

Use of Web 2.0 Services and E-Learning for Teaching and Learning Purposes among Indian Library and Information Science Department

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Abstract

The paper covers the status of contents available at Universities/LIS Departments websites related to the teaching and learning purposes. Data collected and analysed in light of current development of e-learning and contents creation funded by NME-ICT. Status indicates Departments/Universities need to be motivated to use and create platform for local content development and management. Some mandatory provisions for teachers and for students needed from UGC (University Grants Commission side to use of e-learning, web 2.0 enabled services that will help content creation and use among the LIS community.

Keywords: LIS Department, Web 2.0, e-learning

1. Introduction

Library and Information Science is an interdisciplinary or multidisciplinary subject covers practical and theoretical aspects related to the management, information retrieval, information technology, documentation collection building, collection organization, preservation, and dissemination of information resource and related areas to libraries/information centers. This subject was started with traditional approach to manage books in the libraries and accommodated various tools techniques of information retrieval & management. Subject covers computer, communication technology, along with basic approaches of librarianship and information management (Wikipedia contributors, 2012a, July 4). Education for Librarianship/Library Science is the term for the educational preparation for the development of professional librarians, information management, storage, retrieval skills, tools and techniques related to this (Wikipedia contributors, 2012b, July 9). Now Library and information Science is considered as a professional course, student with higher qualification started joining the course. If we go through the past the Library and information science is slowly became popular in India. Until the 19th century, the librarian in charge of an academic collection was normally a scholar, often a university professor with a special interest in the library. There were no training programs, and the new librarian was expected to follow the practices of other similar libraries. Later on this was documented and traditional system of librarianship started emerging. Therefore the LIS education in early years was mainly based on traditional aspects of librarianship i.e. cataloguing and classification, the course content (syllabi) gradually improved and ICT (Information and Communication Technology), Management and related theory, principals, knowledge management, Online Content management included to meet the requirement of the emerging job opportunities. Mortezaie, Lila and Naghshineh, (2002) mentioned that Librarianship itself has experienced radical changes to the face challenges of new technology and its transformation in information material. These changes have made their mark on higher education, especially on LIS-education too.

Faster development in ICT and its powerful use for storage and retrieval has made a change in the LIS curriculum. To serve the information requirement of the academic communities, Library and Information professionals need to be always updated with new trends and techniques of Librarianship. Development of ICT, internet based services such as web based dissemination of Learning Material, Social Networking (use of blog wikis), Use of content managements etc provided an opportunities to the LIS professionals to serve the desired information through their Libraries. But these features of web have also reflected teaching and research too.

Development of Web 2.0, e-learning, digital libraries has helped teachers and scholars to avail the facility of online interaction, dissemination of ideas and contents. To know this with special reference to use of web based services among the LIS Departments/Universities in India. An effort is made to survey the availability of the features related to the web 2.0, e-learning, digital library, institutional repositories at institutional web sites to fulfil the need of the students of Library and Information Science.

In India, there are number of institutions started using of technology, some of them have adopted the e-learning for delivery of contents such as IGNOU, Punjab Technical Universtiy Online Virtual Campus, Yashwantrao Chavan Maharashtra Open University (UNESCO 2012), GBPUAT (Singh, 2010). As per Moodle.org: Moodle Statistics. (n.d.). the total statistical records Registered sites 73206, Countries 224, Courses 6877091, Users 64353448, Teachers 1287960, Enrolments 51255398, Forum posts 113757981, Resources 61447634, Quiz questions 135874440. This includes academic institutions, private and commercial vendors. This shows that e-learning is popular among the academic community all across the world, but in India it has not gained that much momentum.

2. Methodology

Based on UGC Model Curriculum (2001) a list Library and Information Science department Identified, for this survey. The observation in regard of web 2.0 based services offered by the departments were made using their Institutional websites/pages.

3. Web 2.0 Services and e-Learning

Collected data by observation of the websites of 78 universities represented in the below mentioned Table-1 .

Table -1

Interactive Contents	No. of Universities Using
• E-discussion	6
• Blogs/Wikis/RSS	3
• E-Mail Address for Departmental Contact	23
Content Management and Sharing	
• Digital Library/Institutional Repositories	9
• Online Thesis/Dissertation	21

In addition to above an effort is also made to find out their contribution on common platform created for bibliographic databases, Thesis/Dissertation by INFLIBNET Centre.

Table -2

• Content Available on INFLIBNET Website	58
• Subscribe UGC-Infonet Digital Library Consortium	30

3.1 Use of Online Interaction

Online Interaction services are important for academic communication. Availability of web 2.0 enabled services on Departments/Universities official sites such as e-discussion, Blog/wikis, and Email for academic communication can help the students and teachers to interact with each other. But the result shows that use of interactive contents through Institutional website are not much popular among the LIS academic community. There is great need to create awareness, expertise, and development of dedicated system for interactive academic communication among the LIS academic community.

3.2 Content Management System and Sharing

Content Management Systems and sharing are important for development of digital library, institutional repositories, courseware etc. Mentioned result shows that the availability of Content Management System such as Digital Library/Institutional Repositories. Only few departments of LIS at Universities are using Content Management Systems, Digital Libraries, and Institutional Repositories for sharing information related to Online Projects / Theses / Dissertations and tutorial lecture etc.

3.3 Contribution on Common Platform for Bibliographic Databases, Thesis/Dissertation created by INFLIBNET Centre

Many universities have hosted contents on common platform created by INFLIBNET, hosted contents on INFLIBNET site; this includes thesis/dissertations detail, bibliographic information. The result indicate that LIS Departments have not made much efforts to develop institutional/departmental repository, digital libraries, but Universities as whole sharing their contents using collaborative platform created by INFLIBNET for bibliographic and full text information.

INFLIBNET has played great role in this regard, but this kind of sharing has not promoted local content creation among the teaching Departments, there is need to motivate the Departments and faculties to use CMS systems for content creation and sharing at local and at national level.

3.4 E-Learning System Use Implementation

E-learning System offers a great potential for sharing of high quality learning resources, information among the working and teaching groups (Singh and Gulati, 2010). Jaiswal and Gupta (2010), has defined e-Learning as “the use of the internet/extranet, audio and video tape, satellite broadcast, interactive TV, and CD-ROM,

not only for content delivery, but also for interaction among participants”. More recently, the mobile and wireless learning applications are also added i e, m-Learning. Agarawal (2009) defined Electronic Learning (or e-Learning) is a type of Technology Supported education/Learning (TSL) where the medium of instruction is computer technology.

To implement e-learning in reality we need Learning Management System that can manage content repository, content dissemination, course scheduling, learning process, assessment and evaluation etc. There are various readymade LMS software, available for learning management, but it is difficult to chose one readymade tool, which can fulfil all the desired requirement of the e-learning implementation. Tripathi and Jeevan (2010) it has to be decided whether open source software or commercially available software will be used. As we know, open sources are much better, in terms of development and future prospects therefore open source need to be preferred wherever they are available, additional features, customisation may be made by the implementing agency if needed. The content, course pages should have multimedia text, graphics, animation; adequate links and should be easy to navigate. There should be provision for support tools facility to upload files, submit assignments, availing online tests, monitoring learning progress, research reports, bookmarking facilities to mark where one stops in a particular session.

There are few of LIS departments only “Using online of e-learning System & Tutorials”.

The observation also analysed other kind of Information available on websites uploaded by the majority of Departments of static nature. This indicates that a universities as whole has started using online admission, fee collection, syllabus etc at various places as dynamic contents. But systematic e-Learning, dynamic content development and dissemination is not yet implemented by the LIS Departments at large.

As of now only IGNOU has implemented e-learning. Online learning, online tutorials, E-examinations are not yet initiated by the any of the regular Library and Information Science Departments only IGNOU has implemented it in distance mode.

Government initiatives such as pilot project SAKSHAT Portal launched in 2006 to facilitate lifelong learning for students, teachers and those in employment or in pursuit of knowledge free of cost to them (Patil & Sattikar, 2011, p. 1). NME-ICT Government initiation has provided support under various projects for development of contents and systems. The observation of these projects shows duplication of efforts in the similar subject areas, duplication of content creation in the project funded by NME-ICT.

Apart from duplication in content creation NME-ICT provided financial supports for development of ERP (Enterprise Resource Planning) system related to academic resource and contents management. The ERP system includes an integrated system that operates in real time, without relying on periodic updates, with a common database, which supports all applications. It supports a consistent look and feel throughout each module (Enterprise Resource Planning, 2012, December 31). Various institutions such as Indian Institute of Technology, Kanpur, Dayalbagh Educational Institute, Agra, Indian Institute of Technology, Roorkee, National Institute of Technology, Hamirpur, Amrita Vishwa Vidyapeetham, Coimbatore, Indira Gandhi National

Open University, New Delhi are involved for development of ERP system with support from NME-ICT. Other side the institutions which are involved in content creation and development under NME-ICT projects such as INFLIBNET e-PG Pathshala (PG Contents), CEC (UG Content) and many others, are also involved in development/customization/implementation of ERP system for retrieval/dissemination of the contents developed by them. This is a kind of duplication in system customization, development and implementation. This kind of duplication can be avoided by proper cooperation and coordination among the content creator and system developers themselves.

4. Issues

As per observation and discussion majority of LIS users are accessing contents hosted by IGNOU on its website. UGC with the help of the NME- ICT initiated interactive content development but they have not adopted collaborative approach with the Teaching Departments to develop contents and implement e-learning, although they have involved selected teachers, subject experts for content writing, editing etc. But this approach does not help collaborative development of contents due to following reasons.

1. Does not motivate all the teachers to use, adopt and implement e-learning, desired result could not be achieved without involvement of all the teachers.
2. Does not motivate all the Teaching Departments to be a part, to adopt e-learning at their respective departments.
3. All the universities are autonomous institutions, adoption of e-learning at their part will always be the optional, unless until some mandatory provision may be made by University Grants Commission.
4. INFLIBNET and Other NME-ICT project has adopted course based approach UG, PG, Certificate, Diploma, syllabus based content creation. This is resulting duplication in content creation at all level. Instead of course based approach, a modular contents (Topic, Subtopic) based repository may be developed. Subject, sub subject, facets of subject approach may be adopted, for content modules, for contents development and similar approach may be adopted for contents integration, retrieval and teaching, as per requirement of the course curriculum, PG/UG certificate from the repository of contents. Local Contents creation may also be promoted along with use of central repository of contents. Present proposed system of INFLIBNET e-PG Pathshala does not promote local content creation at University Level. If we talk about Library and Information Science contents, CEC, E-Gyankosh of IGNOU and e-PG pathshala of INFLIBNET are involved for content creation for LIS education. It is a kind of duplication in the area of Library and Information Science contents. NME-ICT needs to ensure coordination between all the stack holders.

5. Solution

To obtaining better result in LIS education content development and use at Universities/Departments level it is necessary that the implementation should follow proper policies, planning, strategies and governmental support.

- ◆ Single system for content repository need to be developed to manage the contents related to the subject, that need to include professional teaching/training UG, PG Diplomas, Certificates etc. to informal learning.
- ◆ Collaborative approach need to be used for content development, all the stake holders in content development, access, updating management and monitoring need to be involved.
- ◆ Financial support need to be provided through UGC to all the universities stack holders for content creation, implementation, access, use, promote e-learning. All the teachers, students, and researchers need to be invited to join system in creating open educational resources and collaborative learning communities.

UGC may make the following provision under its policies:

- ◆ Provision of API (Academic Performance Indicator) scores related to career advancement of teachers to act as instructor/content creator to use access, contribute tutorials, and conduct online exams, use test, assignments to supplement traditional teaching.
- ◆ National Assessment and Accreditation Council (NAAC) need to consider use of e-learning by the university/institute along with traditional way of teaching also for assess and accredit institutions of higher education in the country for ranking.
- ◆ Mandatory provision for the LIS Departments, to start conducting at least 20% tutorials, assignment through online, electronic mode in addition to traditional Class Room Teaching.
- ◆ Mandatory provision for the teachers to disseminate/evaluate/submit/use at least 20% tutorials, test, exam assignment related to their teaching through National Learning System.

6. Conclusion

Based on above it can be stated that LIS department have shown interest in sharing of information, they have started sharing some of the information of static nature. They need a platform which can be used, developed managed by the systematic policy, strategy for development, sharing of learning information. Departments/Universities Need to be motivated to create platform for content development and management. Some mandatory provisions for teachers and for students needed to use of e-learning, web 2.0 enabled services that will help content creation and use among the LIS community.

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