E-Learning: Concept, Features and it’s Types

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Abstract:
E-learning is basically the computer and network-enabled transfer of skills and knowledge. It includes the electronic applications and processes applied to teaching and learning. E-learning applications may include web-based learning, computer based learning, virtual classrooms, and digital collaboration. The paper highlights the various steps required to be undertaken by an institution to venture into e-learning, especially in the context of a professional discipline like library and information science which has gained immense popularity in recent times. The present boon of E-learning has its own very special impact on education.

Keywords: E-learning, Information science, Information technology

1. Introduction

E-Learning technology is a recent development and a wonderful gift by the present day technological advancement and innovation. Information technology as given a new shape to the learning process. E-learning would incorporate all educational activities that are carried out by individuals or groups working online or offline, and synchronously or asynchronously via Networked or standalone computers and other electronic devices.

The American Society for Training and Development (ASTD) defines e-learning as a broad set of applications and processes which include web-based learning, computer based learning, virtual classrooms, and digital. Much of this is delivered via the Internet, intranets, audio- and videotape, satellite broadcast, interactive TV, and CD-ROM. Refers to the usage electronic media in the field of learning which is synonymous with multimedia learning, technology learning (TEL), Computer instruction (CBI), Computer based training (CBT), Computer assisted instruction or Computer aided instruction (CAI), Internet based Training (IBT) web-based training (WBT), online education, virtual education, virtual learning environments (VLE) etc.

2. E-Learning

The use of internet for education including the use of web sites and e-mail has come to be known as online education system. Online courses frequently use the internet in combination with delivery modes. The e-learning is the combination of online learning with fact to instruction Net Work (web-based resources) learning. It is a new way of teaching or net based education system. The concept of e-learning is very old before the emergence of internet; Computer Aided Instruction (CAI) AND COMPUTER Based Training (CBT) is used for the same purpose.

3. Virtual Classroom

A virtual classroom duplicates the capabilities found in a real classroom. A virtual classroom provides:
• A place to meet: Students and teachers use their computers to go to a virtual meeting place instead of a classroom.
• Take attendance: A list of students is recorded.
• Lecture: Teachers can choose from a variety of synchronous technologies including:
  o Slide presentation
  o Audio and video conferencing
  o Application sharing
  o Shared whiteboard
• Interaction with students: Students can indicate when they want to speak by virtually raising their hand. Teachers can let students speak through audio and video conferencing. Teachers and students can use instant messaging and chat.
• Quizzes: Teachers can present questions to students.
• Breakout Sessions: Students can work together in groups.

Most companies that sell virtual classroom software provide all of these capabilities in a single package.

4. Learning Content Management Systems
Most online management system also incorporates a Learning Content Management System (LCMS), which is a set of software tools that enables the, storage, use and reuse of the subject matter content.

4.1 Features of LMSs
• Course content Delivery capabilities
• Management of online class transactions
• Tracking and reporting of learner progress
• Assessment of learning outcomes
• Reporting of achievement of completion of learning tasks
• Student records management

A “digital learning object” is any electronics resource that has the potential to promote learning. Typically these include scripts, images and multimedia modules etc in digital format. They are often developed as discrete entries so that they can be reused by multiple users and in a range of education settings.

Reusability of Learning Objects (Proprietary Learning Resource) triggered the need for standards like:

SCORM: Sharable content object reference model (SCORM) is an XML based frame work used to define and access information about learning object so they can be easily shared among different learning management system (LMSs). SCORM was developed in response to a United States department of defense (DoD) initiative to promote standardization in e-learning.

5. Types of E-Learning
5.1 Individualized self-paced
E-learning online refers to situations where an individual learner is accessing learning resources such as a database or course content online via an Intranet or the Internet. A typical example of this is a learner studying alone or conducting some research on the Internet or a local network.
5.2 Individualized self-paced E-learning offline
It is refers to situations where an individual learner is using learning resources such as a database or a computer-assisted learning package offline (i.e., while not connected to an Intranet or the Internet). An example of this is a learner working alone off a hard drive, a CD or DVD.

5.3 Group-based E-learning synchronously
It is refers to situations where groups of learners are working together in real time via an Intranet or the Internet. It may include text-based conferencing, and one or two-way audio and videoconferencing. Examples of this include learners engaged in a real-time chat or an audio-videoconference.

5.4 Group-based E-learning asynchronously
It is refers to situations where groups of learners are working over an Intranet or the Internet where exchanges among participants occur with a time delay (i.e., not in real time). Typical examples of this kind of activity include on-line discussions via electronic mailing lists and text-based conferencing within learning managements systems.

6. The Benefits of E-Learning
One of the impacts of the credit crunch has been a fresh look at the potential of e-learning. We decided to take a look at some of the research and examine the benefits of e-learning, including evidence of
- Lower costs
- Faster delivery
- More effective learning
- Lower environmental impact
- Improved open access to education, including access to full degree programs
- Better integration for non-full-time students, particularly in continuing education
- Improved interactions between students and instructors
- Provision of tools to enable students to independently solve problems
- Acquisition of technological skills through practice with tools and computers.
- No age-based restrictions on difficulty level, i.e. students can go at their own pace.

7. Disadvantages of E-Learning
Disadvantages of e-learning that have been found to make learning less effective than traditional class room settings
- Ease of cheating
- Bias towards tech-savvy students over non-technical students
- Teachers' lack of knowledge and experience to manage virtual teacher-student interaction
- Lack of social interaction between teacher and students
- Lack of direct and immediate feedback from teachers
- A synchronous communication hinders fast exchange of question
- Danger of procrastination.

8. Conclusion
The remarkable growth of Internet has made significant revolution in all the areas of science and technology. Rather than using it as a tool for searching and retrieving information, Internet has become the king of all media, by which we can access virtual information and can build a virtual library to provide timely, quality service to the users. It has brought new opportunities to education in all subjects, including library and information science.
References