software and bandwidth will be needed, institutions must consider how the new technology will be supported. The data protection and other security issues should be also considered. The review of different learning management systems should be done and the technology issues related to the implementation of the chosen e- learning systems should be taken into account afterwards. It is important for the HEIs to determine how to use technology as a teaching tool framed within their particular learning pedagogy and to change their existing teaching and learning methods in accordance with the pedagogy related to e- learning.

The implementation of e- learning in an official setting requires inclusive strategic planning. Changing the educational offering through technology requires utilizing effective implementation plans and strategies [21]. Implementing any type of process that involves change and alters how people work can present difficulties for an organization. Estimates have shown that up to 70 percent of the cost of implementing a major organizational change effort has been linked to managing employee behavior during the transition [6].

REFERENCES

- [1] N. Clark, "Education in Libya". World Education News and Reviews, 2004, vol. 17, no. 4.
- [2] K. Abouchedid, "E-learning challenges in the Arab world: Revelations from a case study profile". Journal of Quality Assurance in Education, 2004, Vol. 12, no. 1.
- [3] T. Kenan, and C. Pislaru, "Challenges related to the implementation of e-learning in higher education institutions in Libya". In: Proceedings of The Queen's Diamond Jubilee Computing and Engineering Annual Researchers' Conference 2012: CEARC'12. Huddersfield: University of Huddersfield. 2012, pp. 116-122.
- [4] T. Kenan, C. Pislaru, and A. Elzawi, "Comparing the impact of E-learning and ICT in Higher Education institutions in Libya and United Kingdom". ICEIC 2011. Florida, USA, 2010, pp. 162-173.
- [5] A. Elzawi, and S. Wade, "Barriers to ICT adoption in quality of engineering research in Libya: how to bridge the digital divide?". In: *Proceedings of The Queen's Diamond Jubilee Computing and Engineering Annual Researchers' Conf.; CEARC'12*. UK: University of Huddersfield. 2012, pp. 98-103.
- [6] A. Chen, A. Mashhadi, D. Ang, and N. Harkrider, "Cultural issues in the design of technology-enhanced learning systems". British Journal of Educational Technology, 1999, vol.30, no.3, pp. 217-230.
- [7] BBC, ARA.NEWS. "A program about the results of Libyan war". In: <http://www.bbc.co.uk/arabic/middleeast/> (ed.) Middleeast news. Feb. 2012, [Http://www.bbc.co.uk/arabic/middleeast/](http://www.bbc.co.uk/arabic/middleeast/)
- [8] T. Kenan, C. Pislaru, and A. Elzawi, "Social media influence on the student's skills in Libyan higher education". Issues in Informing Science and Information Technology, 2013. to be published.
- [9] A. Rhema and I. Miliszewska, "Towards e-learning in higher education in Libya". Issues in informing Science and information technology, 2010, vol. 7, pp. 423-437.
- [10] A. Andersson, and A. Grönlund, A. "A conceptual framework for e-learning in developing countries: a critical review of research challenges". EJISDC, 2009, vol. 38, no. 8, pp. 1-16.

- [11] A. Elzawi, T. Kenan, S. Wade, and C. Pislaru, "Bridging the Digital Divide and Enhancing the Quality of Engineering Research in Libyan Universities". In: *6th Conference on Quality in Middle East, 2012*, Hamdan Bin Mohammed University, Dubai. unpublished
- [12] T. Kenan, C. Pislaru, and A. Elzawi, "Analysing the effectiveness of e-learning based on national and international cultures and approaches to pedagogy". In: *17th UKAIS Conf. on Information Systems, March 2012*, UK. New College, Oxford University (unpublished)
- [13] A. Rhema, and I. Miliszewska, "Reflections on a Trial Implementation of an E-Learning Solution in a Libyan University". *Issues in informing Science and information technology*, vol. 8, pp. 61-76.
- [14] A. Elzawi, & J. Underwood, "How Higher Engineering Researchers in Libya Perceive The Use of Internet Technology". *The International Arab Conf. on Information Technology (ACIT'2010)* , University of Garyounis, Benghazi, Libya, 2010, pp. 89-98.
- [15] T. Kenan, C. Pislaru, and A. Elzawi, "Novel SWOT Analysis of E-learning Implementation in HE Institutions in Libya". In: *Intenational journal on E-learning (IJEL): Association for the Advancement of Computing in Education (AACE)*, 2013. to be published
- [16] C. Armatas, D. Holt, and M. Rice, "Impacts of an online-supported, resource-based learning environment: does one size fit all?". *Distance Education*, 2003, vol. 24, no. 2, pp. 141 -158.
- [17] A. Rhema, and I. Miliszewska, "The Potential of E-Learning in Assisting Post-Crisis Countries in Re-Building Their Higher Education Systems: The Case of Libya". *Issues in informing Science and information technology*, vol. 9, pp. 149-160.
- [18] J. DYCHE, "The CRM Handbook", Boston, MA.: Addison-Wesley Pearson Education. *Education Economics*, 2002, vol. 9, no. 2, pp. 139 -144.
- [19] J. Mapuva, "Confronting challenges to e-learning in higher education institutions". *International journal of education and development using information and communication technology*, 2009, vol. 5, no. 3, pp. 1-14.
- [20] A. Othman, C. Pislaru, T. Kenan, and A. Impes, "Attitudes of Libyan students towards ICT and e-learning in the UK", *Proceedings of the Fourth International Conference in E-learning (ICEL2013)*, Ostrava, Czech Republic, 2013, pp. 123-129.
- [21] F. Danwa, and H. Wenbin, "Research on Educational Technique Training Based on Teacher Professional Development". *IEEE computer society. Second International Workshop on Education Technology and Computer Science*, 2010, pp. 568-571