



ROLE OF E-LEARNING, THE ADVANTAGES AND DISADVANTAGES OF ITS ADOPTION IN HIGHER EDUCATION

Dr. Satish Kumar Kalhotra
Senior Associate Professor , Department of Education,
Rajiv Gandhi University, Itanagar.



ABSTRACT:

E-learning is an extended form of classroom teaching where learning, either online or offline is facilitated by the use of computer, telecommunication devices, networks, and storage capacity. This present study investigates the effectiveness of using e-learning in teaching in higher education. In institutions of higher education, the issue of utilizing modern information and communication technologies for teaching and learning is too essential. This study reviews literature and gives a scholarly background to the study by reviewing some contributions made by various researchers and institutions on the concept of e-learning, particularly its usage in teaching and learning in higher educational institutions. It found that people and institutions had shared globally on the adoption and integration of e-learning technologies in education through surveys and other observations. It looks at 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.

KEYWORDS: *Origin of E-Learning; E-learning, Information and Communication Technologies, Higher Education.*

ORIGIN

The seed of E-learning was sown in the 19th century. The word E-Learning was first used at a C B T system seminar. Many other words were also used such as online learning, Virtual learning. Before Internet was launched, distance course were had an opportunity for the students those who are willing to get higher education. With the introduction of the computer and internet in the late 20th century, e-learning tools and delivery methods expanded. Business man also took advantages to train their employees. E-learning stems from the ongoing incorporation of technology—specifically computer systems and mobile devices—into learning and education environments. While the first e-learning systems were more focused on the delivery of content and information from teachers to students, as technology evolved, e-learning began to incorporate more interactive, multidirectional tools. Correspondence and collaboration became more efficient, and systems started to feel more natural and easier to navigate. E - learning methods continue to expand. Learners now have access to an abundance of information and e-learning opportunities. While schools were the first to adopt e-learning technology en masse, businesses have also recognized its advantages and rapidly adopted e-learning in order to train their employees. Workers of all experience levels are now able to capitalize on online training and resources to increase their professional knowledge and skills, resulting in more efficient business practices and higher employee engagement.

1.1 THE CONCEPT AND DEFINITION OF E-LEARNING

E-learning is an extended form of classroom teaching where learning, either online or offline is facilitated by the use of computer, telecommunication devices, networks, and storage capacity. On top of its easy delivery of information and interactive nature, the main benefit behind using the ELearning instead of the traditional way is that Learners develop communication as well as personal skills such as autonomy, analytical perception, abstraction and others (**Dargham, Saeed and Mcheik, 2013**). An E-Learning system used properly is an important support structure for the delivery of modern, productive pedagogy (**VITTA and Keane, 2005**). E-getting the hang of as indicated by Markus(2008) can be characterized as a learning procedure made by collaboration with carefully conveyed substance, organize based administrations and mentoring bolster E - learning is any mechanically intervened taking in utilizing PCs whether from a separation or in up close and personal study hall setting (PC helped learning), it is a move from conventional. E-learning has become popular because of its potential for providing more flexible access to content and instruction at any time, from any place (**Means et al, 2009**). 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. **Oblinger and Hawkins (2005)** noted that e-Learning has transformed from a fully-online course to using technology to deliver part or all of a course independent of permanent time and place. Also 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. The following are also different definitions of e-learning. 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**).

1.2 TYPES OF E-LEARNING

Synchronous

Synchronous eLearning is real-time learning. In synchronous learning, the students and the instructor are on the web and associate in the meantime from various areas. They convey and get the learning assets by means of versatile, video meeting, Internet or talk. In this kind of learning the members can share their thoughts during the session and communicate with one another and they get nitty gritty inquiries and arrangements. Synchronous eLearning is picking up prominence on account of improved innovation and Internet data transfer capacity abilities. Gaining from the sources, for example, (a) Virtual Classroom (b) Audio and Video Conferencing (c) Chat (c) Webinars (d) Application Sharing (e) Messaging right away

2. ASYNCHRONOUS

Offbeat eLearning is interruption and-resume sort of learning. In this kind of eLearning the student and the educator can't be online at same time. Offbeat E - Learning may utilize advances, for example, email, online journals, discourse gatherings, e - Book's CDs, DVDs, and so forth. Students may learn whenever, download reports, and talk with instructors and additionally with co-students. Truth be told, numerous students lean toward nonconcurrent rather than synchronous learning since students can take online courses to learn at their best time by not affecting their every day responsibilities. Learning from the sources such as (a) Self-paced online courses (b) Discussion forums & groups (c) Messages boards

THE USE OF E-LEARNING IN EDUCATION

The development of multimedia and information technologies, as well as the use internet as a new technique of teaching, has made radical changes in the traditional process of teaching (Wang et al. 2007). Development in information technology, According to Yang and Arjomand (1999), 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 race to advance online course capability in a speedily developing 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 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).

1.4.1 Advantages of E-learning

The adoption of E-learning in education, especially for higher educational institutions has several benefits, and given its several advantages and benefits, e-learning is considered among the best methods of education. Some of the advantages that the adoption of elearning in education, obtained from review of literature includes the following:

1. E - learning shows the path to create and communicate new policies, training, ideas, and concepts. Be it for entertainment or formal education,.
2. E-learning has strength to enforce us for learning more accessible for users around the world. In education, it brings learning opportunities to previously disadvantaged groups. In business, it helps unite and train an increasingly global workforce. When learning materials are online, users are able to access content from anywhere and at any time.
3. Learners may have the option to select learning materials that meets their level of knowledge and interest.
4. Self-paced learning modules allow learners to work at their own pace.
5. Development of computer and Internet skills that are transferable to other facets of learner's lives
6. Successfully completing online or computer-based courses builds self-knowledge and self-confidence and encourages students to take responsibility for their learning
7. Flexibility to join discussions in the bulletin board threaded discussion areas at any hour, or visit with classmates and instructors remotely in chat rooms.
8. Online learning has to be the greatest revolution in contemporary education. It made a huge change in the system and opened great opportunities for everyone who wants to learn something.
9. It 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. receipt of according to learning information.

10. E-learning enhances the efficacy of knowledge and qualifications via ease of access to a huge amount of information.
11. 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. 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.
12. 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.
13. 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.
14. E-learning helps compensate for scarcities of academic staff, including instructors or teachers as well as facilitators, lab technicians etc.
15. 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.
16. Elearning diminishes time far from the working environment, wipes out the requirement for movement, and evacuates the requirement for homeroom based preparing.
17. Using elearning, you can give representatives and understudies the opportunity to learn at their very own comfort, and at a pace that is directly for them. Staff can be prepared in remote areas and in a reliable style as anybody getting nearby preparing.

1.4.2 Disadvantages of E-learning

1. Students may feel isolated or miss social interaction thus the need to understanding different learning styles and individual learner needs.
2. Slow or unreliable Internet connections can be frustrating.
3. E-learning, in spite of the advantages that it has when adopted in education, also has some disadvantages.
4. E-learning as a method of education makes the learners 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.
5. With respect to clarifications, offer of explanations, as well as interpretations, the e-learning method might be less effective that the traditional method of learning. The learning process is much easier with the use of the face to face encounter with the instructors or teachers.
6. When it comes to improvement in communication skills of learners, e-learning as a method might have a negative effect. The learners. Though might have an excellent knowledge in academics, they may not possess the needed skills to deliver their acquired knowledge to others.
7. 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.
8. 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.
9. E-learning may also deteriorate institutions' role socialization role and also the role of instructors as the directors of the process of education.
10. Also not all fields or discipline can employ the e-learning technique in education. For instance the purely scientific fields that include practical cannot be properly studies through e-learning. Researchers have argued that e-learning is more appropriate in social science and humanities than the fields such as medical science and pharmacy, where there is the need to develop practical skills.
11. 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

Information and Communication Technology

World had made impressive strides in the application of information and communication technology in the recent years and that is reflected in the vibrant fast growing economy. Today all our activities are knowledge based. There is a shift from industrial era to information era. Information and communication technology is a diverse set of technological tools and resources used to communicate and to create, disseminate, store and manage information. ICT has become part of everyday life and all sectors from banking to tourism now depend heavily on ICT for carrying out their transaction. The National educational plan structure, 2005 (NCF 2005) has featured the significance of ICT in school training also in advanced education. Many teachers think the computer is used only to make the content look attractive. ICT provides meaningful, observing media that makes teaching learning more productive. ICT helps in development of intellectual skills. The intellectual skills consists critical thinking and problems solving skill. ICT help to develop creativity of the teacher as students those who are studying in higher education.

CONCLUSIONS

E - Learning involves the use of digital tools for teaching and learning. It makes use of technological tools to enable learners study anytime and anywhere. It involves the training, delivery of knowledge and motivates students to interact with each other, as well as exchange and respect different point of views. It eases communication and improves the relationships that sustain learning. Despite some challenges discussed, the literature has sought to explain the role of elearning in particular and how e-learning has made a strong impact in teaching and learning. Its adoption in some institutions has increased faculty and learner's access to information and has provided a rich environment for collaboration among students which have improved academic standards. The overall literature which explains the advantages and disadvantages of e - learning suggests the need for its implementation in higher education for faculty, administrators and students to enjoy the full benefits that come with its adoption and implementation.

REFERENCES

- [1]. 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*.
- [2]. Bourner, T. & Flowers, S. (1997). Teaching and learning methods in higher education: A glimpse of the future. *Reflections on Higher Education*, 9, 77-102.
- [3]. Dargham, J., Saeed, D., & Mcheik, H. (2013), "E-Learning at school level: Challenges and Benefits", *The 13th International Arab Conference on Information Technology*, 340-345
- [4] Oblinger, D. G., & Hawkins, B. L. (2005). The myth about E-learning. *Educause review*.
- [5] Organization for Economic Co-operation and Development. *Education today: The OECD Perspective*. OECD, 2009. Wenglinsky, Harold. *The Relationship between Educational Technology and Student Achievement in Mathematics*. ETS Policy Information.
- [6] Kayte O'Neill, Gurmak Singh, and John O'Donoghue (February 2004): *Implementing eLearning Programmes for Higher Education: A Review of the Literature: Journal of Information Technology Education Volume 3*, 2004. University of Wolverhampton, Wolverhampton, UK. *The Role of Technology and Its Impact on Education, Summary Report*. November 2008
- [7]. LaRose, R., Gregg, J., & Eastin, M. (1998). Audio graphic tele-courses for the Web: An experiment. *Journal of Computer Mediated Communications*, 4(2).
- [8]. 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.
- [9]. Singh, G. & Priola, V. (2001). Long distance learning and social networks: An investigation into the social learning environment on online students. *Proceedings of the Sixth Annual ELSIN Conference*. 158-164.

-
- [10]. Singh, G. & Priola, V. (2001). Long distance learning and social networks: An investigation into the social learning environment on online students. Proceedings of the Sixth Annual ELSIN Conference. 158-164.
- [11]. VITTA & Keane, T. (2005), "Is there a role for e-learning in secondary schools"? Infonet 15(1).