

E-Learning Preferred in Tailor-Made to Readymade

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ABSTRACT

This article is containing the fact that now-a-days why E-learning process is considered to be best to class room study. Actually it is a tailor made process where every individual can get the attention of the instructor. Everyone can hear about the term “distance education” or “distance learning”, but now the concept has been changed. Through the WBT (Web Based Training) or CBT (Computer Based Training) or Internet-based training (IBT) or Technology-enhanced learning (TEL) we can access information and acquire knowledge whenever we want. Today E_learning gives us the opportunity to overcome the barriers of class-room learning process. There are some facts that hinder the development of E_learning but it is expected that soon it will shrink. Also E-learning techniques are to provide knowledge such as games, audio, video, open sources of science and education. This paper tries to show that web based learning is the best by comparing class room instruction. It also emphasizes on its advantages according to readymade rather than tailor-made with proposed new methods.

Keywords

E-learning, web based training.

1. INTRODUCTION

This article is containing the fact that now-a-days why E-learning process is considered to be best to class room study. Actually it is a tailor made process where every individual can get the attention of the instructor. Everyone can hear about the term “distance education” or “distance learning”, but now the concept has been changed. Through the WBT (Web Based Training) or CBT (Computer Based Training) or Internet-based training (IBT) or Technology-enhanced learning (TEL) we can access information and acquire knowledge whenever we want. Today E_learning gives us the opportunity to overcome the barriers of class-room learning process. There are some facts that hinder the development of E_learning but it is expected that soon it will shrink. Also E-learning techniques are to provide knowledge such as games, audio, video, open sources of science and education. This paper tries to show that web based learning is the best by comparing class room instruction. It also emphasizes on its advantages according to readymade rather than tailor-made with proposed new methods.

- Providers of Content.
- Providers of Learning Platforms.
- Learning Hubs or Portal Companies.
- A complete package.

Our country is developing country. Developed country like USA uses PDA (Personal digital assistants) in schools, colleges and workplaces to provide the effective knowledge. Today the technology is so much upgraded that mobile technology such as digital pen and paper, mobile phones, CD-

ROM, audio video tape, internet etc helps us to access information within a second. This is a tailor made process where a learner can quench the thirst of knowledge any time. If a learner has any questions outside the classroom he can clear it with the help of his instructor in no time and for that there is no need of physical interaction. Moreover, E-learning processes have become economically feasible and it boosts up the learners by appraising their performance. It is noticed that the impact of E-learning is so high that it increases the efficiency among the learners.

Simulation is one of the processes of on the job training. Through a model of real object, it creates an atmosphere of real situation. It is used in different fields like defense, aviation and aeronautical industries to provide the practical knowledge. But the main problems to use this process are” cost of development” and lack of tools and techniques to maintain it. But day by day it is expected that the barriers will be diminished and it will enrich different sectors.

The targets of traditional techniques or class-room learning process are mass where E-learning deals with individual interactivity. Monitoring has a vital role in E-learning process. It informs us about the requirements of individuals. It gives a scope to learner to use the system to its fullest. It shows the diversion of “isolationists” approaches to learning.

Considering about the future of it, it has built on open principles. It should not be rigid in nature and according to the merit or characteristics of a learner it should be rearranged otherwise there will not be any difference between a classroom learning and E-learning.

Accessibility, adaptability, affordability, durability and reusability are the requirements to develop the E-learning atmosphere. In school’s text-based E-learning has introduced which not only helps the students but also the teachers to develop their learning materials. In higher education it grabs the market and it increases the number of courses too. E-learning for the kids is a combination of both entertainment and education because through different types of games like Magic Math Market, Shopping Spree, and Fun with Math, Sorting and Classifying Objects etc they can easily communicate with different subjects without any panic.

2. LITERATURE SURVEY

Now-a-days, some of the central and state educational institutes are imparting education programs in distance learning mode like NKN project and Electronically Networked Life-Long-Learning System (ELNet-3L) and NPTEL project Another is Technology Travels to Village for under develop area through satellite telecasting.

National Knowledge Network (NKN). The NKN is a state-of-the-art multi-gigabit Pan-India network for providing a unified high speed network backbone for all knowledge related institutions in the country. The purpose of such a

knowledge network goes to the very core of the country's quest for building quality institutions with requisite research facilities and creating a pool of highly trained professionals. As of now 400 universities and 14,000 colleges across the world had been connected under NKN and when the project will be fully completed 604 universities and 35,000 colleges would be connected to it, HRD minister said.

The National Programme on Technology Enhanced Learning (NPTEL) is a Government of India sponsored collaborative educational programme. By developing curriculum-based video and web courses the programme aims to enhance the quality of engineering education in India. It is being jointly carried out by 7 IITs and IISc Bangalore, and is funded by the Ministry of Human Resources Development of the Government of India. As of October 2012, over 600 courses were available online. The course videos are available in streaming mode, and may also be downloaded for viewing offline. The video files are also view-able via the IIT Channel in Youtube.

Seven IITs and the Indian Institute of Science (IISc) have worked together to develop web and video based material for basic undergraduate science and engineering courses in order to enhance the reach and quality of technical education in India.

From the research paper "Trends in E-learning" by Luciana, Romina, and Ion, we come to know that the truth of rebirth of distance education lays in computer based training system. According to these papers there are two distinct markets:

The first one deals with the people of developing countries where people still cannot get the full access to internet and E-learning methods especially in rural areas due to lack of infrastructure.

The second one talks about those people who moves to and fro for their job and gather knowledge and information from different sites and locations that they visit.

Also authors used some processes of E-learning such as:

- Simulation
- Adaptive Learning Environment (ALEs)
- Open Source E-learning tools
- Standard Development
- On The Job Training
- Vocational Education and Training(VET)
- Consumer E-learning
- Blended Learning etc.

Now-a-days the targets who participate in learning system are different and E-learning is maintained through monitoring or supervising. For example, Standard Development is a means that use technology to connect commercial organization those are worked for almost similar aspects of E-learning technology. It uses the principle of "common reference model". To develop a market all system should be built on open standards. These are the guidelines developed by the developers of learning content. Stakeholders play a vital role too. They give some instructions and supervise that whether the instructional design is reflected by the reference model or not.

The consumer E-learning segment is a combination of education and entertainment. The manuals and guidelines of home appliances will become graphical in near future. Likewise, "Blended learning" denotes a blend of traditional

and E-learning processes which will increase the productivity because a single delivery process is not enough.

In this article it is also told that in near future small E-learning operators as well as the new entrants will merge with others and will be identified as niche market. Telecommunications operators and professional associations are expected as the suppliers of these services. The international market holders like IBM, SAP, Oracle will continue their strong and in this sector in future.

In another paper named "How to Create a Visual Design for Your E-learning Scenario" the author tells about a scenario which is made by "3C Model". Here the 3C are:

- Challenge
- Choice and
- Consequence

"Challenge" denotes the goal of the learner which helps him to think and to make a decision. Through "Choice" instructor wants the learner to get involved in it but the choices should not be obvious. "Consequence" is the result of the decision which is made by learner. It is the instructions and feedback of the developer.

3C model is the standard to build the "scenario infrastructure". To make it hassle free the writer divides the scenario into five parts:

Characters are the representatives of scenario. One can use single or multiple characters. Second one is Environment which acts as a background of the characters. "One can add office machine sounds or people murmuring to make it a real one. Text has a vital role to give a real touch in the scenario. It is not only the message but also the graphics. Here containers are the "bubble" or the "call out" where we have to put the textual graphics. Instruction box, text box, sticky notes are also the containers and applicable where it is needed. The last one is button which is used to show the user's choice. It could be an actual button or a "hotspot".

According to the paper named as "CURRENT STATUS AND INTERNATIONAL EXPERIENCE" by Joanne Capper (World Bank Consultant) E-learning process offers a greater range of courses from the primary section to university level. Anyone who is enrolled in the institution can access the information regarding different types of courses anytime through internet. For example, the Massachusetts Institute of Technology shares its syllabus and learning materials for all courses through internet so that all the students of that university can access it anytime and from anywhere.

The author of this paper has tried to give the definition of E-learning through some quotations. According to Elliott Masie, E-learning is "the use of network technology to design, deliver, select, administer and extend learning." Again according to Cisco systems it is a process of delivering contents in different formats and it connects the learners and content developers.

E-learning makes the learning process more interactive than class-room learning process. The main features of E-learning are:

- Faster
- Cheaper
- Accessible
- Accountability

Because of these features it encourages the investments in E-learning companies. Now 70% of employees of world's giant companies are still unskilled due to lack of training. It is the main barrier to the development and productivity. In 1999, US Corporations spent \$66 billion on training. But it was divided into two sections, 20% was invested in E-learning and 80% was invested in classroom instruction. In 2003 the Corporate University Xchange projects a change. They invested 40% to E-learning and 60% to class-room instruction. The size of E-learning sector is expected to become double in near future.

A 1990 review of CBT (Computer Based Training) where video-disk was used to train the adults showed positive findings. A comparative study between classroom instruction and E-learning process showed a superior feedback that within less time the students learned more and they interact with their teachers more than class-room learning process.

There are different modes of delivering the lectures but all are not of same quality and cost. For example,

Web Lecture Hall: It has moderate to high cost of production. Here the expertise provides the study materials and audio or video lectures. After the completion of these sessions there will be a multiple choice question paper for which the answers will be given. If the videos are available, the cost will be decreased.

Web Mediated Seminar: By the use of electronic gadgets a group of students are instructed by a senior instructor. Instructor provides the guidelines to complete the research paper of each student and finally it is submitted. The startup cost is low but the delivery cost to individual student is high.

Web Portal Course: Different types of questions are frequently asked by the students and their answers are provided by the junior instructors via e-mail. They get the grade from the instructors. It includes "extensive exercises with automated scoring and debriefing for incorrect answers."

Web Multimedia Tutor: The instruction is based on a large learning bank of texts, videos, animated simulations. It provides automated feedback. It has a high development costs and low delivery costs per students. In this mode knowledge enhances through tutoring. With the use of multimedia projector, we explain the pictorial diagram of a study; the multimedia takes more concentration of a student as it attracts student attention with light & sound.

This is the diagram which is already being done by the Institute of expert system, using the above fact the following diagram is used by many institute of expert system.

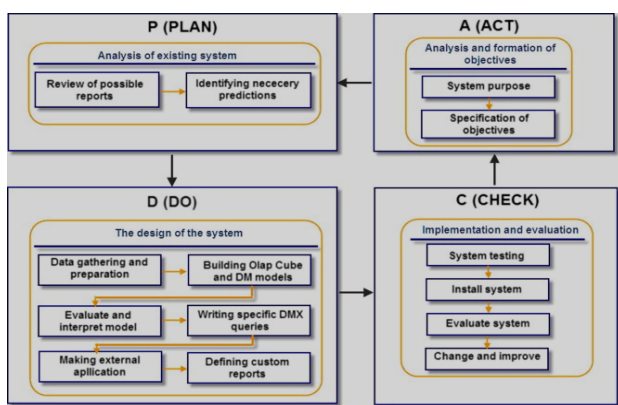


Fig. Architecture

Now we want to propose the new methodology which is easiest an interactive for the benefit of learner.

3. METHODOLOGY

Based on communication characteristics of software and resources for E-learning,

Three different E-learning environments could be distinguished as

- Self-study,
- Asynchronous, and
- Synchronous.

In present days' participants in learning process are not bound in time. Self-study approach is oriented to tools and material prepared in advance which are used by learner itself, without later interactions intended. Some of self-study software tools are: tutorials, e-books / hypermedia, simulations, educational games, open simulation, educational ended learning environments. Asynchronous E-learning is usually facilitated by the tools that do not require for participants to be present at the same time to enable work relations. Examples of asynchronous E-learning include watching a video lesson, taking an online exam or the posting questions to a message board, for learning to be realized, participants have to join the virtual sessions in the same time, due to real time characteristics of synchronous, educational games open-ended learning style. There is a number of supporting E-learning tools for synchronous system of E-learning.

E-learning systems have a goal to create, manage E-learning courses and integrate learning resources and tools. E-learning systems can be classified as:

- LMS - Learning Management System,
- CMS - Content Management System, and
- LCMS - Learning Content Management System

LMS provides interface to successful presentation of learning modules and trainings to learners. Moreover, there are mechanisms to manage user access control and user classifications. One important characteristic of such systems is ability to monitor progress of user's activities and completion status.

CMS is a family of software, when used as E-learning systems it enables content creators, instructors and teachers to store, manage, create and edit learning resources. By building shareable context, one aspect of such systems becomes important, so called RLO (Reusable Learning Objects) or reusable content components. It is easy to separate content from its layout, by providing appropriate presentation methods:

LCMS are systems that integrate LMS and CMS. In such environments, that is often

Web-based, there are possibilities to build learning content using elementary and reusable components, to manage access, track learner's activities progress and manage presentation

There are a lot of works that deal with comparison of well-known LMS and LCMS systems. Some useful comparisons are given in with the aim to understand which characteristics of modern LMS and LCMS are suitable for competences development, it is useful to analyse which learning tools are suitable for competences development. Study from lists some most important competences.

Predictions about E-learning styles and systems are numerous. Some of futures of E-learning are:

- Growth in synchronous learning;
- Prevalence of blended solutions;
- Improved technology and access; and
- Integration of information provision,
- Performance support, peer collaboration and training.

With continuous development of communication technologies, it will be possible for learners to actively take part in learning process in every moment. This access is enabled by development of small handheld devices with networking capabilities.

4. CONCLUSION

In the conclusion of this paper the two questions will be raised and that is why we should go for online learning process?

By using new methodology, we should use E-learning and that should be readymade process for the benefit of learner. by comparing the two different modes to reach a certain conclusion:

| Sl. No. | Web Based Learning | Class-Room Instruction |
|---------|--|--|
| 1. | There is no limitation of time. 24x7 hours the learning materials and the instructors are available. So if there is any doubt to clear a learner can knock any time. | But here the time is bounded for every class. If the learner has some problem, then he has to wait for the next class to clear it. |
| 2. | A learner can access a computer based learning system in whatever place he wants. There is no need to present students and teachers at the same place. They can be anywhere in world. International sharing is there to solve the problem. | But class-room learning process is very much rigid in this respect. Without physical interaction one cannot access the study material or doubt clearing classes. |
| 3. | It encourages creative conversation process. Here learners can response through electronic mail and instructors can also give their feedback and guidelines through electronic gadgets. | It does not involve any creative conversation and never helps to get the guidelines without face-to-face interactions. |
| 4. | It helps to visualize the theoretical scenario with the help of characters, environment, containers etc. which has a deep impact on learners' development. | It is based on the traditional theoretical knowledge only. It does not provide any practical knowledge with the help of any abstract model or system. |
| 5. | It enriches skills through simulation, gaming interactivity, | It does not have these types of modes to deliver the |

| | | |
|----|--|--|
| | web based seminar, on the job training etc. | knowledge. |
| 6. | Many E-learning processes are economically feasible and it also provides the scope of sharing innovations, findings and improvements of instructors regarding the learning contents. | It does not have these types of facilities. |
| 7. | It deals with individual interactivity. | Class-room instruction deals with mass. Individual interactivity is not possible here due to the limitation of time. |

5. LIMITATIONS

There are some problems to run the E-learning process smoothly. Such as:

- It is true that E-learning provides best quality knowledge but it is sometimes seemed to be not economically feasible to some extent.
- Complexity is there in handling the system.
- E-learning mainly follows the English language to teach. The pupils who do not understand English, never cope-up with the system.
- It has a limitation in course offerings which is problematic for larger-sized corporate market.
- It has risks too. Change is a continuous process. So the system should always be upgraded otherwise the quality will be degenerated
- Due to lack of profitability many E-learning companies or institutions are merged.
- User's behavioral change is also a threat to E-learning process.

6. FUTURE SCOPE

- In future technological upgradation and availability helps E-learning to spread its wings.
- It will enrich the skills of employees in the organizations which will help to motivate them to give their efficiency in work.
- It will create the more flexible atmosphere which can be changed according to the situation.
- Time to time it will be economically feasible so that people of rural area can access it.
- A debriefing session by E-learning institutions will help the learners to handle the system smoothly.
- E-learning institutions or organizations should keep in mind about the requirements of the students too.
- Effective negotiation is a major tool of E-learning.
- Instructors should be careful in selecting the tools and techniques of E-learning.
- Instructors should give the opportunity to the learners to create their own action plan. They should encourage the learners to implement the ideas.
- The session should be more dramatic with a touch of emotion, texture, graphics so that it can create an unending impact on the learners' mind.
- The following diagram shows how a E-learning process can run smoothly in a systematic way.

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