

# Key Role of E-Learning in Higher Education and Communication Technology Alongwith Its Advantages and Disadvantages

Dr. Padma Raut & Ms. Jaishree Dhokane

*Principle*

*SL Mankar college of Education Amgaon District Gondia. Pin code 441902*

*SL Mankar college of Education Amgaon District Gondia. Pin code 441902*

---

## **Abstract**

*E-learning is a new method of teaching and learning in the field of education. The demand for simple, engaging education has increased as the world's population has gotten older. Instead of a boring learning environment, students choose a more engaging and dynamic environment. With the use of modern technology like satellite, the internet, and mobile phones, we may use e-learning to deliver high-quality education to isolated and rural areas. This cutting-edge educational technology plays a significant role in the modern world by enhancing and supporting learning. Instructors, students, and mentors who utilise this technology to update their work are all involved in e-learning. E-learning has been acknowledged by educational institutions as having the potential to transform people, information, skills, and performance. Modern information and communication technologies are used in higher education institutions for teaching and learning.*

*E-learning is becoming more and more significant in higher education institutions. The current study focuses on the definitions of e-learning provided by various scholars, the function that e-learning plays in higher educational institutions with regard to teaching and learning processes, as well as the benefits and drawbacks of adopting and implementing it.*

**Key Words:** *E-learning, Information and communication technologies, Learning environment etc.*

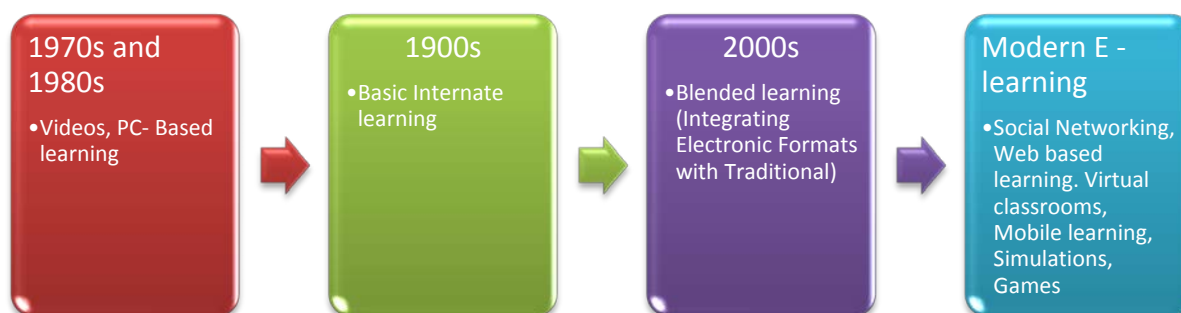
---

## **I. INTRODUCTION**

In the contemporary world, education has expanded in scope, and individuals seek learning that is enjoyable and engaging. Instead of a boring learning environment, students choose a more engaging and dynamic environment. The world's primary method of instruction will soon be the internet. In an effort to raise the standard of this type of learning, a lot of work is put into advancing communication techniques via email between students and instructors. Also, the advancement of modern technologies and the Internet will be crucial for the continued development of fundamental education in the future. With the use of contemporary technology like satellite, the internet, and mobile phones, we may use e-learning to deliver high-quality education to isolated and rural areas. The establishment of linkage between all educational institutions with an adequate infrastructure to deliver high-quality education that is interesting to a broad number of populations can be made possible via satellites.

E-learning has developed into a crucial resource for academic growth and study during the past few years. E-learning has made it possible for teaching and learning to take place anywhere at any time. One of the most important ways for teachers and students to share and access resources for learning and research is now through the internet. E-learning is the process of acquiring knowledge and skills via the use of electronic tools, such as web-based learning programmes on computers and local and wide area networks. Technology-based e-learning refers to the process of creating learning and teaching materials for organisations using the internet and other significant technologies. Internet and information technology have made it necessary to change how university students learn by adopting more cutting-edge, efficient, and replacement methods like e-learning systems. Many situations, including distance learning, online learning, and networked learning, define e-learning (Wilson 2001). Universities now have a strong incentive to provide online courses thanks to the Internet's rapid growth and other related technology breakthroughs, tight resources, and social demands for better access to higher education. Universities will fall behind in the fight for globalisation if they do not adopt the widely available E-learning technology. If universities want to fully realise the promise of e-learning as a way of providing higher education, Ribiero (2002) contends that they must be fully aware of the vital

## DEVELOPMENT OF E- LEARNING



## THE CONCEPT OF E-LEARNING

The idea of e-learning can be expressed in a variety of ways, which means there are numerous definitions, terminology, and explanations of the idea. They are all connected by their reliance on IT. E-learning is described as "... teaching given on a digital device such as a computer or mobile device that is intended to enhance learning" by Clark and Mayer (2011). According to Anderson (2008), there are a number of terms used to describe learning that is done online, including remote learning, virtual learning, e-learning, Internet learning, and others. Regardless of the terminology employed, they share the same characteristics:

## II. LITERATURE REVIEW

For both teachers and students to share and gain information, the Internet has emerged as one of the most important sources of research and learning tools (Richard and Haya 2009). Technology-based e-learning includes using the internet and other significant technologies to create learning resources, instruct students, and also manage courses inside an enterprise (Fry,2001). E-learning, according to the European Commission (2001), is the use of new multimedia technologies and the Internet to improve learning quality by facilitating remote exchanges and cooperation. A consensus meaning of the word "e-learning" has been the subject of heated discussion. Several definitions of e-learning include elements other than the provision of entirely online courses. Oblinger and Hawkins (2005), for instance, pointed out that e-Learning has evolved from being a fully online course to employing technology to provide part or all of a course independent of a set time and place. From the foregoing, it may be inferred that there is no single definition of electronic learning. Some authors define e-learning as solely offering fully online courses, whereas others define it as including web-enhanced and web-dependent services for the delivery of educational and support procedures.

## E-LEARNING IN HIGHER EDUCATION

The traditional methods of teaching and learning have undergone significant changes as a result of the development of information technology and multimedia, as well as the usage of the internet as a new method of instruction. The growth of information technology has increased the options available for schooling today. E-learning is widely acknowledged by schools and other educational institutions as having the potential to change people, knowledge, skills, and performance.

- Many changes in higher education institutions have been sparked by the introduction and growth of a variety of e-Learning tools, notably in terms of their educational delivery and support processes (Dublin, 2003). There are numerous ways to use e-Learning in the classroom, just as there are various forms of the practise.

- E-learning has improved traditional ways of administration and instruction in higher education quite successfully. They now have personalised web environments where they can join discussion forums with their class or group, and this new kind of access gives them much more flexibility in their study. Students on many courses at many universities now find that they have web access to the lecture notes and selected digital resources in support of their study. By reducing the typical hurdles to HE study, part-time students can more readily access the course, supporting the goals of greater participation. (p. 10)

- E-learning has improved traditional ways of administration and instruction in higher education quite successfully. They now have personalised web environments where they can join discussion forums with their

class or group, and this new kind of access gives them much more flexibility in their study. Students on many courses at many universities now find that they have web access to the lecture notes and selected digital resources in support of their study. By reducing the typical hurdles to HE study, part-time students can more readily access the course, supporting the goals of greater participation.

- Restructuring of educational activities is required when e-learning is implemented in the classroom. The roles of teachers and students shift while switching from a traditional learning environment to an online learning environment.

### **EDUCATIONAL USE OF E-LEARNING TOOLS:**

Today, e-learning is used in many different ways and with many different technologies, including emails, blogs, wikis, e-portfolios, animation, video links, specialised software, etc. With the help of these tools, we may establish a learning environment that spans time and space and is quaintly referred to as a virtual classroom. Innovative teachers are increasingly using blogs or other personal platforms to post instructional materials, graphics, exercises, assignments, etc. and make them accessible to a select set of people, such as students or other learners.



- **Web log:** Also known as a weblog or web log, a web log is a user-generated website where posts are published in the form of journals and are shown in reverse chronological order. The words "web log" and "blog" are combined to form the phrase "blog". Some blogs serve as more private online diaries, while others offer commentary or news on a certain topic. The online journal, where people would maintain a running chronicle of their personal life, gave rise to the current blog. There are blogs on websites like Word Press, Movable Type, Blogger, or Live Journal, or you can use a conventional web server like Dream Host.
- **Social bookmarking:** A web-based service for sharing Internet bookmarks, social bookmarking. By the use of folksonomies techniques, social bookmarking sites are a well-liked method for storing, categorising, sharing, and searching links on the Internet. Users keep lists of interesting Internet resources in social bookmarking systems.
- **Wiki:** A wiki is a website that doesn't require users to register in order to add, remove, edit, or update content. Moreover, it enables connection between any number of pages. The idea behind Wikipedia, which has gained popularity in recent years, gave rise to wikis. It enables readers to access any desired subject, like the history of a nation, an explanation of a scientific concept, the most recent advancements in psychology or education, etc. On Wikipedia, one can find information about e-learning in general. This idea served as the foundation for the creation of the wiki tool. It enables students to read, add to, or change anything that has previously been posted by anyone, such as a teacher or tutor. In this approach, several people with an interest in a given sector or issue interact and work together. The content could be text, tabular data, images, pictures, etc.
- **RSS (Really Simple Syndication):** RSS is a web feed format for constantly updated digital material, such as blogs, news feeds, podcasts, and videocasts. Software applications known as "feed readers" or "feed aggregators" are used by RSS content users. A person can subscribe to a feed by pasting a link to it into the reader application. After that, the reader can check the user's subscribed feeds to see if any have new content since it last checked, and if so, retrieve it and show it to the user.

- **Podcasting:** The term podcasting is a combination of the words "podcast" and "iPod," Apple's well-known digital music player. In essence, podcasts are digital audio programmes that listeners may subscribe to and download using RSS (Really Simple Syndication). A variety of digital audio players, laptops, mobile phones, desktop computers, and other devices can all access it.
- **Instant Messaging:** With an instant messaging programme, you can speak with someone else across a network in a fair amount of secrecy. For instant chatting, there are numerous options, including Gtalk, Skype, Yahoo! Messenger, MSN Messenger, and AOL. By inputting their email address or messenger ID, friends can be added to a contact list or buddy list.
- **Text chat:** Internet Relay Chat (IRC) and other online chat technologies let users join chat rooms and engage in open, group conversations with a large number of individuals at once. Users have the option of creating new chat rooms or joining ones that already exist. You are often free to invite other online users to join you in any chat room, whether it is one you've built yourself or one that someone else has created. Both one-to-one and many-to-many interactions are facilitated by this.
- **Online forums:** Initially fashioned after the actual paradigm of electronic bulletin boards used in the world before to the advent of the Internet, internet forums enable users to publish a "subject" for others to review. In a sequential order, other users can see the topic and add their own remarks. The majority of forums are open to everyone, allowing signups at any time.

### **E-LEARNING IN EDUCATION AS TOOL**

The three e-learning model classification categories are as follows. The first is known as synchronous learning, the second as asynchronous learning, and the third as blended learning.



#### 1. Synchronous training (at the same time):

Because communication occurs in real time, the synchronous learning style is more like traditional education. During class sessions, synchronous communication enables students to listen in on lectures and speak with instructors. Compared to using only asynchronous communication, discussions become more dynamic when they are conducted in real-time using the synchronous communication style. When it comes to broadcasting various session kinds to big populations, the synchronous communication style is appropriate. In essence, synchronous training entails real-time communication between participants and E-mentor via the crucial platform. In other words, synchronous training gives participants the ability to communicate both with their mentor and with one another in an online classroom using tools like video conferences or chat rooms.

#### 2. Asynchronous (not occurring simultaneously)

The term "asynchronous mode" describes online learning scenarios in which students communicate with one another with a time lag using resources like discussion boards, email, and bulletin boards. Asynchronous communication, according to Hrastinski's argument from 2007, "better enhances cognitive engagement due to enhanced contemplation and the ability to share complicated information." The numeric growth in student numbers is a pretty typical and repeated depiction of the advantages of e-learning. The increase is attributed to the fact that education is no longer confined to a specific location, allowing students to learn virtually anywhere. According to Hrastinski (2008), students find the asynchronous teaching style appealing since it makes it simple for them to study and take care of other responsibilities; they contextualise the learning (Anderson, 2008). Singh et al. (2005) cited Holley (2002), who contends that asynchronous learning has given everyone in the world access to lifelong learning. The asynchronous mode allows participants to communicate with teachers/mentors and one another online at their own speed without having live interactions with the instructor. In this manner, students can learn whenever it is most convenient for them. Yet, mentors and their fellow students are unable to provide timely feedback.

3. Blended learning (the blending of synchronous and asynchronous learning): This type of training includes elements of online and in-person instruction, so the course materials and explanations are split between

conventional learning methods and e-learning methods in the classroom setting. Because blended learning enables tailored instruction, students can work at their own pace and ensure they have a firm grasp of the material before moving on. E-learning allows professors to provide more lectures, display more information, and improve student learning in the classroom. Also, using an e-learning system can assist lecturers save time and focus more on the course material.

### **BENEFITS OF E-LEARNING**

- E-learning can assist in removing obstacles to achievement by offering fresh, innovative strategies for inspiring and motivating students of all abilities to reach their academic potential. By providing tailored instruction, it can support learning, especially for those who require assistance with literacy, numeracy, and ICT.
- Online communities of practise are developed through e-learning. The sharing of ideas and best practises can happen when learners, teachers, expert communities, practitioners, and interest groups come together online.
- All learners, including those who are underprivileged, disabled, extraordinarily gifted, have specific curricular or learning needs, or who are remote or away from their typical location of study, can benefit from a tailored learning experience through e-learning.
- By giving people the chance to start studying and to select the courses and support that best suit their requirements, e-learning can promote more participation and more equitable access to higher education.
- E-learning offers individualised learning support through services for information, counsel, and direction. It can assist students in finding the course they require, facilitating a smooth transfer to the following phase of their education, including online application or enrollment and a portable electronic portfolio of their learning.
- Virtual learning environments offered by e-learning allow students to engage in collaborative, active learning with others through role-playing, simulations, remote control of equipment found in the real world, online master classes, and partnerships with other educational institutions.

From a financial standpoint, implementing online courses might result in significant financial savings because neither teachers nor students would need to travel far for their education. E-learning programmes enable students to complete their education without being required to be present in a particular physical location.

### **CONTRAINS OF ELECTRONIC LEARNING**

The following are some of the drawbacks of online learning that studies have identified:

The e-learning approach may be less effective than the traditional learning approach in terms of clarifications, explanations, and interpretations. Face-to-face interactions with the instructors or tutors make the learning process considerably simpler.

E-learning as a method may have a negative impact on learners' ability to improve their communication skills. the students. Although having exceptional academic talents, individuals could not have the necessary communication abilities to impart their knowledge to others.

It will be difficult, if not impossible, to control or regulate negative behaviours like cheating as exams for assessments in e-learning may be completed through a proxy.

E-learning may also be susceptible to plagiarism and piracy due to poor selection skills and the simplicity of copying and pasting.

E-learning may potentially worsen institutions' socialisation roles and teachers' leadership roles as managers of the educational process.

### **III. CONCLUSION**

In higher education, e-learning and ICT are crucial for both teachers and students. One argument is that using such technology enables students who primarily have the option of studying online to have more flexible options, independent of the student's location. According to several studies, increasing flexibility is another significant change that ICT and e-learning provide, enabling colleges all over the world to accept a larger number of students—a development that is advantageous to the institutions from an economic standpoint. Students no longer have to physically attend class or feel awkward in front of their peers when they respond to questions from the teacher thanks to e-learning systems. As a result, students can use multi-electronic devices like computers, laptops, or smart phones to study from home, at work, or even while walking down the street. Students can conveniently read or download the materials or reference books online whenever and wherever they choose by following the steps below. It is clear that teachers are no longer working as active knowledge transmitters but rather as tutors who lead, encourage, and expose students to the technology resources they need to learn in an online-based teaching environment. As the teacher is no longer the primary component of learning, thanks to the principles underlying ICT and e-learning, the instructor no longer holds the monopoly on knowledge.

**REFERENCES:**

- [1]. Bloom, B. S., Engelhart, M. D., Furst, E. D., Hill, W. H., & Krathwohl, D. R. (Eds.) (1956). Taxonomy of educational objectives: The Classification of Educational Goals. Handbook 1: Cognitive Domain. Ann Arbor, Michigan: Longmans.
- [2]. Garrison, D. R., Anderson, T. (2003) - E-Learning in the 21st century: A framework for research and practice. London: Routledge/Falmer
- [3]. Garrison, D. R., Anderson, T., Archer, W. (2001) – “Critical thinking, cognitive presence and computer conferencing in distance education”, American Journal of Distance Education, 15(1), pp. 7-23
- [4]. 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.
- [5]. Aggarwal, D.: Role of e-Learning in A Developing Country Like India. Bharati Vidyapeeth's Institute of Computer Applications and Management, New Delhi, India, 2009.
- [6]. Cohen, E. B., & Nycz, M. (2006). Learning objects and e-learning: An Informing science perspective. Interdisciplinary Journal of Knowledge and Learning Objects, (2).
- [7]. Abbit, J. T., & Klett, M. D. (2007). Identifying influences on attitudes and self –efficacy beliefs towards technology integration among pre-service educators: Electronic Journal for the integration of technology in Education,
- [8]. Eke, H. N. (2009). The Perspective of E-Learning and Libraries: challenges and opportunities. Unpublished article, completion.
- [9]. Hawkes, M. (2001) – “Variables of interest in exploring the reflective outcomes of network-based communication”, Journal of Research on Computing in Education, 33(3), pp. 299-315

Shri LAXMANRAO MANKAR COLLEGE OF Education Amgaon Acknowledge to Shri Keshavrao Mankar Secretary BSS and Dr DK Sanghi Principal Astdt. Professor