

The E-Learning - Is it an Effective Tool in Sharing Knowledge in Higher Education? - A Review

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Abstract: *In the recent past the technological advancement has resulted the change of user behavior and usage patterns in different areas of learning pattern and consequently it has resulted a breakthrough in Pedagogy. However in the recent years, researchers have been showing tremendous interest in learner styles, which is a key factor that influencing the learning process in general. During the last few decades rapid advances in technology have enhanced the learning behaviour and this new trend has changed the mindset of both the teacher and taught to its application in formal education and the learning process too. The induction of different forms of E-Learning viz .Computer Aided Learning, Blended Learning, Massive Online Open Courses (MOOCs) etc. have become a reality in most the Universities in India and Abroad. In this backdrop a study has been done to scrutinize the effectiveness of E-Learning in the learning process to promote the knowledge. This study investigates that effectiveness of using E-Learning in teaching in territorial Educational Institutions. In the Institutions of Higher Education, the issue of sharing latest information and adoption of modern communication skills for teaching and learning has attained greater importance. This study views a scholarly background of E-Learning and also reviewed some contributions made by various researchers on the concept of E-Learning, particularly its usage in teaching and learning processes in higher Education. It unveils some views that people and institutions have shared globally on the adoption and integration of E-Learning technologies in education through surveys and other observations. This study mainly trusts on the meaning and definitions of E-Learning as given by various researchers and the role that E-Learning plays in higher educational institutions in relation to teaching and learning processes.*

Keywords: E-Learning, Effectiveness, Benefits of E-Learning in Higher Education

1. E-Learning- The Definition

E-Learning is a form of education that is increasingly being used in higher education in the developed world. However, the take-up and use of E-Learning in developing countries is at a preliminary stage. In the recent years, massive changes in policy, governance, structure and status of higher education have been taken place all over the world. Environmental changes, such as privatization, diversification, decentralization, internationalization and increased competition in higher education are common to most countries. 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 and also regulate courses in an organization (Fry, 2001). There has been extensive debate about a common definition of the term E-Learning. The European Commission (2001) describes, E-Learning as the use of new multimedia technologies and the Internet to increase learning quality by easing access to facilities and services as well as distant exchanges and collaboration. Existing definitions according to Dublin (2003) tend to reveal the specialization and interest of the researchers.

E-Learning as a concept covers a range of applications, learning methods and processes (Rossi, 2009). It is therefore difficult to find a commonly accepted definition for the term E-Learning, and according to Oblinger, Dublin (2003) and Hawkins (2008) 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. In their literature review on definitions

for E-Learning, Liu and Wang (2009) found that the features of E-Learning process are chiefly centered on the internet; global sharing and learning resources; information broadcasts and knowledge flow by way of network courses, and lastly flexibility of learning as computer-generated environment for learning is created to overcome issues of distance and time.

Algahtani (2011) in his evaluation of the effectiveness of the E-Learning experience in Saudi Arabia categorized the definitions of E-Learning from three different perspectives: the distance learning perspective (Perraton, 2002; Alarifi, 2003; Holmes and Gardner, 2006), the technological perspective (Wentling et al. 2000; Nichols, 2003) and also from the perspective of E-Learning as pedagogy (Khan, 2005; Schank, 2000). Therefore it can be concluded from the above that it is difficult to identify a common definition for E-Learning. Some of the authors refer to E-Learning as providing complete on-line courses only whereas others comprise web-supplemented and web-dependent services for the provision of educational and support processes.

2. Types of E-Learning

According to Algahtani (2011), there have been some classifications based on the extent of their engagement in education. Some classifications are also based on the timing of interaction. Algahtani (2011) divided E-Learning into two basic types, consisting of computer-based and the internet based E-Learning.

• The Computer-based E-Learning

The computer-based E-Learning comprises the use of a full range of hardware and software generally that are available for the use of Information and Communication Technology and also each component can be used in either of two ways:

computer managed instruction and computer-assisted-learning. In computer assisted- learning, to him, computers are used instead of the traditional methods by providing interactive software as a support tool within the class or as a tool for self-learning outside the class. In the computer-managed instruction, however, computers are employed for the purpose of storing and retrieving information to aid in the management of education.

• The Internet-based E-Learning

According to Almosa (2002) the internet-based E-Learning is a further improvement of the computer-based learning, and it makes the content available on the internet, with the readiness of links to related knowledge sources, for examples e-mail services and references which could be used by learners at any time and place as well as the availability or absence of teachers or instructors (Almosa, 2002). Zeitoun (2008) classified this by the extent of such features use in education, mixed or blended more, assistant mode, and completely online mode. The assistant mode supplements the traditional method as needed. Mixed or blended mode offers a short-term degree for a partly traditional method. The completely online mode, which is the most complete improvement, involves the exclusive use of the network for learning (Zeitoun, 2008). Algahtani (2011) described the completely online mode as “synchronous” or “asynchronous” by the application of applying optional timing of interaction. 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 eLearning 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).

• Synchronous E-Learning

Synchronous E-Learning is real-time learning. In synchronous learning, the learners and the teacher are online and interact at the same time from different locations. They deliver and receive the learning resources via mobile, video conference, Internet or chat. In this type of learning the participants can share their ideas during the session and interact with each other and they get detailed queries and solutions. Synchronous eLearning is gaining popularity because of improved technology and Internet bandwidth capabilities. Learning from the sources of Virtual Classroom, Audio

and Video Conferencing, Chat, Webinars, Application Sharing and Messaging instantly.

• Asynchronous E-Learning

Asynchronous E-Learning is pause-and-resume kind of learning. In this type of E-Learning the learner and the teacher cannot be online at same time. Asynchronous E-Learning may use technologies such as email, blogs, discussion forums, e-Book’s CDs, DVDs, etc. Learners may learn at any time, download documents, and chat with teachers & also with co-learners. In fact, many learners prefer asynchronous instead of synchronous learning because learners can take online courses to learn at their preferable time by not effecting their daily commitments. Learning from the sources of Self-paced online courses, Discussion forums & groups messages boards.

3. The Role of E-Learning in Higher Education

The E-Learning in education, especially for higher educational institutions have several benefits. E-Learning is considered among the best methods of education. Some of the advantages are the E-Learning in education, obtained from review of literature includes the following:

- E-Learning enhances the efficacy of knowledge and qualifications via ease of access to a huge amount of information.
- E-Learning is flexible when issues of time and place are taken into consideration. Every student has the luxury 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.
- E-Learning 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.
- 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.
- 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.
- 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.
- E-Learning helps compensate for scarcities of academic staff, including instructors or teachers as well as facilitators, lab technicians etc.
- 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)

The above-mentioned advantages of E-Learning has been summed up by Holmes and Gardner (2006) by noting that the ability of E-Learning to assess the students or learners as they learn, and at the same time increasing their experiences in education, by way of interactivity suitable to community education, cultural diversity and globalization, and eradicating boundaries of place and time. To them the most vital characteristics as well as advantage of E-Learning in education is that it centers on the students or learners (Holmes and Gardner, 2006). According to Judahil et al (2007) Brown et al (2008) and offers teachers with several ways of interacting with learners and to give them instantaneous feedback. However, according to Judahil et al (2007), it is essential for those who embrace the advanced technology during the process of teaching and learning has a variety of skills in Information and Communication Technology (ICT).

4. Conclusion

The effectiveness of E-Learning involves the use of digital tools for teaching and learning. It makes use of technological tools to enable learners to read and learn anything at any time and anywhere. It involves the technical knowhow, training, sharing of knowledge and motivates the students to interact with each other and exchange their views in respect of various aspects. It eases communication and improves the relationships for sustain learning. Despite some challenges as discussed, the literature pertains to E-Learning has sought to explain yet the role of E-Learning that has been making a strong impact in teaching and learning process in higher education. The use of E-Learning in the higher education institutions has certainly enhanced the learner's access to information and has provided a rich environment for sharing the views and lead for collaborative interaction among the students which improves the academic standards. On the whole the literature which explains the advantages of E-Learning suggests that the need for its implementation in higher education need to be scrutinized to reap the harvest to enjoy its benefits to the maximum extent as it aimed. It is opined that E-Learning provides a good platform for sharing vast knowledge and information globally but the technical precisions are highly essential to reach the goal. Although E-Learning is at the verge of its beginning but its movement towards the future is far-off. At last as a member of faculty I strongly believe that the notion among certain sections of the people that the E-Learning replaces or can overcome the dearth of the faculty in the educational institutions can be a myth and it never be an alternative.

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