Exploring the E-Resources for Educational Use

Dr. M. Natarajan

ABSTRACT

This paper deals with the electronic resources (e-resources) and their different types. The information seeking behavior of students, researchers and faculty in the e-environment are discussed in detail. Explored the open educational resources (OER) created by different organizations are emphasized for open access. Open courseware (OCW), which is available in audio-visual and textual OER are given examples in this paper. Role of library professionals for making the e-resources available to different types of user community is discussed in detail. Impact of students towards e-resources is given with the evaluation of them. It has been concluded that e-resources helps for anytime availability and easy to access, which helps for the researchers to carry out the research on time.

Keywords: Open Educational Resources, Courseware, ICT, e-Resources.

INTRODUCTION

The ability to use library resources (print and non-print) effectively is increasingly becoming recognized as an integral part of undergraduate study and a great concern of library practitioners the world over. The emergence of electronic resources has drastically revamped the status of all the libraries and information centers across the world during the last decade. There has been a rapid urge of the user community to get more and more information online. The development of the information communication technologies (ICT), the rapid rise of electronic databases, and modern e-book technologies have altogether changed the entire scenario of informatics. The users' attitude to information is gradually shifting from the printed documents to electronic resources and thus, it has been their prerogative to know the details of the availability and organization of e-resources like online journals and databases, electronic theses and dissertations (ETDs), government publications, online newspapers, etc. in the information centers. Therefore, it is the time for the information professionals in India to study the different key dimensions of electronic resources and to successfully channel them into the inquisitive minds of users by identifying and addressing some of the issues relating to the use of e-resources. This article deals with different types of e-resources available, including freely available open access materials and their impact for the educational use.

ELECTRONIC RESOURCES

Electronic resources are regarded as the mines of information that are explored through modern ICT devices, refined and redesigned and more often stored in the cyber space in the most concrete and compact form and can be accessed simultaneously from infinite points by a great number of audience. The phrase “electronic resources”, has broadly been defined as, information accessed by a computer, may be useful as bibliographic guides to potential sources but, as of yet, they infrequently appear as cited references in their own right (Graham, 2003). Moreover, e-resources refer to that kind of documents in digital formats which are made available to library users through a computer based information retrieval system. The Internet is said to be the right and most extensively used channel to catch hold of the majority of e-resources through different search engines (e.g. Google, AltaVista, MSN, Yahoo, etc.) and WebOPAC and, of course, some offline databases in CD/DVD formats that can even be accessed without the help of internet. Therefore, it is perceptible that e-resources include online databases, sources from web pages, e-journal articles, electronic personal papers, e-mail messages, newsgroup postings, newsletters, government publications, e-theses and dissertations, e-newspapers, CDs/DVDs, e-books, e-databases, HTML links, digital library materials, institutional repositories, social networks, open access materials, etc.

INFORMATION SEEKING

Today's researchers are using a wide variety of sources for information. Search engines, e-print servers, websites, full-text databases, electronic journals, and print resources are all used by most of the users. Students usually respond positively to recommendations of specific resources by their teachers, friends, or librarians, but convenience remains the most important factor for information use. Users, in general, prefer...
e-journals because they make their work easier and give them the information they need. Fast online access, and the ability to download, print, and send articles electronically are top advantages of e-journals for all. Generally, users take print out the relevant articles for detailed reading. They used the two important features in e-journals viewer-friendly formats, such as HTML, and printer-friendly formats, such as PDF. It seems that concerns over the quality of e-journals diminishing as most peer-reviewed journals are digitized. On the other hand, concerns remain over the quality of web resources, particularly among faculty and librarians who fear that students are using the web indiscriminately. In spite of all the above, there is still some type of confusion over the variety and relative quality of e-resources, in particular among novice users or students (Tenopir et al., 2003).

**TYPES OF E-RESOURCES**

The different types of e-resources are from e-books, e-journals, e-databases, digital library resources, institutional repositories, open access resources, html links, search engines, etc. Even though different types of resources are available, students, staff and others may not be able use in proper way, like searching the internet, from DBs, from e-journals, etc. Also they may not know the metadata, what is available in digital library / institutional repository for searching.

**EDUCATIONAL RESOURCES**

Education Resource Information Centre (ERIC) provides unlimited access to more than 1.3 million bibliographic records of journal articles and other education-related materials, with hundreds of new records added multiple times per week. If available, links to full text are included. Within the ERIC Collection, you will find records for:

- Journal articles
- Books
- Research syntheses
- Conference papers
- Technical reports
- Policy papers
- Other education-related materials

ERIC users include education researchers, teachers, librarians, administrators, education policymakers, instructors and students in teacher-preparation programs, parents, the media and business communities, and the general public. The user community conducts more than thirteen million searches each month through the ERIC Web site and commercial and non-commercial sites.

**OPEN EDUCATIONAL RESOURCES AND THE INDIAN LEARNING LANDSCAPE**

The open educational resources (OER) and open courseware (OCW) are some of the recent innovations that are especially relevant for achieving equitable access to quality education. OER are open content that is freely accessible worldwide from a common portal or gateway. Indian institutions also have recognized the importance and impact of OER to bridge the learning divide in the country. Recently, India's National Knowledge Commission (NKC) has called for a “national e-content and curriculum initiative” to stimulate the creation, adaptation and utilization of OER by Indian institutions. In addition to NKC, University Grants Commissions, National Association of Software and Services Companies and many other advocacy, advisory and policymaking bodies in India are supporting the cause and bridging knowledge and skill gaps (Ghosh, S.B. and Das, 2007; Das, 2011).

India has been experiencing the incremental growth of OER, where a number of national institutions have established OER portals for providing nationwide access to their educational resources. As the majority of higher education and professional education programmes in India are taught in English language, worldwide audiences, particularly who are located in developing countries, are benefiting from the OER produced and hosted in India. Professional and vocational schools in India only have a limited number of highly committed educators. Most of the professional degree colleges are either under-staffed or existing faculty members lack the expertise to impart in depth subject knowledge to their students. Thus, there is a vacuum in formal education system for effective knowledge transfer from teachers to students. Here, innovative technology enabled learning environments create an atmosphere of effective learning and knowledge retention. If a popular technical teacher delivers a lecture from the classroom of an internationally reputed institute, remotely located students of professional colleges still can gain in-depth subject knowledge. The OER developers are expecting an incremental increase of awareness level and self learning motivation so that OER will be reached to lifelong learners across the professions and occupations.

Indian initiatives of open educational resources - Indian OER can be broadly categorized as audio-visual OER and textual OER. Few of the Indian OER initiatives are targeted at school students, whereas most others are targeted at students of technical and vocational education and training (TVET), tertiary education and lifelong learning. Some of the OERs are as follows:

- National Programme on Technology Enhanced Learning (NPTEL) (www.nptel.iitm.ac.in/).
- Learning Object Repository of the Consortium for Educational Communication (CEC) (www.cec-lor.edu.in/)
- eGyanKosh of Indira Gandhi National Open University (IGNOU) (http://in.youtube.com/IGNOU)
- Online textbooks of the National Council of Educational Research and Training (NCERT) (www.ncert.nic.in/html/textbooks.htm).
The impact is:
The use of e-resources by students and faculty are increasing.
places a challenge on information providers to meet this need.
appears to be a training need among graduate students. This help in library usage especially science graduates. There
students are familiar with the library. Graduate students need
information needs. Library staff assumes that all graduate
therefore, a necessity to help students meet some of their
access. Guidance in the use of library resources and services is,
information sources and services to which the library provides
enabling them to make more effective and efficient use of
information sources and services to which the library provides
Guidance in the use of library resources and services is,
therefore, a necessity to help students meet some of their
information needs. Library staff assumes that all graduate
students are familiar with the library. Graduate students need
help in library usage especially science graduates. There
appears to be a training need among graduate students. This
places a challenge on information providers to meet this need.

ROLE OF LIBRARY PROFESSIONALS
Library professional is supposed to
- arrange timely access to relevant serials content in an appropriate medium;
- publicise what’s available and where it might be obtained;
- the right staff structure;
- the right environment; and
- the right budget.

There is also a need for
- early knowledge of budget;
- well-trained adaptable staff with good management to sell the vision;
- to acquire the right information;
- good two-way communication with users and good PR;
- selection and evaluation of suppliers;
- physical environment; and a plan.

Professional is to
- identify the stuff the user wants;
- sufficient funds;
- the necessary infrastructure;
- educate the users;
- get staff to process and deliver; and
- identify how and when the user wants the stuff.

LIBRARY INSTRUCTION
Lubans (1971) and Holland and Powell (1995) which indicated that graduate students need instruction in the use of the library to enable them to make more effective and efficient use of information sources and services to which the library provides access. Guidance in the use of library resources and services is, therefore, a necessity to help students meet some of their information needs. Library staff assumes that all graduate students are familiar with the library. Graduate students need help in library usage especially science graduates. There appears to be a training need among graduate students. This places a challenge on information providers to meet this need.

IMPACT ON STUDENTS
The use of e-resources by students and faculty are increasing. The impact is:

- Students feel more at ease using online (Web-based) resources than CD-ROM databases, and find CD-ROMs less user-friendly with a less intuitive interface. The library is responding to this by subscribing to more Internet/Web-based academic resources.
- Students prefer to use the Web for e-mail (the high percentage that uses Hotmail, Yahoo Mail, etc.). The University might investigate moving towards a Web-based interface for the e-mail system.
- Printing – All of the Windows NT workstations can now send print jobs directly to the printer. The PC beside the printer has been moved to nearer the help desk where staff on hand to help users who may have difficulty with the interface.
- Staffing – an additional member of staff has to be employed and he/she act as a training role.
- Training – basic IT skills training are provided during induction week
- Opening hours – weekend opening hours has to be increased.
- Number of machines is to be increased.

Behavior differs based on the status, subject discipline for subject experts, task, type of institution or workplace, age and gender. In terms of information seeking, today’s researcher seems to be comfortable with using a wide variety of sources for information. Internet search engines, e-print servers, author Web sites, full-text databases, e-journals, and print resources are all used to some degree by most users. Both browsing and searching remain important information-seeking behaviors, but there is some evidence that the amount of searching is going up when users have access to multi-title, full-text databases. Browsing through journal issues is done in print issues or in e-journals for core journal titles. Articles from non-core journals are most often located through searching. Students are highly responsive to recommendations of specific resources by their teachers, friends, or a librarian. Educating both high school and college students in the best resources, how to evaluate Web resources, and search strategies is important. Desktop access, speed of access, and the ability to download, print, and send articles are top advantages of e-journals for all groups. Use of e-journals increases every year. Among faculty members, graduate students, and other professionals, higher use of e-journals is accompanied by a decrease in visits to the physical library. Most readings will come from a relatively small percentage of the collection, but users will read from a greater variety of titles when they are made freely and easily accessible to them. (Tenopir, 2003).

EVALUATION
The evaluation of usage is an assessment of the resource according to the following criteria:
- Content: Scientific and technical accuracy, educational content, curriculum content, etc.
CONCLUSION

The e-resources available in different formats helps and supports the researcher and faculty to carryout the research and for teaching in an efficient manner and quickly, as the e-copies are available in anytime and anywhere. The production and use of OER raises a number of issues including the open licensing. If materials are to be openly and freely shared, they must be licensed in a manner that promotes the desired objective. This article explored the different e-resources and mechanism of use and their impact to the library professionals also, with students and faculty. Web is not yet ubiquitous, and there will certainly be many more challenges ahead. But there is a way forward for OER that will contribute to the promise of education for all.

REFERENCES