# E – LEARNING INDIAN SCENARIO & IT'S IMPACT ON LIBRARY AND INFORMATION SCIENCE PROFESSIONALS

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## Abstract

*The aim of e-learning is to explore and to accumulate useful knowledge over and above faster copying, searching and to distributing. The present paper discusses in e-learning, its meaning, role of libraries in e-learning, need of e-learning modules, forms, technologies, components, motivating factors, virtual communication tools, e-learning development in India, Impact on library and information science professionals, advantages and disadvantages.*

**Keywords :** E-learning, Components, Technologies, Virtual Communication Tools, Impact of E-learning

## 1. Introduction

Libraries have changed from mere static storehouse of knowledge to dynamic service centers.  The internet is blurring the  traditional roles of creators, suppliers and distributors of scientific information and injecting a long overdue element of competition.  The concept of information is ageless, Information Technology is the savoir of mankind.  The method of classroom learning is changed to e-learning.  It has played a major role on library and information science professionals.[10]

## 2. Meaning

The term e-learning is used in a variety of ways such as online learning, Computer Based Learning (CBL) Web Based Training (WBT), Online Resource-Based Learning (ORBL) Networked Collaborative Learning (NCL), Computer Supported Collaborative Learning (CSCL) [2].

E-learning is nothing but the extension of classroom learning, here the emphasis is on making available the study material at the convenience of the user.[4]

E-learning is thus the high-tech, net-enabled subset of the larger universe of distance education of distributed learning.[1]

## 3. Role of Librarians in E-Learning

The following are the role of the Librarians in e-learning-

- E-learning nowadays become the order of the day and it is being used to impart distance education.
- Librarians are the information intermediaries who can help the users in making use of e-resources.
- The librarians need to be made aware of the internet and the resources available therein and how to make efficient use of them.
- The idea behind e-learning module is to train both the librarians as well as the users regarding the efficient use of e-resources.
- The emphasis is on the resources related to librarianship in addition to general topics of interest [4 & 5]

## 4.    Need of e-learning Modules

- Effective usage of the information resources, particularly those in electronic media such as e-journals and databases, require continuous training to user.

- The need was to develop e-learning modules to provide for both self-education and trainer assisted education [4 & 5]

## 5.    Forms of e-learning

Robin Manson(2002) describes three forms of e-learning: Web-based training, supported online learning and informal e-learning [2]

The following table summarizes the key characteristics of these approaches:

**Table: 1.1. Three forms of e-learning [2]**

| Web-based Training | Supported online Learning | Informal e-learning |
|---|---|---|
| Content- Focused<br>Deliver-driven<br>Individual learning<br>Minimal interaction with tutor<br><br>No collaboration with other learners | Learner Focused<br>Activity drives<br>Small group learning<br>Significant interaction with tutor<br><br>Considerable interaction with other learners | Group-focused<br>Practice-driven<br>Organizational learning<br>Participants act as learners and tutors<br>Multiway<br>Interactions among participants |

## 6.    E-learning Technologies:

E-learning technologies used to support different educational configurations in terms of place and time. Video conferencing for example, is a same times, different place technology, whereas e-mail can support different time, different place.

The following figure shows technologies used in e-learning and their advantage.

| Different Place | **Synchronous interaction**<br>Group interactive video<br>Desktop interactive video<br>Chat sessions<br>Webcams<br>Audio conferencing<br>Collaborative groupware<br>Whiteboards | **Asynchronous interaction**<br>Online discussion forums<br>E-mail<br>Voice mail<br>Video mail<br>Video on demand<br>Web casting<br>Collaborative document editing |
|---|---|---|
| Same Place | **Classroom –based instruction**<br>Black boards<br>Teaching theater<br>In-class labs and groupware<br>Presentation tools | **Shared use**<br>Laboratory assignments<br>Self-paced programmes in Central facility |
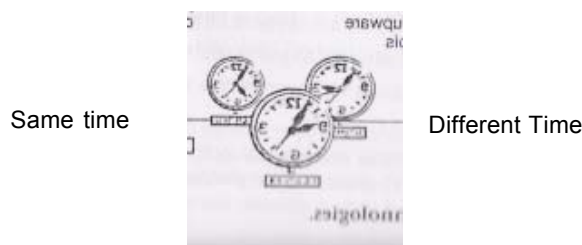
**Figure 2.1 Matrix of e-learning Technologies [1]**

In a synchronous mode, classes are real time, which is instructional and the students are connected through a chat room.

On the other hand a synchronous e-learning is that where a student can have an access to pre-packaged training, based on his requirement and convenience.[8]

## 7.    Components of e-learning:

E-learning is comprised of the following elements (Shintaro, 2003)

- Content delivery methods: e-learning allows content to be adjusted and supplied according to the level of progress of the individual learner.

- Live broadcasting: e-learning can be a two-way system that allows participants to take-tests, ask questions, or respond to questionnaires.

- Video-on Demand: This technology is available via cable television (CATV) systems. Here large number of learners can access vide content whenever they like.

- Interactive Communications: There are two approaches, distance education and community approach.

In the distance education approach, the instructor can interact with the learners through text messaging systems, or via audio video communications. On the other hand, in the community approach, the instructor becomes thefocal point of a virtual class and it is also possible to hold discussions with experts   or specific themes.[8]

## 8.    Motivating Factors:

The following are the motivating factors of e-learning:

E-learning is increased in higher education in US market and there is a  massive movement for global e-learning.

- Employees want to enhance their learning opportunities.
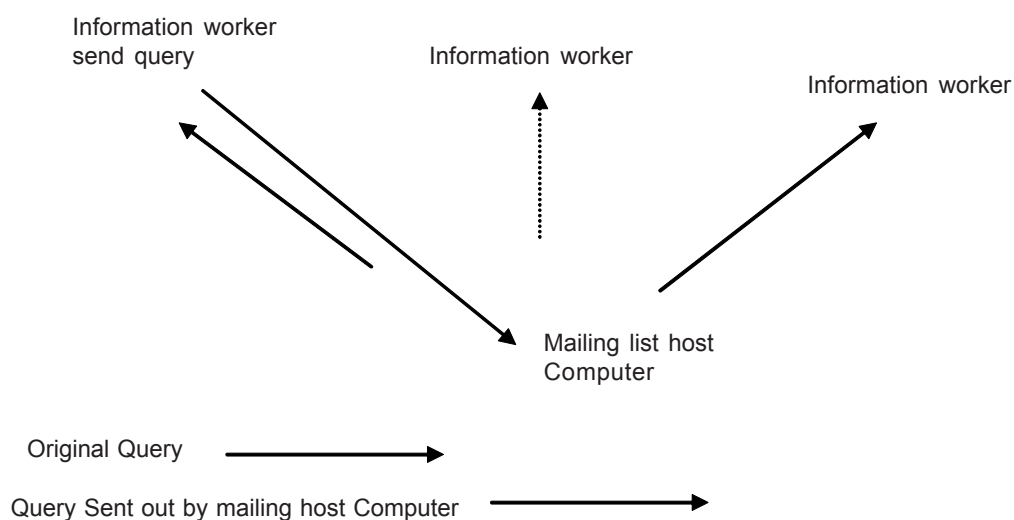- Wide spread proliferation of information technology has enable the

- Employees to have access to internet.

- Due to globalization of business, it is essential to bring employees together at the same time.

- Competition is increased in the market by training the manpower.[8]

## 9.    Virtual Communication Tools

The following tools are covered they are:

- **E-mails:** E-mail is used by information workers, librarians and others for  formal and informal learning and teaching activities

- **Mailing Lists:** It is possible to send e-mails to groups using mailing lists.  The process is managed by a hosting service that maintain a list of all the different discussion lists and the people who subscribe to them.  It is run by a mail server.

**Fig .2 : Diagram shows operation of maili ng list**

Information worker
send query

Information worker

Information worker

Mailing list host
Computer

Original Query

Query Sent out by mailing host Computer

- **News Groups:** The user can read and post message in a single environment rather than a series of e-mails arriving at different times.  Here an individual will send a message to a central source, which then copies it to individuals and other news groups.

- **Bulletin Boards:** Bulletin boards provide a facility for discussion under  various topic headings and not in real time.  Many library and information services provide bulletin boards within their websites as a means of enabling their customers to discuss ideas and share information.

**Figure 2.3 Diagram shows the operation of a news group**
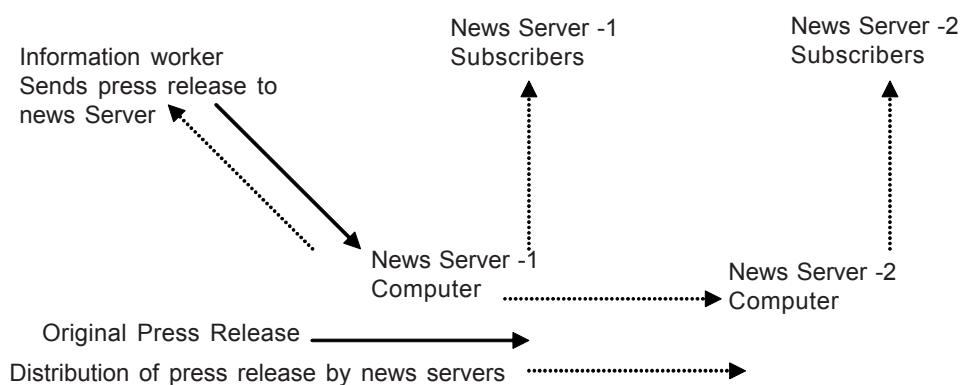


- **Web forms:** Web forms are often used as a means for providing a reference service within a library or information unit. They are commonly based in –

  - Reference service

  - Administration of servicing such as mentoring programmes.

  - As a tool for obtaining information from participants on e-learning programme.

- **Polling :** Polling enables us to setup a survey/questionnaire and obtain feedback for a wide range of people.

- **Instant messaging:** It enables us to send and display a message on someone's screen in a matter of seconds. It means the staff who is working on a busy reference or help point may message a colleague with a question and obtain response.

- **Chat or conferencing:** This enables users to hold a live discussion by sending each other short written messages.

- **Internet Telephony:** In this tool a user can make calls by using the internet. An individual can make distance phone calls through the computer and the internet without paying long-distance phone charges.

- **Video conferencing:** it requires specialists and very expensive machines are used in video conferencing.

- **Virtual worlds:** Used for e-learning within Universities, it is possible to access through dimensional virtual worlds [2]

## 10    E-learning developments in India

In under developed country, e-learning can raise the level of education, literacy and economic development. The adoption of e-learning in all spheres corporates, schools, universities etc, is low at present.  E-learning in India is more successful in the corporate segment where it is seen as a means of achieving business goals and motivating employees.

The government of India has always considered the use of information and communication technologies as means of mass education.  From the use of satellite in early 1970s to the present in a dedicated satellite for education (EDUSAT).

India is progressed in information technology sector, the first online education enterprise with private initiative, when the National Institute of Information Technology (NIIT limited) started Netvarsity in 1996.

However, the National Association of Software and Services companies (NASSCOM)'s Market Intelligence Service Reports that e-learning is in an infant stage.

The e-learning came into existence from National Task Force on Information Technology and Software Development constituted by the Prime Minister of India in 1998.

In 1999 the Indira Gandhi National Open University (IGNOU) started Virtual Campus Initiatives (VCI) with 2 programmes –

a)      The Bachelor of Information Technology (BIT)

b)      Advanced Diploma in Information Technology (ADIT) in collaboration with Edexel, UK and the Government of India, Ministry of Information Technology.

The Yashwantrao Chavan Maharashtra Open University (YCMOU) used e-learning for its Electronics Engineering Diploma Programme (EEDP) in 2002.

Tamil Virtual University established in 2000, to provide Internet-based resources for the Tamil Communities living in different parts of the globe and others those who are interested in learning Tamil.

Indian Institute of Management, Bangalore (IIM-B) used e-learning to supplement face-to-face teaching.

The University Grants Commission (UGC) organized a dialogue on "Enhancing Higher Education through E-learning" in collaboration with the Common Wealth of Learning (COL) Vancover from 17-19, November 2003 at New Delhi.[3]

## 11.    Impact of e-learning on library and information science professionals

In order to promote e-learning, it is very important to develop library and information science professionals, competencies in use of web-technologies.  Parihar (2004) identified the following bottle necks to introduce Information Communication Technologies (ICT) in academic set up –

●      Teachers have to make a move to new education, but lack time.

●      Teachers fear that ICT will dislocate them.

●      Teachers are ensure of the security provisions for their study materials.

●      Perceived unreliability of network servicing and local computing services.[3]

Impact on LIS professionals: E-learning offers opportunities and Challenges for information workers in the following areas

- Offer new learning opportunities to develop their knowledge and skills in a wide range of areas.

- Growth in employment opportunities associated with e-learning.

- It offers new opportunities to take part in collaborative development.

- Developed new roles and responsibilities within the libraries and information units.

- It offers opportunities to work from home.

- It offers opportunities and challenges to maintain a healthy life/work balance.

- Virtual communication tools helped in information exchange, sharing of ideas and support within the library and Information community.

E-learning offers the opportunity for information workers across different countries to work together and construct their own professional knowledge [2]

### 11.1 Advantages

The following are the advantages of e-learning.

- Lower costs

- Time savings

- Flexibility

- Faster response

- Greater effectiveness

- Better Competitiveness

- E-learning complements the process and can help reach out the masses.

- E-learning lies in its ability to cover distances.

- The consistency that e-learning provides, e-learning is self-paced, and learning is done at the learners.

- Learning resources can be pace easily developed using a variety of standard packages.

- One can make use of, and link into other resources available on the internet.

- Online delivery cheap as there are no printing or distribution costs.

- It is easy to track learner activity and progress.

- Electronic learning where the student can access the study modules through web, irrespective of the location, time etc.

- It is interactive and can serve as a substitute for a classroom teaching environment.[4,6,&8]

### 11.2 Disadvantages:

The following are the disadvantages:

- Many people find it daunting, especially at first.

- The student and tutor need reliable access to a computer and internet.

- The student and tutor need basic information technology skills.

- Training is required for both tutor and student.

- The development of high-quality learning materials is time-consuming and expensive.

- Online tutoring can be more time-consuming than face to face tutoring.

- Learning is a social process and many people enjoy face-to-face interactions.

- The use of the large virtual learning environments is expensive and may demand additional equipment and specialized staff.

- Some learning environments require state of the art computers and the most up to date browser.

- Blended solutions can be expensive as they may involve the development of expensive online learning resources and providing technology based support as well as face- to-face support [2]

## 12. Conclusion

Information technology is developing at a rapid pace and forcing a change in the structure and dynamics of the information society. Library professionals cannot run away from this change, they have to accept the challenge they face in the new millennium. E-learning in India has to improve its quality & service. The quality of the e-learning experience follows from the quality of the course modules and of the interactions among students and instructors that make up online courses.

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