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E-Learning's Application in Information Science in Academic Libraries

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ABSTRACT

An overview of LIS e-learning projects is presented in this publication. It defines e-learning, outlines its features, and discusses its resources. The study also highlights the benefits of both e-learning and traditional schooling, comparing the two approaches. When learning is done via e-learning instead of traditional methods, a lot of time is saved. Consider classroom instruction as an example. One week, a lecture might last for an hour, and attendees would have to wait another week for the next one. The process of gaining knowledge, skills, and information using digital means—typically transmitted over the internet or electronic devices—is referred to as e-learning, short for electronic learning. Aggregating e-content is possible in e-learning environments. Services provided by the library must be available from within this setting and allow for things like the building of "virtual shelves." All e-learning environments must have context-sensitive full-text access, bibliographic management tools, and library resource discovery. The possible benefits of online learning include greater educational access, better learning opportunities, enhanced student performance and abilities, and a wider range of educational possibilities.

Introduction:

Elliott Masie first used the term "eLearning" at his TechLearn Conference at Disneyworld in November 1999. The word "online learning," which essentially refers to the same idea, has previously been used by others in the sector. The process of development never stops. Every new advancement in a sector that has higher social significance opens up new possibilities. This also applies to the education sector. The ability to provide and receive knowledge is one of the traits that set humans apart from other living things.[1] Additionally, humankind is constantly developing new teaching and learning resources and methods to provide better education. Every social transformation in human history has affected education. Information and communication technology (ICT) advancements have changed education from a psychological, social, and technological standpoint. ICT's current benefits have a unique influence on education of its own. ICT has an impact on education at all levels, in both formal and informal settings, and traditional and professional settings. E-learning is seen as the most recent example of ICT's influence in the sphere of education. There are numerous alternative terms used interchangeably with e-learning, including computer-assisted instruction, web-based training, online education, and computer-based training. E-learning has been around for a while now.[2] It has expanded educational opportunities across the board, including in the field of library and information science (LIS).

Meaning Of E-Learning

Electronic media-facilitated learning is known as e-learning. It is a method of learning made easier by the use of ICT. The process of teaching through computers, networks, telecommunications, and storage technology is known as e-learning. E-learning, as defined by CISCO and cited by Jeevan,[3] is a broad category that includes training, information sharing, education, and communication. It is a web-enabled system that enables people to access knowledge and information whenever and wherever they need it. In this instance, learning is done online. In a more pedagogical context, e-learning possesses the following features:

E-learning is a type of instruction that happens online, frequently through the use of computers. It calls for the use of electronic devices by students, such as laptops, tablets, and smartphones; these are typically their own, however, occasionally students use devices provided by the university. Students who have access to a device and a Wi-Fi or data connection can theoretically learn at any time or location via e-learning. Because learning management systems can store student courses, grades, and assessments, they are a useful tool for facilitating e-learning.[4] A wide range of applications and procedures, such as computer-based learning, web-based learning, virtual classrooms, and digital collaboration, are encompassed by the term e-learning."[5].

Definitions of E-Learning

The distribution of instructional materials and/or learning support materials via electronic media, typically via the Internet or a computer network, is known as e-learning. Here are some quotations regarding e-learning from various authors: "E-learning is the all-encompassing umbrella that includes training, information, education, and communication." The employment of electronic media, instructional technology, and information and communication technologies in the classroom is known as e-learning.[6]

Objectives of E-Learning

The goals of online learning are as follows:

The next generation of technology applications for teaching and learning will be improved by research and evaluation.

All teachers will use it effectively to help students meet high academic standards;

All students will be tech and information-literate;

Advantage Of E-Learning

1. Time and money are saved

The ability to save time and money is undoubtedly one of the most apparent benefits of online learning. Whether it is early in the morning, late in the afternoon, or late at night, you may plan your time and attend online classes whenever it is most convenient for you. Because you don't have to pay for transit or worry about eating on the way, you also save money.

2. Increased adherence

Pedagogy is one of the platforms used in e-learning that offers interactive content. You can also express your ideas and opinions to other people. Students retain information better in more engaging classes.

3. Tailored education

You are free to select your learning path and proceed at your speed. Your motivation and commitment to the course increase.

4. Economy of scale

Not just students may save money with online education. Because this arrangement eliminates the need for a physical classroom, many educational institutions can save money.

5. Ecologically friendly

E-learning is also less harmful to the environment since it doesn't add to the pollution caused by the manufacturing of paper.

Disadvantages Of E-Learning

1. Insufficient social contact

One of the reasons for social isolation is e-learning since it eliminates in-person interactions between students and teachers. There is very little interaction.

2. Not reachable by others

Sadly, some people only have very restricted internet access. It is highly inconvenient for them to have to use public Wi-Fi or visit internet cafes.

3. It is inevitable to cheat.

Assessment is a part of e-learning, just like it is in a traditional classroom. With no one else to see, sharing answers is simple for students learning online.

4. Needs self-motivation and effective time management techniques

In online learning, you're essentially on your own. You must force yourself to put in a lot of study time, make notes, and learn more. To effectively manage your time, you should also learn how to balance studying with other responsibilities like taking care of the house or working a part-time job.[7]

5. Puts more emphasis on theory

There is no more practical experience than running experiments.

All you need for this cutting-edge method of learning is a device and an internet connection. It's not for everyone, though. Knowing the benefits and drawbacks of online learning might assist you in determining if it's right for you.[8]

Major Types of E-Learning

There are numerous e-learning course process kinds accessible, each with special features and advantages of their own. The following are a few of the most typical e-learning process types:

Self-paced courses: These are classes in which learners follow their schedule and progress at their speed. Usually, they are made up of recorded lectures, tests, and homework that students can finish at their own pace.[9]

Virtual classrooms: These are online learning spaces where students can communicate in real-time with peers and teachers.

Blended learning: This kind of online learning mixes in-person education with traditional classroom activities. For instance, students might attend lectures in person yet finish their homework and tests online.
Massive Open Online Courses (MOOCs): Anyone who wishes to enroll in these online courses is welcome. Online discussion boards, interactive tests, and pre-recorded video lectures are common components of MOOCs.[10]
Adaptive learning: This kind of online education adjusts the course material to the unique requirements and learning preferences of each student through the use of artificial intelligence and algorithms. Based on the student's progress, adaptive learning platforms can modify the assignments' degree of difficulty, offer tailored feedback, and recommend other resources.
Microlearning: Students receive brief, bite-sized lessons in this form of online education. Then, microlearning is intended to be finished fast and simply and can be given via movies, tests, or other interactive activities.[11]

Tools of E-Learning
In this section, we'll talk about three different kinds of e-learning tools: knowledge representation tools, digital library resources, and curriculum tools.

Broadly speaking, we may state that every kind of tool highlights a certain step in the process.

1. **Curriculum Tools**

The usage of curriculum tools is common in education colleges and high schools. To facilitate cooperation and assessment, extra resources are included, like online tests and discussion boards. Three interconnected components make up a typical commercial curriculum tool: student, administration, and instructional tools. Online tests with automatic grading and curriculum design are examples of instructional tools. File management, authorization, and authentication are examples of administration tools. Functions of student tools include:[12]
• Perusing course materials, including readings, assignments, projects, and other materials
• Learning progress scheduling and monitoring: activity logs, personal calendars, and reminders for assignments.
• Self-assessment and evaluation: assessments created by teachers to gauge pupils' progress
Two of the most widely used commercial curriculum technologies are WebCT and Blackboard. According to an evaluation comparing these two programs, Blackboard is better suited for both individual and collaborative learning because of its flexible content management and support for group projects. WebCT is better suited for guided, less autonomous learning because of its more rigid structure and fully integrated support tools. These resources are generally designed to assist in-class activities rather than solitary research or self-study.[13]

2. **Digital library Tool**

Digital library tools concentrate on resource location, whereas curriculum tools enhance classroom duties. These features aid in the information search process during the phases of investigation and gathering. Users can locate the appropriate information among a vast amount of digital content with the aid of digital library tools.[14]

3. **Knowledge Representation Tool**

Tools for knowledge representation assist students in reviewing, capturing, or developing knowledge visually. This method frequently fails to distinguish between the ideas and abilities taught in one course and those taught in another.[15] Furthermore, it does not demonstrate the body of information that a student will have attained upon completion of their course of study. When educators and students use visualization tools to create spatially semantic displays of the knowledge, concepts, and abilities that students possess and gain, they can involve both parties in an active learning process.[16]

A wide range of tools are available to help instructional designers with the analysis, design, implementation, and delivery of online education as a result of the e-learning revolution.[17]

E-Learning Initiatives In Library And Information Science Education

With the rapid increase of research and development activities, especially in the field of information and communication technology (ICT), the scope of LIS education in India has experienced profound changes. To meet new challenges and enhance the quality of LIS education in India, new ICT-based courses must be implemented in various LIS schools.[18] In actuality, technology has impacted not just how library services are run but also LIS education in general. To maximize employment options for LIS professionals, it is necessary to incorporate qualitative changes in LIS education to:

Adopt and promote e-publishing, which is rapidly being embraced by users.

Face difficulties as a result of ICT's expanding influence and how it affects LIS education.

Elevate the caliber of LIS students to fulfill the expanding demands of the digital world.

Change the way that LIS education is traditionally taught in India.

Use the online e-learning courses that are expanding daily.

Better outcomes can be achieved by using technology for LIS instruction in an appropriate manner. These days, it is essential to think about using an online learning environment for LIS education.[19]

The objectives are to provide a comprehensive understanding of the fundamental concepts of Library and Information Science and their relevance in the current context, as well as to build practical abilities in a novel virtual online environment to effectively tackle obstacles.[20]

The following goals will be achieved in part by the LIS education and training provided in the digital environment:

Proficient in analysis and critical thinking.

Capabilities to obtain information and comprehend the fundamentals of knowledge organization through analysis. Attitudes, comprehension, and information requirements of people and organizations.[21]

Proficiency in managing information.

proficiency with electronic information.

Comprehensive understanding of business and information management, both theoretically and practically.[22]

Techniques for evaluating organizational data that are quantitative and financial.

Quantitative methods and management in conjunction with human resource management.

E-Learning Initiatives In India

In India, open and distance learning is growing rapidly. Distance education in LIS is provided by numerous institutions. The first organizations to use e-learning in LIS are remote education centers. As was previously mentioned, e-learning works better for remote learning. Traditional university departments that offer remote education are also attempting to include e-learning in their curricula.[23] One such emerging e-learning platform for LIS education is VidyaOnline.9 It is a Vidyasagar University initiative. For people interested in e-learning, the Documentation Training and Research Centre, Bangalore, developed the Librarians Digital Library (LDL), which offers digital materials. Short-term, need-based e-learning courses will not be far behind in being introduced by LIS departments in traditional Indian colleges.[24]

Conclusion

E-learning goes beyond simple technological advancements. As a species, we are redefining how we pass on knowledge, skills, and values to the next generation of workers and students. With the flexibility to customize e-learning to each learner's needs, students can concentrate on particular subjects, have access to pertinent materials, and proceed at their own pace. Based on the skills and advancement of the learners, adaptive technology and personalized learning pathways can modify the pace and material. Gaining knowledge and growing yourself gives you a sense of achievement

and makes you feel ready to take on new tasks and investigate other business opportunities.

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