E-LEARNING : NEW TREND IN EDUCATION

Mrs. Sushma Singh
Assistant Professor (B.Ed.)
S.B.D. (P.G.) College, Dhampur,
Distt.-Bijnor (U.P.)

ABSTRACT

The concept of E-learning is getting very popular these days. Presently the concept of E-learning is becoming very popular as the numbers of internet savvy users are increasing. E-learning is cost effective as course content once developed could be easily used and modified for teaching and training. E–learning is defined as acquisition of knowledge and skill using electronic technologies such as computer and Internet-based courseware at local and wide area networks. As a result Internet and Information technology in tutoring and studying has created a different necessity to modify how students learn by using more modern, effective and alternative tools such as E-learning system. E-learning also provides students freedom from carrying heavy school bags and stop cutting of trees for the sake of paper, pencil and rubber. E-learning is the future of education as it is interactive, interesting and entertaining way of learning, and will soon replace the paper books in the form of touch screen tablets. This paper highlights an editorial summery on E-learning introduction, concepts, types of E-learning, advantages & disadvantages and also gives the comaparision between traditional learning and E-learning, those are outlined in greater detail in the full report.

Key words : E-learning, Traditional learning, New Trend, Education, CML.

Introduction :

Personal computers and the Internet have revolutionized entire sectors of our society. Facebook, Twitter, YouTube, Skype and other online communications media have allowed billions of people around the world to share ideas in a matter of seconds, mostly at a very low cost. These advances in computer technology are as remarkable as they are familiar. But most people are not aware of how computers and Internet technology are transforming the way students learn. This emerging education paradigm is often called "E- learning," and it has the potential to improve student achievement, educational access and schools' cost-effectiveness. Specifically, E- learning uses computer software, the Internet or both to deliver instruction to students. This minimizes or eliminates the need for teachers and students to share a classroom. E-learning does include the increasing use of e-mail or online forums to help teachers better communicate with students and parents about course work and student progress; as helpful as these learning management systems are, they do not change how students are taught.
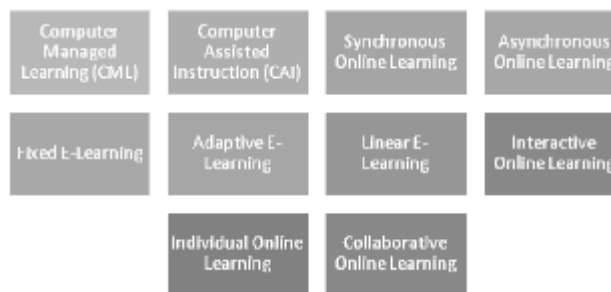
Concept : In the present scenario, the rapid growth of information and communication technology has led to the alphabet "e" becoming the symbol of this latest age of information technology. The alphabet "e" is used as abbreviation for electronics. Thus, words prefixed with "e" are currently emerging in every second field, like e-learning, e-health, e-business, e-government and many more. In the current scenario, where the world is being dominated by globalization, networking and information technology has reached its peak, E-learning plays a vital role in the field of education.

E-learning is a computer based educational tool or system that enables you to learn anywhere and at any time. E-learning provides the learners with the ability to fit learning around their lifestyles, effectively allowing even the busiest person to further a career and gain new qualifications. In the fast-paced world of E-learning the available technologies to make a course exciting are always changing, and course content can and should be updated quickly to give students the very latest information.

Types of E-learning

Some educational scientists have identified types of E-learning according to learning tools, while others have chosen to focus on different metrics such as synchronicity and learning content. In this article, we will filter down all these findings into 10 easily distinguishable types of E-learning. These are the 10 different types of E-learning:

1. **Computer Managed Learning (CML) :**

    In the case of computer-managed learning (CML), also known as Computer Managed Instruction (CMI), computers are used to manage and assess learning processes. Computer managed learning systems operate through information databases. These databases contain bits of information which the student has to learn, together with a number of ranking parameters which enables the system to be individualized according to the preferences of each

student. As a result of two-way communication between the student and the computer, determinations can be made as to whether the student achieved their learning goals on a satisfactory level. If not, then the processes can be repeated until the student has achieved their desired learning goals.

2. Computer Assisted Instruction (CAI) :

Computer Assisted Instruction (CAI), also sometimes referred to as computer-assisted learning (CAL), is another type of E-learning which uses computers together with traditional teaching. This could mean interactive software for the students or the kind of training software used by **Patrick Suppes** of Stanford University in 1966. Computer-assisted training methods use a combination of multimedia such as text, graphics, sound and video in order to enhance learning. The primary value of CAI is interactivity – it allows students to become active learners instead of passive learners, by utilizing various methods such as quizzes and other computer-assisted teaching and testing mechanisms. Most schools nowadays, both online and traditional, use different variations of computer-assisted learning to facilitate the development of skills and knowledge in their students.

3. Synchronous Online Learning :

Synchronous online learning enables groups of students to participate in a learning activity together at the same time, from any place in the world. Real-time synchronous online learning often involves online chats and video-conferencing, as these tools allow training participants and instructors to ask and answer questions instantly while being able to communicate with the other participants. This kind of community-oriented online learning has been made possible with the rapid development of online learning technologies. Before the invention of computer networks in the 1960s, truly synchronous E-learning was practically impossible to implement. Nowadays, synchronous E-learning is considered to be highly advantageous as it eliminates many of the common disadvantages of E-learning, such as social isolation and poor teacher-to-student and student-to-student relationships. Synchronous E-learning is currently one of the most popular and quickest growing types of E-learning.

4. Asynchronous Online Learning :

In the case of asynchronous online learning, groups of students study independently at different times and locations from each other, without real-time communication taking place. Asynchronous E-learning methods are often considered to be more student-centered than their synchronous counterparts, as they give students more flexibility. For these reasons, asynchronous E-learning is often preferred by students who do not have flexible schedules, because it allows them to utilize self-paced learning. They can set their own time frames for learning, and they are not required to learn at specific time intervals together with other students. Before the invention of the PLATO computer system, all E-learning was considered to be asynchronous, as there were no methods of computer networking available. However, nowadays, with the availability of computers and the World Wide Web, deciding between synchronous and asynchronous E-learning becomes a more difficult task, as each has its pros and cons.

5. Fixed E-learning :

Fixed E-learning is a fancy name for something you are likely already familiar with. "Fixed" in this context means that the content used during the learning process does not change from its original state and all the participating students receive the same information as the others. The materials are predetermined by the teachers and don't adapt to the student's preferences. This type of learning has been the standard in traditional classrooms for thousands of years, but it's not ideal in E-learning environments. That is because fixed E-learning does not utilize the valuable real-time data gained from student inputs. Analyzing each student individually through their data and making changes to the materials according to this data leads to better learning outcomes for all students.

6. Adaptive E-learning :

Adaptive E-learning is a new and innovative type of E-learning, which makes it possible to adapt and redesign learning materials for each individual learner. Taking a number of parameters such as student performance, goals, abilities, skills, and characteristics into consideration, adaptive E-learning tools allow education to become more individualized and student-centered than ever before. We are now at a point in time where laboratory-based adaptive instructional techniques can be used for mathematical sequencing of student data. When done correctly, this could mean a new era for educational science. While this type of E-learning can be more difficult to plan and accomplish than traditional teaching methods, it's potential value and effectiveness is often understated.

7. Linear E-learning :

When referring to human-computer interaction, linear communication means that information passes from sender to receiver, without exception. In the case of E-learning, this becomes a very limiting factor, as it does not allow two-way communication between teachers and students. This type of E-learning does have its place in education, although it's becoming less relevant with time. Sending training materials to students through television and radio programs are classic examples of linear E-learning.

8. Interactive Online Learning :

Interactive E-learning allows senders to become receivers and vise versa, effectively enabling a two-way communication channel between the parties involved. From the messages sent and received, the teachers and students can make changes to their teaching and learning methods. For this reason, interactive E-learning is considerably more popular than linear, as it allows teachers and students to communicate more freely with each other.

9. Individual Online Learning :

Individual learning in this context refers to the number of students participating in achieving the learning goals, rather than the student-centeredness of the material. This type of learning has been the norm in traditional class-rooms for thousands of years. When practicing individual learning, the students study the learning materials on their own (individually) and they are expected to meet their learning goals on their own. This type of learning is not ideal for developing communicational skills and teamwork abilities in students, as it largely focuses on students learning independently, without communi-cation with other students. Therefore, a more modern approach is necessary to supplant the communication of skills and abilities.

10. Collaborative Online Learning :

Collaborative E-learning is a modern type of learning method, through which multiple students learn and achieve their learning objectives together as a group. Students have to work together and practice teamwork in order to achieve their common learning objectives. This is done through the formation of effective groups; where each individual student has to take into account the strengths and weaknesses of each other student. This boosts the communicational skills and team-work abilities of the students. Collaborative E-learning expands on the idea that knowledge is best developed inside a group of individuals where they can interact and learn from each other. While this type of learning is more often used in traditional classrooms than in online courses, it's still a valid type of E-learning which can be highly effective if done correctly.

Advantages of E-learning :

There are many advantages of E-learning, some of them we are discussing here.

1. It is convenient :

This is obviously the greatest benefit of online learning as long as you own a computer and have an internet connection, it doesn't matter in which part of the world you are. Learners can access information from anywhere, anytime. Furthermore, distance is no longer a barrier to learning, whether academic or professional. Especially for corporate training, the ability to reach an unlimited number of employees quickly and regardless of their location has greatly benefitted organizations all around the globe.

2. It is flexible :

It is simple, really; learning becomes easier when aligned with one's learning needs and preferences. Online learning allows learners to study at their own pace, whether they are students, busy adults, or employees. Assignment due dates aside, your audience is given the freedom to personally build their own learning schedule and choose where and when to learn. Speaking of "where", mobile learning offers your audience the ability to keep up with their learning wherever they are, at home, on a bus, in the park, as long as they have a mobile device with them.

3. It is cost effective :

Especially regarding corporate training, the cost effectiveness of online learning is quite impressive; no more travel and accommodation expenses for trainers and employees, reusable online content, budget cuts on training materials. Especially if your company has an online training budget, online learning is the ideal training option for you.

4. It can be tailored to different needs :

Different people learn in different ways, and online learning does everything in its power to ensure that all learning needs are met. Instructional Designers and e-Learning professionals create online courses that address almost all learning behaviors and accommo-date all learning preferences. With online learning it doesn't matter whether your learners are visual, acoustic, or kinesthetic; there is a very wide variety of learning methods and tools that can be used to support learning while meeting all needs.

5. It's immediate :

Not only learners are able to begin their online learning immediately, but they are also able to see immediate results; whether self-paced or instructor-led, online learning provides a variety of ways to offer constructive feedback to the audience. Furthermore, online learning allows for immediate access to additional online resources, which is always a bonus.

6. It's unrestricted :

With online learning location is no longer a barrier; neither are culture and nationality. Translating and customizing your online courses to address different

cultures in various languages makes possible for your e-Learning content to travel all around the world and reach the widest possible audience. This is particularly effective for your online training program, as you can use the same training material for your globally distributed workforce and ensure that all of your employees are aligned with your company's brand, values and vision.

7. **Immediate updates :**

Today's online learning is better than yesterday's; and online learning of tomorrow will be better than today's. Multimedia, gamification, interactivity, constantly improved technology in general, provide a wide variety of applications and tools that not only update online learning, but also they make it more effective. The best part is that once you update your e-Learning course, your audience will have immediate access to the updated version as soon as they click a mouse button.

Disadvantages of E-learning :

The disadvantages of E-learning are here—

1. **It may be a "solo" act.**

It is true that, although online learning might be convenient and flexible, it is also a solo act. It will not be easy for all of your learners to feel comfortable when participating in online discussions and engaging more actively with their online instructors or their virtual classmates. Furthermore, some people absolutely need personal contact with their educators or trainers in order to learn successfully. Constructive feedback can be very effective, but if not given properly or in time, it might also be limited. In addition, some types of learning problems may be difficult to be addressed online, and some questions can be lost in a sea of requests and inquiries. This sometimes make learners feel they lack support and reassurance.

2. **It may be impersonal.**

No matter how hard we try to fully transfer human communication to online platforms, no matter how natural it seems to form relationships behind computer screens, a virtual environment is just not human. Nothing can replace human contact.

3. **Too much time spent in front of a computer screen may be harmful.**

Being constantly online is the new reality, but the truth is that using a computer or a tablet all the time can cause poor vision, strain injuries, and other physical problems. Consider sending guidelines about right sitting posture, desk height, etc. along with your e-Learning course; it might be very useful to your audience.

4. **It requires self-discipline.**

If your e-Learning audience lacks self-discipline, it is unlikely that they will be motivated to self study. Traditional learning and training have the benefit of easily tracking both progress and falling behind; this works for many learners as well, as some people prefer their progress to be closely monitored in order to perform.

5. **Possible lack of control.**

No matter how carefully you design your e-Learning course, there is no guarantee that your messages will get across. You offer your learners control over their e-Learning experience and this is great, but are they going to use it effectively? There is always the risk of your learners just going through the material without paying any attention.

If your E-learning content is not built to make the most of the medium it will easily become disengaging. Further more, unless you know exactly what you're doing with new technologies, it is very likely that you overwhelm or distract your audience. Creating effective online learning courses requires knowledge, time, experience, talent, commitment, great communication skills, and a true passion for learning. Have you got all that? If the answer is yes, then be sure that the advantages of your online training, outweigh its limitations.

Comparision Between Traditional Learning And E-learning

When comparing learning an identical course in a traditional framework to a computer mediated   learning framework, students have expressed higher satisfaction from the computer mediated learning, and rated the learning as more effective than in the traditional framework. In other studies, too, it was argued that computer mediated or online learning is more effective and interactive. Findings of research conducted in the seventies and eighties, comparing the use of computers as a learning environment, also indicated a slight improvement in the student's achievements following use of a computer.

E-learning includes many components that are familiar from traditional learning, such as: presentation of ideas by the students, group discussions, arguments and many other forms of conveying information and accumulating knowledge. The contents of the course's curriculum might be organized according to subjects and in a serial manner. e-Learning also includes advantages which are not found in traditional learning, such as: time for digesting the information and responding, enhanced communication among the learners, both as regards to quality and as regards to urgency, knowledge being acquired and transferred among the learners themselves, the ability to conduct an open discussion, where each learner gets more of an equal standing than in a face-to-face discussion, access to information and to discussion ability, responses may be made around the clock with no restrictions, a higher motivation and involvement in the process on the part of the learners. The very use of technology for learning has been found to have a positive effect on the student's commitment to the learning process. Also, use of technology creates a greater commitment on the students' part to learning.

The following table summarizes several opinions regarding the comparison between traditional learning and e-Learning :

Conclusion :

The concept of E-learning is getting very popular these

	Traditional Learning	E- learning
Classroom Discussions	The teacher usually talks more than the student	The student talks at least as much as or more than the teacher
Learning Process	The learning is conducted with the whole class participating; there is almost no group or individual study	Most of the learning process takes place in groups or by the individual student
Subject Matter	The teacher conducts the lesson according to the study program and the existing curriculum	The student participates in determining the subject matter; the studying is based on various sources of information, including web data banks and net-experts located by the student.
Emphases in the Learning Process	The students learn "what" and not "how"; the students and the teachers are busy completing the required subject matter quota; the students are not involved in inquiry-based education and in solving problems, but rather in tasks set by the teacher.	The students learn "how" and less "what"; the learning includes research study which combines searching for and collecting information from web data banks and authorities on the communications network; the learning is better connected to the real world, the subject matter is richer and includes material in different formats.
Motivation	The students' motivation is low and the subject matter is "distant" from them.	The students' motivation is high due to the involvement in matters that are closer to them and to the use of technology
Teacher's Role	The teacher is the authority	The teacher directs the student to the information.
Location of Learning	The learning takes place within the classroom and the school	The learning takes place with no fixed location
Lesson Structure	The teacher dictates the structure of the lesson and the division of time	The structure of the lesson is affected by the group dynamics.

Table -1

days, as many universities are offering degree and diploma programs through E-learning mode. Many big companies are investing in E-learning and setting up their interactive classrooms. Also subject matter experts are developing new and versatile tools to create E-learning modules. E-learning could be an effective tool for transferring knowledge and it has a potential to overtake the traditional teaching method E-learning is increasing the percentage of literate population in all over the world. E-learning plays a vital role in educational development in education sector. E-learning will overcome these drawbacks, if instead of heavy school bags, each learner is given a tablet with the course content fed in it, which would be much more attractive, enjoyable and thoughtful decision to take in the present era of modernization. Through E-learning lot of opportunities can be captured and speedy development will be possible. It is expected that E-learning will be beneficial for educational sector. Thus, the day is not far away when E-learning will become the future popular method of education throughout the world.

References :

● Sharma, Sunil Kumar, Wasim, Javed, Dr. Siddiqui Jamshed E-learning in India International Journal of Advanced Research in Computer Engineering & Technology (IJARCET) Volume No. 3, Issue No. 1, January 2014

● Pande, Deepali1, wadhai, Dr. V.M.2, Thakre Dr. V.M.3, Current trends of E-learning in India International Research Journal of Engineering and Technology (IRJET) Volume: 03 Issue : 01 | Jan-2016 e-ISSN:2395-0056.

● Goyal, S, (2012). E-learning : Future of Education, Journal of Education and Learning. Vol.6 (2) pp. 239-242.

● Agarwal, Himanshu1, Pandey, G. N.2 Impact of E-learning in Education, International Journal of Science and Research (IJSR) ISSN (Online): 2319-7064.

● Rashty, David Traditional Learning vs. e-Learning.

● E-learning concepts, trends, applications, v1.1 January 2014, www.talantlms.com.

● https://www.deccanherald.com/supplements/dh-education/E-learning-in-the-time-of-social distancing-828495.html

● www.elearningindustry.com

● www.e-student.org