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# E-Learning System and Higher Education

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*Abstract: This study focuses on the effectiveness of using e-learning in teaching in tertiary institutions. The higher education institutions utilize modern information and communication Technologies for teaching and learning. This paper reviews literature and gives a scholarly background to the paper by sharing some contributions made by various researchers and institutions on e-learning concept, particularly its usage in teaching and learning in higher educational institutions. It unfolds some views shared by people and institutions globally on the adoption and integration of e-learning technologies in education through surveys and other observations. Here we find the meaning or definitions of e-learning as given by different researchers and the role that e-learning plays in higher educational institutions in relation to teaching and learning processes, and the advantages and disadvantages of its adoption and implementation.*

*Key words: E-learning, Information and Communication Technologies, Higher Education.*

### **Introduction:**

The old correspondence courses were the first Distance learning courses but with the advent of E-learning, It becomes the new mantra for delivering higher education courses over a long distance. The Internet has opened new possibilities and now any type of learning content, it may be for school, graduate or masters level, employee training, research activity or any other type of academic offering is called e-Learning. e-Leaning has already established its credentials and its popularity can be gauged from the fact that delivery is not restricted to just plain text but has crossed boundaries to

video creating virtual class rooms via video conferencing. The introduction of a variety of technologies has made it possible to convert it from impersonal to highly interactive medium of pedagogy (the art and science of teaching). The Internet has become one of the vital ways to make available resources for research and learning for both teachers and students to share and acquire information (Richard and Haya 2009). Technology-based e-learning encompasses the use of the internet and other important technologies to produce materials for learning, teach learners, and also regulate courses in an organization.

Technology-based e-learning encompasses the use of the internet and other important technologies to produce materials for learning, teach learners, and also regulate courses in an organization. It is therefore difficult to find a commonly accepted definition for the term e-Learning, and according to Oblinger and Hawkins (2005) and Dublin (2003), there is even no common definition for the term.

E-learning refers to the use of information and communication technologies to enable the access to online learning/teaching resources. In its broadest sense, Abbad et al (2009), defined E-learning to mean any learning that is enabled electronically. They however narrowed this definition down to mean learning that is empowered by the use of digital technologies. This definition is further narrowed by some researchers as any learning that is internet-enabled or web-based (LaRose et al, 1998; Keller and Cernerud, 2002). E-learning, according to OECD (2005) is defined as the use of information and communication technologies in diverse processes of education to support and enhance learning in institutions of higher education, and includes the usage of information and communication technology as a complement to traditional classrooms, online learning or mixing the two modes.

## **THE USE OF E-LEARNING IN EDUCATION**

The development of information technologies and multimedia, also the use internet as a new technique of teaching, has made radical changes in the traditional process of teaching and learning (Wang et al. 2007). According to Yang and Arjomand (1999), development in information technology has generated more choices for today's education. Agendas of schools and educational institutions have recognized e-Learning as having the prospect to transform people, knowledge, skills and Performance (Henry, 2001). Also according to Love and Fry (2006), colleges, universities, and other institutions of higher learning are in a race to advance online course capability in a speedily enveloping cyber education market. E-learning, has come to be more and more important in

institutions of higher education. The introduction and expansion of a range of e-Learning tools has been initiating several changes in higher education institutions, particularly when it comes to their educational delivery and support processes (Dublin, 2003). Just as there are different types of e-Learning, there are also different ways of employing the technique in education. Algahtani, (2011), in his evaluation of E-learning effectiveness and experience in Saudi Arabia, discovered three distinct models of using e-learning in education including the “adjunct, blended e-Learning and online”. The three ways of using e-Learning technologies as discovered by Algahtani (2011) are described below. The “adjunct e-Learning is the situation which e-Learning is employed as an assistant in the traditional classroom providing relative independence to the learners or students (Algahtani, 2011). In the blended e-Learning, Algahtani (2011) and Zeitoun (2008) explained that, in this way of using e-Learning, the delivery of course materials and explanations is shared between traditional learning method and e-learning method in the classroom setting. The third one which is the online is devoid of the traditional learning participation or classroom participation. In this form of usage, the e- Learning is total so that there is maximum independence of the learners or students (Algahtani, 2011; Zeitoun, 2008). Zeitoun (2008) has gone further to explain that the online model is divided into the individual and collaborative learning, where the collaborative learning also consist of the synchronous and asynchronous learning (Zeitoun, 2008)

### **E-learning tools used in higher Education:**

#### **Web log**

A blog short for web log is a user-generated website where entries are made in journal style and displayed in a reverse chronological order. The term "blog" is a mingling of the words web and log. Blogs provide comments or news on a particular subject, some function as more personal online diaries. The modern blog evolved from the online diary, where people would keep a running account of their personal lives. There web blogs, such as WordPress, Movable Type, blogger or LiveJournal, or on regular web hosting services, such as DreamHost.

#### **Social bookmarking**

Social bookmarking is a web-based service to share Internet bookmarks. The Social bookmarking sites are a popular way to store, classify, share and search links through the practice of folksonomies techniques on the Internet. In a social bookmarking system, users store lists of Internet resources that they find useful.

## **Wiki**

A wiki is a website that allows visitors to add, remove, edit and change content, without the need for registration. It also allows for linking among any number of pages.

## **RSS**

RSS is a web feed formats used to publish frequently updated digital content, such as blogs, news feeds or podcasts, vodcasts etc.

Users of RSS content use software programs called "feed readers" or "feed aggregators". The user subscribes to a feed by entering a link to the feed into the reader program. The reader can then check the user's subscribed feeds to see if any of those feeds have new content since the last time it checked and if so, retrieve that content and present it to the user.

## **Podcasting**

*Podcasting* is a fusion of two words: *iPod*, Apple's popular digital music player, and *broadcasting*.

Podcasts are basically digital audio programs that can be subscribed to and downloaded by listeners by RSS (Really Simple Syndication). It can be accessed on an array of digital audio devices, like Mp3 players, desktop computer, laptops, mobiles etc.

## **Instant Messaging**

An instant messaging application allows one to communicate with another person over a network in relative privacy. There are many options like Gtalk, Skype, Meetro, ICQ, Yahoo! Messenger, MSN Messenger and AOL for instant messaging. You can add associates to a contact list or buddy list, by entering their email address or messenger ID.

## **Text chat**

Internet Relay Chat (IRC) and other online chat technologies allow users to join chat rooms and communicate with many people at once, publicly. Users may join a pre-existing chat room or create a chat room about any topic. Whether you are in another person's chat room, or one you've created yourself, you are generally free to invite others online to join you. This facilitates both one-to-one communication and many-to-many interaction.

## **Internet forums**

Originally modeled after the real-world paradigm of electronic bulletin boards of the world before Internet was born, internet forums allow users to post a "topic" for others to review. Other users can

view the topic and post their own comments in a linear fashion, one after the other. Most forums are public, allowing anybody to sign up at any time.

### **Advantages or Benefits of E-learning**

The inclusion of E-learning in education, especially for higher educational institutions has Several benefits. E-learning is considered among the best methods of education. Several studies and authors have provided benefits and advantages Derived from the adoption of e-learning technologies into schools (Klein and Ware, 2003; Algahtani, 2011; Hameed et al, 2008; Marc, 2002; Wentling et al. 2000; Nichols, 2003). Some studies has proven the advantages of e-learning as its ability to focus on the needs of individual learners. For example Marc (2000) in his book review on e-learning strategies for delivering knowledge in digital age noted that one of the advantages of e-learning in education is its focus on the needs of individual learners as an important factor in the process of education rather than on the instructors', or educational institutions' needs. Some of the advantages that the adoption of e learning in education, obtained from review of literature includes the following:

1. It is flexible when issues of time and place are taken into consideration. Every student has right of choosing the place and time that suits him/her. According to Smedley (2010), the adoption of e-learning provides the institutions as well as their students or learners the much flexibility of time and place of delivery or receipt of according to learning information.
2. E-learning enhances the efficiency of knowledge and qualifications via ease of access to a huge amount of information.
3. It is able to provide opportunities for relations between learners by the use of discussion forums. Through this, e-learning helps eliminate barriers that have the potential of hindering participation including the fear of talking to other learners.
4. E-learning motivates students to interact with other, as well as exchange and respect different point of views. E-learning eases communication and also improves the relationships that sustain learning. Wagner et al (2008) note that e-Learning makes available extra prospects for interactivity between students and teachers during content delivery
5. E-learning is cost effective in the sense that there is no need for the students or learners to travel. It is also cost effective in the sense that it offers opportunities for learning for maximum number of learners with no need for many buildings.

6. E-learning always takes into consideration the individual learners differences. Some learners, for instance prefer to concentrate on certain parts of the course, while others are prepared to review the entire course.
7. E-learning helps compensate for scarcities of academic staff, including instructors or teachers as well as facilitators, lab technicians etc.
8. The use of e-Learning allows self-pacing. For instance the asynchronous way permits each student to study at his or her own pace and speed whether slow or quick. It therefore increases satisfaction and decreases stress (Codone, 2001; Amer, 2007; Urdan and Weggen, 2000; Algahtani, 2011; Marc, 2002; Klein and Ware, 2003)

### **Disadvantages of E-learning**

1. E-learning if used in education makes the learners/ student undergo contemplation, remoteness, as well as lack of interaction or relation. It therefore requires a very strong inspiration as well as skills with to the management of time in order to reduce such effects.
2. The e-learning method may be less effective than that of the traditional method of learning with respect to clarifications, way of explanations, as well as interpretations,. The learning process is much easier with the use of the face to face encounter with the instructors or teachers.
3. When we consider about improvement in communication skills of learners, e-learning as a method might have a negative effect. The learner may have an excellent knowledge in academics, they may not possess the needed skills to deliver their acquired knowledge to others.
4. Since tests for assessments in e-learning are possibly done with the use of proxy, it will be difficult, if not impossible to control or regulate bad activities like cheating.
5. E-learning may also probably be misled to piracy and plagiarism, predisposed by inadequate selection skills, as well as the ease of copy and paste.
6. E-learning may also deteriorate institutions' role socialization role and also the role of instructors as the directors of the process of education.
7. It is not possible for all fields or discipline to employ the e-learning technique in education. For Instance the purely scientific fields that include practical cannot be properly studied through e-learning.

8. E-learning may also lead to congestion or heavy use of some websites. This may bring about unanticipated costs both in time and money disadvantages (Collins et al. 1997; Klein and Ware, 2003; Hameed et al, 2008; Almosa, 2002; Akkoyuklu & Soylu, 2006; Lewis, 2000; Scott et al. 1999; Marc, 2002)

## REFERENCES:

1. Yang, N. & Arjomand, L. H. (1999). "Opportunities and Challenges in Computer- Mediated Business Education: An Exploratory Investigation of Online Programs," *Academy of Educational Leadership Journal*, 3 (2), 17-29.
2. Abbad, M. M., Morris, D., & de Nahlik, C. (2009). Looking under the Bonnet: Factors Affecting Student Adoption of E-Learning Systems in Jordan. *The International Review of Research in Open and Distance Learning*.
3. Oblinger, D. G., & Hawkins, B. L. (2005). The myth about E-learning. *Educause review. International Journal of Education and Research Vol. 2 No. 12 December 2014*
4. OECD (2005). E-learning in tertiary education [Online]. Available at <http://www.cumex.org>. (Accessed 27 /02/ 2014).
5. Richard, H., & Haya, A. (2009). Examining student decision to adopt web 2.0 technologies: theory and empirical tests. *Journal of computing in higher education*, 21(3), 183-198.
6. Rosenberg J.M. (2001). *E-learning: Strategies for Delivering Knowledge in the Digital Age*. McGraw-Hill: New York
7. Alkhateeb F., AlMaghayreh E. Aljawarneh S., Muhsin Z., Nsour A. *E-learning Tools & Technologies in Education: A Perspective*.
8. Love, N. & Fry, N. (2006). "Accounting Students' Perceptions of a Virtual Learning Environment:
9. Springboard or Safety Net?," *Accounting Education: An International Journal*, 15 (2), 151-166.
10. Andersson, A., (2008). *Seven Major Challenges for e-learning in Developing Countries: Case Study*
11. Dublin, L. (2003). If you only look under the street lamps.....Or nine e-Learning Myths.The e- Learning developers journal.<http://www.eLearningguild.com>.
12. Fry, K. (2001). E-learning markets and providers: some issues and prospects. *Education Training*,233-239.
13. Keller, C. & Cernerud, L. (2002).Students' perception of e-learning in university education. *Learning, Media and Technology*, 27(1), 55-67.
14. ISSN: 2201-6333 (Print) ISSN: 2201-6740 (Online) [www.ijern.com](http://www.ijern.com)
15. Eke, H. N. (2009). *The Perspective of E-Learning and Libraries: challenges and opportunities*. Unpublished article, completion.
16. Holmes, B. & Gardner, J. (2006). *E-Learning: Concepts and Practice*, London: SAGE Publications.