

# Emerging Web-based Learning for LIS Professionals: An Innovative, Informative and Interactive Tool

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## Abstract

*This article explores the different e-learning modes especially the web-based e-learning and how it is suitable for LIS professionals depending on the subject content and its scope. It also focuses how web-based learning can complement current situation of library and library professionals. New technology leaves librarians with ample of options to choose from for upgrading their desired knowledge and skills. Knowledge of different web-based learning methods and available resources will help librarians to leverage the opportunity to the fullest and stay relevant.*

**Keywords:** Education, E-Learning, Online Learning, Web-based Learning, Web-based Learning Tools

## 1. Introduction

The growth of a nation reflects in its education system. Education is reciprocal to national growth. An educated, learned and an informed society helps to build a better nation. India being one of the largest countries in the world with a wide population, many citizens face constraint to get higher education due to the remote location, financial crisis, physical constraint, or their other priorities. But one thing that has come up with the advent of Information Communication Technologies (ICT) is web 2.0 and we are still progressing towards web 3.0, semantics, natural language processing, artificial intelligence, are all going to make our life easy. The learning which is facilitated and supported by ICT is e-learning. The www has a great contribution towards e-learning process. It has emerged as one the most innovative, informative and interactive way of learning. Now in India, a few institutions have started online courses which are use e-learning

process throughout the curriculum or a part of the curriculum which is otherwise known as dual mode / blended learning.

Ministry of Electronic & Information Technology, Government of India has realised the potential of e-learning and engaged in many e-learning initiatives through R&D projects. It involves academic educational institutes and R&D labs for development of e-learning tools with high quality interactive simulation environment, personalized learning, Open Educational Resources (OER), adaptable e-learning, accessibility models for the disabled, ubiquitous learning, augmented reality, gaming environment for learning for specific target groups etc. The Ministry of Human Resource Development has created different web portal/e-learning platforms like; Sakshat, e-GyanKosh, IGNOU FlexiLearn, National Programme on Technology Enhanced Learning (NPTEL), Consortium for Educational Communication (CEC), Institute of Life Long Learning (ILLL), e-PG Pathshala, by INFLIBNET for higher education.



In LIS discipline, initiatives are being taken for incorporating web-based learning for students, researchers, faculties and working LIS professionals. These initiatives can be categorized into three levels;

### 1.1 Government Level

Government started projects eGyankosh, ePG Pathshala, IGNOU Video channel, which contains

BLIS and MLIS program course materials in well categorized way in pdf form and videos. LIS Learning: An e-learning portal, which is being maintained by Aligarh Muslim University and funded by University Grants Commission (UGC).



**Figure 1: e-PG Pathshala**  
Source: <http://epgp.inflibnet.ac.in/>

### 1.2 Educational Institutes/ Organizational Level

Tata Institute of Social Sciences has started PGDLIM program which is a blended form of learning. Students need to attend the class room training for 14 days in a semester and remaining part of learning is carried out by web-based learning platform, Moodle. Course material sharing, assignment submission, general discussion among group,

sharing grades with the faculty feedback are done through Moodle. Corporate libraries like Tata Consultancy Services taking advantage of ICT and incorporating more video/ audio conferencing mode of learning into their staff learning programmes. Librarian's Digital Library (LDL) is being hosted and maintained by Documentation Research and Training Centre, Bangalore.

### 1.3 Individual Level

People are making effort at individual levels to offer information to all LIS fraternity through the web by blogs, social media, mailing list, subject gateways, organizing online conferences, online courses etc. Example- LIS-LINK, LIS CAFE, Info librarian, online course on research methodology or portals for preparation of certification exams; state level eligibility test, national level eligibility test in library and information science. These portals contain many useful resources in the form of subject gateway, hyperlink to video/podcast, solved questions, quiz etc.

## 2. Web-based learning for Library and Information Science Professional

E-learning opens up new avenue for better learning experience for LIS students, researchers, faculties, and working professionals. In web 2.0 era e-learning offers numerous options in its many and varied forms, it is suitable for any learning activity which does not require face-to-face meeting. LIS is an interdisciplinary subject which overlaps with computer science, various social sciences, statistics, systems analysis, management, etc. It is a multi-faceted and multi-dimensional subject in which content type varies. Based on the proper analysis and information requirements, effective mode of e-learning can be determined, which will lead to a great learning experience fulfilling the purpose of effective learning.

E-learning can be broadly categorized into two, which take place in synchronous and asynchronous mode. Learning which takes place in real time is the synchronous mode of learning. It requires instructor and learner to be available at a given time. It can be

done through chat, IM, video & audio conference, live webcasting, application sharing, whiteboard, polling virtual class rooms, etc. Asynchronous learning is time independent, it does not occur in real time or simultaneously. It is self-paced. Students ideally complete the course at their pace by using an e-learning platform/learning management system. It takes place through audio/video, email, discussion forum, wiki, blog, webcasting, conferencing, simulation, and games based learning.

Web-based learning is a subset of computer-based learning and e-learning. Here material is made accessible on the internet by applying web technologies. A typical web-based learning has text and graphics, animation, audio and video, and needs additional bandwidth and software to work optimally. Now most of the e-learning is web- based or online. So it is interchangeably used with “online courses” or “web-based instruction”. Web-based learning has its own advantages over other forms of e-learning due to its easy content update, usage control, linking facility, multi-platform features.

Web-based learning has different types or modes on the basis of the medium used, content type, format type and their scope. Their features may sometimes overlap with each other. Moreover, web-based learning comes in many variations and often a combination of the following:

### 2.1 Virtual Instructor-Led Training (VILT)

Virtual Instructor-Led Training (VILT) or Virtual Classroom Training (VCT) is the training that is delivered in a virtual or simulated environment. It allows instructor and learner to interact and discuss the training material, either individually or in a group setting, being in separate locations. These environments are designed to simulate the traditional

classroom or learning experience. VILT can take place in synchronously or asynchronous method. Virtual instructor-led training in academia is a powerful tool now. Many educational institutions are opting for online graduate and undergraduate degree programs based on VILT technology. In addition to this, schools are also coming forward to launch Massive Open Online Course (MOOC) platforms to provide free education courseware to a global audience, often in collaboration with other institutions.

## 2.2 Web-based Video/ Podcast

There are numerous educational video and audio platform available on the web, some are paid, and some open access. The flexibility of Internet technology creates opportunity for gray areas around the concepts of synchronous and asynchronous. For example, video and audio sessions can be recorded and made available for learners who cannot attend a live event.

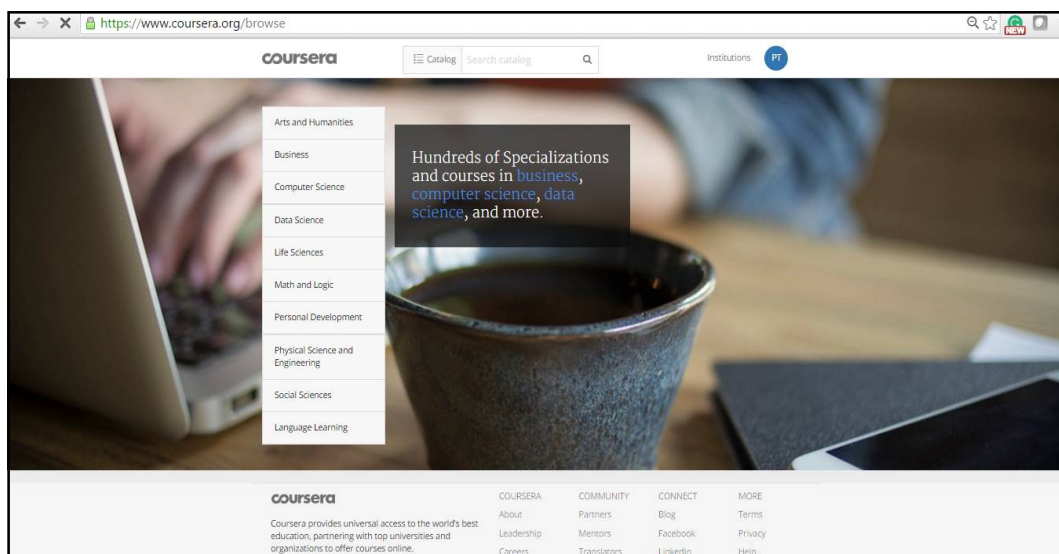
Examples of video educational sites are; Academic Earth, Big Think, Brightstorm, CosmoLearning, The Futures Channel, Howcast, Internet Archive, iTunes U, Khan Academy, Learner.org, Math TV, MIT Video MIT Video, NeoK12, Research Channel ResearchChannel, PBS Video PBS, SchoolTube, SchoolsWorld, Snag Films, Teacher Tube, TED, Videojug, WatchKnowLearn, WonderHowTo, YouTube EDU etc . Additional sites that are not free but offer outstanding content: BrainPOP, Lynda from LinkedIn, etc.

LIS specific videos which are available on the web are IGNOU Video channel, ALA recorded webinars, Recorded class room teaching by an individual institutes or on video hosting site like You Tube.

## 2.3 Massive Open Online Courses

MOOCs, or Massive Open Online Courses, have become a popular option for learners, as numerous institutions collaborate with Coursera, edX, FutureLearn, Udacity and others to make their online courses reach to the larger group. MOOC platforms are in continuous partnership with research universities, colleges, and community colleges, all of whom are eager to offer their brands to students around the world. Educational opportunities that were once restricted to a specific group are now openly and freely available to anyone, anywhere with internet access. The scale of participation and its openness differentiate MOOC from other web-based learning. As a result, learners enrol in huge numbers, from all over the world, with varying levels of knowledge and expertise in subject matters related to courses. Furthermore, MOOCs are not confined to a strict school-year calendar or semester system. They start throughout the year and last for the number of weeks determined by the concerned professor. In case one has missed the deadline, its prompts learners or provides another chance to enrol for next session and resume the learning process and do not require starting from the beginning.

Webjunctions by OCLC, WIPO academy by WIPO, Google Web Academy are few examples of the initiative by individual organizations.



**Figure 2: MOOC-Coursera (Source: <https://www.coursera.org/>)**

## 2.4 Open Educational Resources

Open educational resources (OER) are the resources available on the web for teaching, learning, or research purpose. It is in textbooks, course material, and other learning form. These are created by subject experts in LIS. Free access to OER removes the barrier to quality educational content, for all learners. E-Gyankosh by IGNOU and e-PG Pathshala by joint collaboration of UGC and MHRD contain quality educational resources for library and information science along with other subject's contents.

## 2.5 Courseware

Courseware has evolved from being an aided course material to an entire course package. It comes in different format like html pages, zipped course files, printable PDFs, online textbooks and complete video lectures, etc. It can incorporate any knowledge area, but IT subjects are the most common. It can be hosted by individual institutes or in collaboration with other institutes in form of MOOC platform. It could be paid or free, otherwise known as, Open

Courseware. MIT Open coursewares are open publication of material from thousands of MIT courses, covering the entire MIT curriculum. edX is a MOOC, joint venture of Massachusetts Institute of Technology and Harvard University which host courses in a wide range of disciplines.

## 3. Need for Web- Based Learning for LIS professionals

Learning should be a continuous process for LIS professionals. Here is some major reason which demands LIS professionals to indulge more in web-based learning.

### 3.1 Advancement of Technology

The Internet is omnipresent now. Device compatibility, cheaper data plans offered by telecom companies, attractive offer by Internet service providers, Free Wi-Fi zones in the main cities have made the access to internet quite easy. It has also become the “must have” for all different age group and different genre of the population with a different purpose. Seeking for information is no more

confined to the human being or the conventional source of information. Now with mobile in hand, one can simply speak up and find the relevant information from the Internet with the Google Voice search app. Likewise, many search engine companies are making a continuous effort to make search easy and user-friendly. With the Google Vs Librarian, a much talk about the topic now, certainly librarians have all the potential to provide better information than any search engine. But librarians need to be ready to play the role of a smart librarian.

### **3.2 Time Constraint**

Librarians remain occupied with various activities throughout the financial year with book procurement, library annual events, book exhibition, user orientation programs, vendor contact for book / journal or database subscription or renewal, audit, library committee meeting, taking the suggestion, implementation, stock verification, etc. Escape from work and taking time out for full-time classroom training is an unrealistic task. Whereas enrolling for an online course and learning through an e-learning platform is possible. Here e-learning could be synchronous and even asynchronous which progress at its pace with a flexible time frame to complete the training.

E-learning platforms also come with the added feature of time management for the learner. It helps to plan activities in a calendar and reminds learner to finish the task on time.

### **3.3 Easy Access**

Web-based learning is accessible 24x7 and device compatibility makes it easier to access. Moreover a learner may not require being an expert in technology to access the web-based learning platform. All these features give ample opportunity

to a learner to complete the learning program with flexible time frame and ease.

### **3.4 Multifaceted role of LIS Professionals**

With a degree in library and information science, one can work as a library staff in any library. Although the nature of work may differ, the basic routine task remains the same. LIS professionals have the opportunity to work in different types of organizations, from a school library to space research organization. It becomes difficult to inculcate all these skills in a time bound rigorous program of BLISc/ MLISc. LIS professionals need special training to fit into these job requirements.

### **3.5 Location Constraint**

Many students have their dream institute to get a degree from. E-learning makes it possible to earn a degree, short term or a certificate course from a university of home county or abroad, without actually travelling to the distant academic institute.

### **3.6 Image Management**

Unlike developed countries, library science is still either an unknown subject or not a popular choice among students to pursue a career. With this lack of awareness, library users who are not frequent or non-user have a stereotyped notion of librarians. An updated, informed, and well equipped librarian helps to build an image of library among such non-users and can help them to become a regular user of library.

### **3.7 Lifelong Learning**

Learning something new, long after graduating from LIS School, not only makes a learner knowledgeable but also keeps motivated to do well in the field. Learning should be a never ending process. Moreover, e-learning has opened up with increased flexibility of learning.

### **3.8 Situation Demand**

The situation demands various changes in the library to stay relevant to the current technology. Library may be in a need to digitize their existing record or have to switch from one library management software to another, or start a library page or a repository or may have to create a mobile app for library users. Opportunity to expand the library services is huge for a knowledgeable and skilled LIS professional.

### **3.9 Competencies Required for LIS Professional**

It is not just the technical knowledge that makes good LIS professionals. There are many competencies needed for a successful librarian. Excellent communication, being assertive, handling difficult user, email writing skills, good customer service, managerial skills, etc. When a knowledgeable and well behaved librarian interacts with the user, he/ she not only create own image but of LIS profession too. Eventually, a satisfied user becomes the advocate for the librarian and the library.

### **3.10 Currency of Content**

LIS is an emerging discipline. New procedures and applications get added to it in the routine and older get obsolete. Here the content demands frequent update and reach to the intended group as soon as possible. Web based learning enables instruction or the content to be updated instantly and learners from across the globe can access the latest ideas, without waiting for the materials to be published through print, etc.

### **3.11 Knowledge Delivery**

In LIS, learners come from diverse background, prior knowledge, and different age groups. Here e-learning brings learners to a consistent level by acting as a

levelling device and it also ensure, instructor-led instruction have an informed pool to address. So, more focus can be given to classroom on higher-level skills and knowledge application.

### **3.12 Cost Effective**

It omits the travel and other related expenses. The experience may not be real time but the cost saving will be substantial and affordable.

### **3.13 Micro Learning**

E-learning offers a new way of learning. It's gaining popularity due to pin pointed lessons, short and crisp information and flexible learning activities which can easily incorporate into a librarian's busy schedule. Due to its short and crisp nature of the content, cognitive load on learner is considerably lighter. And more importantly, this type of learning is ideally suited for the device like Smartphone, which most of the people have access to.

## **4. Conclusion**

LIS education has a direct impact on how libraries function and play their role. The future of web-based learning is bright. New web-based learning methods should be encouraged to flourish by incorporating more of these in LIS. Librarians need to be well equipped to provide the best information services. It is high time for librarians to embrace web-based learning tools and technology to stay relevant, irrespective of their job profile, background, and experience.

The biggest shortcoming of web-based learning could be their pricing model. Now many web-based learning platforms claim to be free, but they might not be absolutely free. In many cases, one can have the free access to the content. It is good as long as a learner just wants to learn and do not have the

intention of acquiring the certificate to get acknowledged and to showcase achievements. Learners should be well aware of the pricing model before enrolling for any course. It is also important to verify the source or the authenticity of the course content, as the web is open for all and any one can share their inputs. LIS professionals have to overcome the shortcomings of these web-based learning and leverage the facility of e-learning by adopting the technology. An educated librarian can make a real difference to user experience and the effectiveness of information resources, which ultimately fulfil the purpose of library/ information centre. Excellent information service is what makes a long lasting impression on users' mind, and portray the library and librarianship in large.

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