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The importance of e-learning system in higher education in developing countries - A Case of Macedonia

Abstract

The growing influence of information technology on all aspects of life, also including the education sector, particularly higher education, involves developing countries to use e-learning system that helps in the realization of the learning process, to follow the example of developed countries. E- Learning systems are a technological development aimed at the use of the information and communication technology for the distribution teaching materials and interaction between students and teachers. E-learning system in developing countries represent a new era in communication between students and teachers. E-learning represents an essential paradigm on higher education unlimited by time and place, offering new opportunities for the development of the educational process, making it more flexible and cost effective, thus many universities in developing countries have begun apply such a system.

The purpose of this study is to identify the importance of using an e-learning system in the learning process in developing countries, such as Macedonia, specifically will focus on State University of Tetovo. By literature review and discussions with university colleagues and students will be shown the importance, various issue and benefits of e-learning system in the learning process in the SUT. From the study will be seen that the implementation of e-learning system in higher education will be very important on improving and increasing the efficiency of the learning process.

Key words: E-learning system, Developing Country, Higher education, Importance.

Introduction

The rapid development and widespread of Internet and communication technologies have materially altered many characteristics and concepts of the learning environment. Nowadays, the traditional teaching in universities' classrooms becomes no longer sufficient for our students. E-learning emerged as an imperative paradigm of modern education unrestricted by time or place, offering new possibilities to higher education institutions for providing flexible and cost-effective remote or distance learning environment, thus many universities put it in their programs, depending mainly on the Internet as a delivery medium (Chen & Tseng, 2012; Ahmed, 2010).

E-Learning has become increasingly important in higher education institutions. E-learning is defined as all electronic forms that support learning and teaching, the use of all electronic media and information and communication technologies. Information and communication systems, whether networked or not, serve as specific media to implement the learning process. E-Learning is an ideal learning environment using modern means of information technology, through the effective integration of information technology and the curriculum to achieve, a new learning style which can fully reflect the main role of the students to thoroughly reform the traditional teaching structure and the essence of education, to train large numbers of high quality personnel. (Ma, Wang, & Liang, 2008)

Notably, the E-learning system is considered as an effective tool of teaching and learning (Liaw, Huang, & Chen, 2007). In fact, of late, the E-leaning system rapidly used to interact with students and teachers. One can conclude that this kind of learning brings solutions to constrain like, but limited to, time, geographical differences, and cost (Kester, Kirschner, & Corbalan, 2007). Put together, it allows education organizations and/or teachers to deliver education via online. Global wide, educational institutions have spent large portions of their budget on online learning.

Over the last twenty years, developed countries and emerging economies have introduced ICT to enhance all their sectors of society including the educational sector. This change has had a significant impact on the curricula, the methodology of teaching, and learning processes. But, today also have started to follow the path of developed countries and developing countries, so, to implement and use e-learning systems in the learning process. E-learning system in developing countries represent a new era in communication between students and teachers.

Therefore, this study aims to identify the importance of using an e-learning system in the learning process in developing countries, such as Macedonia, specifically will focus on State University of Tetovo (SUT). By literature review and discussions with university colleagues and students will be shown the importance, various issues, benefits and challenges of e-learning system in the learning process in the SUT. From the study will be seen that the implementation of e-learning system in higher education will be very important on improving and increasing the efficiency of the learning process. This study will be a message for the institution to think in

terms of adoption and implementation of e-learning system in learning process in the SUT.

2. Literature Review

Relevant literature, which provided the conceptual foundation for this paper and past research were extensively reviewed and integrated sequentially, including a wide range of recently published works, in order to develop more effectively the study hypotheses. E-learning has been conceptualized and defined in multiple ways in literature. Hassanzadeh et al. (2012) defined e-learning as a learning technology that uses web browsers as a tool for interaction with learners and other systems. Also e-learning is defined as using the network technologies to create, foster, deliver and facilitate learning, anytime and anywhere (Duan et el., 2010), or simply it refers to the education delivered through information and communications technologies to support individual and organizational goals (Maldonado et al., 2011). Here e-learning is perceived as a key enabler to knowledge transfer within the higher education sector, which considered the central theme of the system (Owens & Price, 2010; Sridharan et al., 2010). E-learning as a new paradigm shifts higher-education from instructor-centered to learner-centered and enhance the quality of teaching and learning. Through the Internet, e-learning allows digitized educational materials to be quickly and efficiently delivered to higher-education students. The self-paced aspect of e-learning gives students a chance to access educational materials any time, any place and choose tools appropriate to their different needs. It also allows students to customize the organization of their personal learning course (Jeong et al., 2012; Bhuasiri et al., 2012).

E-learning platforms are applications used for delivery of learning content and facilitation of learning process. They are developed for administration and teaching in tertiary education. This software enables the administrators and lecturers to treat enrolment data electronically, offer electronic access to course materials and carry out assessments (OECD, 2005).

E-learning system has launched to incorporate in developing countries and is believed to have huge potential to meet growing demand for education. E-learning can be seen as a tool for raising the number of students who have access to higher education. In spite of e-learning advantages and goals, challenges are plentiful; in many developing countries there is a lack of vital e-learning components such as computers, skills; and the active, participative student that is required for interactive learning is also very rare in countries where the tradition is to teach in a more traditional. For those concerned with implementing e-learning in developing countries it is important to understand all challenges, benefits and the importance of using an e-learning system in learning process.

Macgregor et al. (2009) stated that the advantages of e-learning are frequently purported in the literature and are generally manifest in the Web. Such benefits include (a) the ability to engage students in non-linear information access and synthesis; (b) the availability of learning environments from any location and at any time; (c)

the ability for students to influence the level and pace of engagement with the learning process; and (d) increased opportunities for deploying disparate learning strategies, such as group discussion and problem-based or collaborative learning, as well as delivering interactive learning materials or learning objects.

Other benefits have been documented by Zhang et al. (2010) they argued that the implementation of e-learning showed some benefits for both university student and educational institutions, these benefits are: (a) provides time and location flexibility;(b) results in cost and time savings for educational institutions; (c) fosters self-directed and self-paced learning by enabling learner-centered activities; (d) creates a collaborative learning environment by linking each learner with physically dispersed experts and peers; (e) allows unlimited access to electronic learning material; and (f) allows knowledge to be updated and maintained in a more timely and efficient manner.

Universities can achieve numerous benefits from implementing e-learning programs, including personalized instruction, content standardization, accountability, on-demand availability, reduced cycle time, increased convenience for students, improved tracking capabilities, and reduced cost. Universities in developing countries face unique challenges compared to developed countries and suffer from congested classrooms, e-learning can compensate the weakness of their traditional education methods and enables higher-education instructors to transfer their knowledge for a relatively large number of students without limitation of space, time or facilities (e.g. Bhuasiri et al., 2012; Maldonado at al., 2011).

Although the benefits and advantages of e-learning are obvious, it could be argued that it still has some weaknesses. For example, since users are not bound by time, the course is available 27/7 and does not require physical attendance which could reduce the social and cultural interaction. The learners may also feel isolated and unsupported while learning since the instructors and instructions are not always available. They may become bored with no interaction. Technology issues required for e-learning could also become potential problems for the learning process. The learners need to have access to resources such as computers, internet, and software. They also need to have computer skills with programs such as word processing, Internet browsers, and e-mail (Welsh et al, 2003; Collins, Buhalis and Peters , 2003).

3. Research objectives

Like in most developing countries, the use of ICTs and the implementation of e-learning in Macedonia are still in an early stage. While some Macedonia universities have implemented e-learning system in their learning process, but the State University of Tetovo still don't have such system, still use the "traditional" model of education; this model is based on face-to-face interactions in, and outside of, classroom between students and teachers, and learning activities that are only available on campus.

State university of Tetovo is one of the universities with large number of students and also has a large number of study programs. Student studying not only from Macedonia, but also from other countries such as Kosovo, Presevo, Montenegro, Albania. Also, given that in addition to regular studies, SUT also offers part-time studies. Given these issues and also review the literature regarding the development of teaching and learning process in developed countries, therefore, these are some of the main reasons that make significant to use e-learning system in learning process.

The main objective of this paper is to see the importance, benefits and challenges to use one e-learning system in SUT.

4. Research Methodology

This study was conducted in one public university in Macedonia, in the State University of Macedonia. The data collection was based on interviews to students and academic staff and secondary information. Questions covered in the interview guide were laid out in two sections. The first section targeted general and historical background information on e-learning in the higher education. The second section sought to identify advantages and the benefits to use one e-learning system in SUT.

Secondary information has been collected from various documents such as books, newsletters, reports, magazines, journals, WWW, as well as from existing literature to understand the important to use e-learning systems in higher education. So, the main aim of the study is to collect opinion from the respondents to examine the state of the role of e-learning system in the higher education in the context of SUT.

5. Importance and benefits of e-learning system for higher education - SUT

By literature review and also from the data collected from interviews conducted by academic staff and students of SUT will give some conclusions about the importance and benefits of using e-learning system in the learning process. Reviewing the literature on e-learning practices shows common agreement on the importance of information and communication technology (ICT) in today's learning environment (Lytras, Pouloudi and Poulymenakou, 2002). Most organizations have understood that e-learning has to be integrated as part of daily tasks of students and employees (academics and managers), not to be seen as a separate tool or technique for learning and training. Therefore, e-learning has become a strategic advantage that participates in the realization of the organizational strategic plan (Magalhães, 2004).

E-learning system offers the opportunity for information to be presented in various forms – text, sound, pictures, etc. More than that, it affords the opportunity for the information to be stored in various mediums and formats over long periods of time and accessible over long distances. Compared to face-to-face learning, these mediums can provide means of revision several times over in a day and over a period in a manner more accurate and convenient to students who are at the centre of the

teaching and learning activity.

E-learning offers great flexibility in learning (Kocur & Kosc, 2009). This flexibility pro-vided by the various forms in which the learning material can be presented, allows the students a variety of options to learn from at their own pace and time. So, as we said SUT has a significant number of part-time students, they can more easily access the course and this in turn supports the objectives of wider participation, removing the traditional barriers to higher education study. Writers such as Hems-ley (2002) express the view that full time and part time students can now partake in their chosen degree courses from any location, giving people who travel or who are relocated, a transferable and easily accessible learning resource and experience. Through the use of advanced technology, students who have previously not had access to higher education now have the opportunity to study at the location that best suits their needs (Sadler-Smith 2000).

Another benefit of using e-learning system is that this system gives the opportunity to students with disabilities can study from their homes. Seeing conditions and op-portunities offered by developing countries, highlighting Macedonia, namely SUT, are impossible studies of students with disabilities, therefore, from this we can say that the use of an e-learning system in the SUT will be a good opportunity to study these students.

Also, E-learning system offers lower cost to both students and implementers. These are some of importance and benefits to use on e-learning system in SUT in the learning process.

6. Conclusion

E-learning has grown significantly over the last decade to become a significant mode of instruction in higher education. For students, e- Learning system can pro-vide an educationally-superior alternative to traditional lectures, in which learning can take place outside the lecture hall. Can also provide a model for students how to become independent from lecturer, therefore, to become self managing their studies.

Noting the importance of using an e-learning system and the opportunities offered by such system can conclude that the application of e-learning system in learning process in the State University of Tetovo will impact on improving and increas-ing the efficiency of learning, and also to encourage the students in their study. Also, the importance and benefits of e-learning system are believed to be great enough to allow the governments and universities of developing countries to meet the growing need of education effectively.

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