

Role of E-learning in Pandemic Situation in Higher Education

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ABSTRACT :

Information and Communication Technology explored to a greater extent to improve the quality of higher education in 21st century. ICT Tools and technology have significant impact to improve the quality of higher education. It helps to share and collaborate academic information among students and teachers in different forms like text, audio, video , image and pdf in higher education. It is the use of the Internet and related technologies for the development, distribution and enhancement of learning resources . During the lockdown period , where face to face interaction and teaching-learning process is not possible, teachers are using different ICT Tools and technology for teaching purpose . The students experience that ICT technology has played an important role in their learning purpose . It helps to improve their learning and skill outcomes. E-learning is emerging as an important strategy to provide widespread and easy access to quality higher education. E-learning applications and processes include Web-based learning, computer based learning, virtual classroom and digital collaboration.

Keywords : *social media, higher education, ICT tools, ICT technology, e-learning, web based learning.*

1.Introduction :

Education is the driving force of economic and social development in any country. Higher education is a powerful tool to build knowledge-based society of the 21st century. It is important to find ways to make education of good quality, accessible and affordable to all using the latest technology available. Last two decades witnessed a revolution caused by the rapid development of Information and Communication Technology (ICT). ICT has fundamentally changed the working of higher education, since ICT acts as a powerful change agent to change many of the educational practises accustomed by the universities and colleges. ICT helps to solve the problem of access, equity and quality in Indian higher education system. Since the world is moving rapidly towards digital media, the role of ICT in higher education has become increasingly important. Today's learning system using ICT is divided into two types like e-learning and blended learning. Web and Internet are important ICTs to spread education through e-learning. It include the components like e-portfolios, cyber infrastructures, digital libraries and online learning object repositories. E-learning is emerging as an important strategy to provide widespread and easy access to quality higher education. The paper addresses concept of e-learning, components of e-learning, forms of e-learning , characteristics of e-learning and technological fluency with e-learning.

2. Concept of E-learning :

E-learning is the acquisition and use of knowledge distributed and facilitated primarily by electronic means. It includes the use of web-based teaching materials and hypermedia, multimedia CD-ROMs, websites, discussion boards, collaborative software, e-mail, blogs, wikis, test chat and computer aided assessment. It also includes educational animation, simulations, games, learning management software, electronic voting systems and more, with possibly a combination of different methods. It is an approach to facilitate and enhance learning through computer and communication Technology. It is used to support distance learning through the use of Wide Area Networks. E-learning is also considered to be a form of flexible learning where learning is possible in no time. E-learning applications and processes include web-based learning, computer based learning, virtual classroom and digital collaboration. Content is delivered via internet, intranet/extranet, wireless telephonic, audio or video tape, satellite TV, and CD-ROM. It can be self-paced or instructor-led and includes media in the form of text, image, animation, streaming video and audio. It is the use of the internet and related technologies for the development, distribution and enhancement of learning resources. This form of learning depends on networks and computers, and a variety of channels like wireless, satellite, and technologies like cellular phones, personal digital assistants, as they are developed and adopted. E-learning may incorporate synchronous or asynchronous access and may be distributed geographically with varied limits of time.

3.Components of E-learning :

- i) Content delivery methods: E-learning allows content to be adjusted and supplied according to the level of progress of the individual learner.
- ii) Live broadcasting: E-learning can be a two-way system that allows participants to take-tests, ask questions, or respond to questionnaires.
- iii) Video-on Demand: This technology is available via Cable Television (CATV) systems where large number of learners can access wide content whenever they like.
- iv) Interactive Communications: It considers two approaches like distance education and community approach.

4. Forms of E-learning : There are three forms of e-learning like :

- i) Web-based learning : It is content focused and deliver driven and gives emphasis on individual learning. In web based learning, there is minimal interaction with tutor and no collaboration with other learners.
- ii) Supported online learning : It is learner focused and activity driven. It is a small group learning and creates significant interaction with tutor and considerable interaction with other learners.

iii) Informal e-learning : It is a group-focused and activity driven where participants act as learners and tutors and provides interaction among participants.

5.Characteristics of E-learning :

- i. Empowered by digital technology : E-learning is a pedagogy empowered by digital technology.
- ii. Computer enhanced learning : E-learning is a term which is used to refer computer enhanced learning.
- iii. Technology enhanced learning : E-learning includes all types of technology enhanced learning (TEL), where technology is used to support the learning process.
- iv. Online learning: Use of E-learning is generally confined to “on-line learning” carried out through the Internet or Web-based technology, with no face-to-face interaction.
- v. Confined to web-based and Internet-based learning : E-learning should be confined to the type of learning carried out, supported or facilitated through web enhanced instruction and the Internet based communications like e-mail, audio and video conferencing, mail list, live chats and telephony.

6. Technological Fluency with E-learning :

E-learning eliminates time barriers in education for learners and teachers and also eliminates geographical barriers as learners can log on from any place. E-learning and use of ICT provides enhanced group collaboration and enhances the international dimension of educational services. It allows just in time and just enough education for employees in organization and enhances international dimension of educational services. E-learning increases the rate of progression in courses which reduces the level of anxiety of students due to fear of falling behind others in class and also increases satisfaction of gifted learners regarding education system. It allows asynchronous interaction leading to thoughtful and creative interaction and provide speedy dissemination of education to target disadvantaged groups.

7.Conclusion :

Today due to pandemic situation, where face to face learning is not possible, Higher learning institutions are shifted to e-learning. The reason behind e-learning is the number of socio-economic and pedagogical factors such as easy access to information, rapid electronic communication, increased cooperation and collaboration, synchronous learning, cost effectiveness, simulation, virtual experiences and graphic presentations . E-learning provide the strength of constructive learning which emphasizes learning as a process of knowledge construction rather than memorization of facts . ICT tools used in e-learning offers the creation of interactive and collaborative learning opportunities. E-learning can take the form of courses as well as modules and smaller learning objects and may incorporate synchronous or asynchronous access and may be distributed geographically with varied limits of time . E-learning include the concept of web and the internet along with the components like e-portfolios, cyber infrastructure, digital libraries and online learning object repositories . These components create a digital identity of the student and connect all the stakeholders in the education.

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