curriculum will be undertaken as a primary and most important activity. This is the most significant difference between open educational resources developed worldwide and NPTEL. IIT/IISc faculty would be encouraged to incorporate feedback from user community in their courses and update them.

It is one of the fundamental goals of the project to bring in all the best teachers in the country under the umbrella of NPTEL and record their lectures/seek their collaboration with IITs/IISc and make their courses available for the community under free and open sources agreement. There is already a move to create open virtual laboratories in the Internet for engineering subjects initiated by IIT Delhi which is extremely important for our country. Another primary objective is to forge strong ties with major academic initiatives worldwide such as MIT OCW, Commonwealth of Learning, British Open University, Australian Open Universities and Digital Library initiatives (to mention a few) and with industry for developing new technological tools for learning and dissemination. The number of things that must be done simultaneously is enormous. IITs and IISc must rise to the challenge of education in India posed by the unprecedented and rapid economic growth and the opportunities it provides for globalizing the pool of scientific and technical talent in the country. Together everyone WILL prosper.

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INFORMATION LITERACY AND E-LEARNING
Dr. Khaisar Muneebulla Khan
Professor, Dept of Lib & Information Science, Mangalore University, Mangalagangothri-574 199
E-mail: khaismrk@yahoo.com

Mr. Raju C
Library Project Assistant, Mysore University Library, Manasagangothri, Mysore-570 006
E-mail: rajumlisc@gmail.com

Abstract:
The advance in information technology is changing the educational process both formal and informal in many ways making learning more flexible and tailor made to individual needs. The need and importance, role of E-learning and information literacy for academic staff is highlighted. The paper also states that by combining the information literacy expertise from the US and Australia with e-learning solutions and the growing recognition of e-literacy in the UK, it gives a clear role for librarians in the future. In any country including India there has been significant changes and developments with the impact of ICT, Net working. Consortia approach in Library and information Centres. To conclude, information Literacy programmes and E-learning have become essential to access to the relevant needed information from the voluminous growth of information in this network and digital era.

Keywords: Information Literacy, E-learning, Information Literacy Standards.

1. Introduction
Increasingly, technology extends learning beyond the classroom, and students engage in more self-directed learning. These trends contribute to a need for greater emphasis on developing information literacy skills. Collaboration amongst faculty, librarians, and administrators makes it possible for an information literacy program to work. Faculty members provide curriculum, context, and guidance for students’ learning and evaluate their progress. Academic librarians provide access to resources, maintain collections, and instruct users of those resources and collections. Administrators facilitate cooperation amongst faculty and librarians and finance the infrastructure and collections. Together, we ensure that outcomes for information literacy are achieved and documented.

2. Meaning and Definitions
The first definition of information literacy appeared in 1974 when Paul Zurkowski recommended to the National Commission on Libraries and Information Science (NCLIS) that a national program be established with the end product, “People trained in the application of information resources to their work can be called information literates. They have learned techniques and skills for utilizing the wide range of information tools as well as primary sources in molding information-solutions to their problems.”1 He had estimated that 1/6 of the
population of the U.S. had any concept of the explosion ahead with access to information and how this might affect both their economic lives and their social lives. Many organizations and educational institutions took up the concept of trying to help their clientele become information literate. Librarians in academic and school libraries remodeled their library skills instruction to encompass information literacy. By 1998, information literacy was further defined as visual literacy to include the thinking, learning, and expressing oneself with images. Lastly, computer literacy began as the ability to create and manipulate documents and any data with word processing programs, use of spreadsheets, access to a myriad of databases, and use of a wide variety of other software available. Currently, the term "transliteracy" is being used by some to indicate the widening of skills needed to participate in the current world of technology. The arrival of the World Wide Web made it necessary for the literate person to be able to retrieve information, analyze and manage it making use of it to improve the overall quality of life.

It is useful to first define information literacy for the purposes of this concept. The concept has been defined in numerous ways by authors in the field, but it is generally understood to include the following skills. That is knowledge of information resources in one's subject, ability to construct effective search strategies, ability to critically appraise information sources and the ability to use information sources appropriately, cite and create references.

Information literacy is, therefore, being able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information. Computer literacy involves gaining familiarity with hardware, software applications, and databases as well as an understanding of how technology works. Developing computer literacy is necessary in order to become information literate, as information technology has become an integral part of obtaining access to information and managing it. However, learning critical thinking skills - comprehension, analysis, application, synthesis, and evaluation - is what distinguishes information literacy from the "fluency with technology" that comes with computer literacy.

3. Information Literacy standards

In many aspects of information literacy education the USA and Australia are both more advanced than the UK, in particular with established information literacy standards. They both also have greater standardization in the delivery of information literacy programmes and of information literacy being incorporated into the curriculum at all education levels. In the UK, while information skills feature within the National Curriculum for pre-16 education, within the Further and Higher Education sectors a strategic approach to information skills training to students is yet to be established, although a JISC funded project, The Big Blue, went some way towards establishing this.

The US and Australian Information Literacy Standards are important and can be the turning points for the information literacy standards. In 1998 the Association of College and Research Libraries (ACRL) established a Task Force on Information Literacy Competency Standards and charged it to develop competency standards in this area for higher education. In 2000 the group published its Information Literacy Competency Standards for Higher Education. The full text of the standards is available on their website with a number of case studies of how the standards are being used. The ACRL recognize the central role of information literacy for developing lifelong learners. Five broad standards were established, each with performance indicators and specific outcomes. These included:

- The information literate student determines the nature and extent of the information needed.
- The information literate student accesses needed information effectively and efficiently.
- The information literate student evaluates information and its sources critically and incorporates selected information into his or her knowledge base and value system.
- The information literate student, individually or as a member of a group, uses information effectively to accomplish a specific purpose.
- The information literate student understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally.

The standards provide a framework for assessing the information literate individual. The established competencies can be used as indicators of information literacy by academic staff and librarians. Meanwhile, following the work of the ACRL, the Council of Australian University Librarians published its Information literacy standards in 2001. They reviewed the US standards published the previous year and added two additional standards of their own including: a new standard for which addresses the ability of an individual to control and manipulate information and standard seven that represents information literacy as the intellectual framework, providing the potential for lifelong learning.

Similarly, the UK Information Literacy developments also led to the growth and development of information literacy standards and programmes. Here, the UK SCONUL (Standing Council on University and National Libraries) acknowledged the need to address the issue of information literacy and information skills training for students with the formation of the SCONUL Information Skills Task Force in December 1998. The SCONUL taskforce in their paper "Information skills in higher education: a SCONUL position paper" went some way toward achieving this and highlighted a number of issues which have formed the basis for further evaluation.

The Task Force has identified two levels of competency to the acquisition of information skills within higher education. The first relates to study skills, or the tools needed to be a learner, which students will require to undertake a course of study. This includes:
- The ability to use a library and its resources
- Ability to search for literature
- Appropriate use of citations and references
4. E-literacy and E-learning

Many librarians will be familiar with the term 'information literacy' but e-literacy is a relatively new term emanating from the Universities of Glasgow, Glasgow Caledonian and Strathclyde in Scotland. Martin (2003) argues that the notion of e-literacy is based on the assumption that there are skills, awareness and understandings which will enable individuals firstly to survive and secondly to be more effective, in their e-encounters.

He goes on to define e-literacy as being comprised of computer, information, media, moral and media literacy. The conference attracts IT support providers, librarians, educationists, educators, researchers and policymakers. In many ways these e-literacy skills are more relevant to librarians involved in e-learning initiatives than simply considering information literacy in isolation. However, the field is less well established, the terminology less well defined, so introducing the concept to academic staff is not without problems. However, one of the advantages of the term 'e-literacy' has over information literacy is the use of the 'e' word. Just as e-learning as a concept has very quickly fallen into mainstream use, so perhaps e-literacy will give librarians the edge when selling their skills.

5. E-Literacy / Information Literacy for Academic Staff

Much of the work on information literacy has concentrated on skills and education for students or learner, however, a crucial area must be the information literacy levels of staff that are responsible for the development and implementation of e-learning. Following on from the Big Blue Project, JISC funded the six month Big Blue Connect Project in 2003-06 this project carried out a survey of academic, managerial, administrative and technical staff, to establish how staff access and use information within their work environment. The research found there were a general lack of staff awareness about information skills and a lack of training for staff, in particular nonteaching staff. Where training existed it focused primarily on the development of ICT skills and where staff had received training in the development of information skills, this was mainly in the form of a one-off training session to support the introduction of a new service or resource. Developing information literacy skills, or e-literacy skills, is essential for academic and other support staff to be able to fully engage and exploit library resources in the e-learning system. Engaging with academic staff to develop their own skills also makes them more likely to see the value of building these skills into their courses for students. Building on information literacy programmes offered to students, library staff will need to play an important role in delivering this type of e-literacy education to staff. E-literacy skills for staff might include knowledge of the range of resources available in the digital library, such as which journal titles are available in electronic format. But it would also include teaching a member of staff to build an online reading list and add stable links to electronic journal articles. E-literacy also involves knowledge about copyright and licensing arrangements for electronic resources, what Martin (2003) terms, moral issues. So staff would receive guidance and support about issues such as which resources are licensed to allow downloading for use in the virtual learning environment, and which must be linked to.

and licensing is discussed in greater detail in Chapter Four. Nevertheless, library staff will increasingly be called upon to offer guidance in this area, through a variety of means such as:

- One to one training and support for guidance on specific issues
- Group training sessions for more routine problems such as setting up an online reading list, or learning to use the digital library
- Documentation (printed and web based) that staff can consult on a need to know basis

It is important that e-literacy programmes are not exclusively designed for academic staff or those at the front line in the delivery of e-learning. Library staff should recognize that there is often a team of people who are involved in any e-learning project. Administrative staff, such as departmental or faculty managers and secretaries are often responsible for updating the information within the virtual learning environment. Tasks such as setting up online reading lists may also be routinely undertaken by administrative staff. It is important that the training is offered as widely as possible and is available to other learning support staff.

6. Conclusion

Libraries have always been an integral part of learning, helping learners find, evaluate and exploit resources. Therefore it is not surprising that changes in education are being felt in the library profession. With an increasing number of digital resources, librarians have a crucial role in navigating learners through the complex digital information environment. Information professionals in the education sectors in particular, are also becoming important members of an expanding team of learning support staff. Meanwhile within the library profession it there is a marked interest in the set up and delivery of information literacy programmes, as librarians seek to capitalize on their unique role as educators.

This information provides an overview of recent developments and research within the learning support and information literacy field. The practical examples of initiatives that librarians can become involved and can be noticed from the developments in US, UK and Australia. The wider concept of 'e-literacy' is discussed to identify the skills that both learners and teachers require to fully exploit e-learning. Information literacy initiatives in the UK are somewhat behind the US and Australia in terms of achieving widespread recognition for librarians as educators and raising the profile of information literacy. Therefore, developments from these two countries are particular useful. However, two has shown us how in terms of finding integrated library and e-learning solutions, developments in the UK are very much leading the way. By combining the information literacy expertise from the US and Australia with e-learning solutions and the growing recognition of e-literacy in the UK, it gives a clear role for librarians in the future. In any country including India where there has been significant changes and developments with the impact of ICT, Net working, Consortia approach in Library and information Centres. To conclude, information Literacy programmes and E-learning have become essential to access the relevant needed information from the voluminous growth of information in this network and digital era.
A FEW E-LEARNING DEVELOPMENTS UNDERTAKEN IN INDIA: AN OVERVIEW

UMESH KUMARY
Associate Professor & Head, Library and Information Centre
Hasanath College For Women, BELGAURU-560042. E-mail : umeshkumary@yahoo.com

Dr. Vijayaraj Kumar, U.S.
Senior Librarian, Govt. First Grade College. Rajaji Nagar, Bangalore-560010

Muralidhara, K.
Librarian, Jnanesh School of Nursing, Bangalore-560056

ABSTRACT
The paper throws light with the introduction to E-learning and Distance learning in the Present ICT context. Also the paper emphasizes on the various developments undertaken by the Government, Institutions and various Organizations in Initiating developments in E-learning such as EDUSAT, IGNOU, Gyan Vani, INFLIBNET, UGC-INFONET, CEC, NIOS, etc., along with the advantages of E-learning and finally with the conclusion as to how E-learning has been gaining momentum with regards to the national development in magnification and globalization of education at all levels.

KEYWORDS: E-learning, edusat, ignou, inflibnet, ugc-infonet, cec, nios, distance learning

Introduction
Technology is a driving force in the contemporary education system. Proper and reliable communication is a prerequisite to effective and efficient use of electronic resources available free in the web space or for a fee. Digital communication and networking technologies are key drivers of economic growth and social well-being in the 21st century. The tremendous growth of Information and Communication technologies and its applications in every aspect of life has thrown open new challenges and opportunities to every individual and to all professionals in their fields. ICT is a potentially powerful tool for extending educational opportunities, both formal and Non-formal.

E-learning refers to the use of electronic media and information and communication technologies (ICT) in education. E-learning includes numerous types of media that deliver text, audio, images, animation, and streaming video, and includes technology applications and processes such as audio or video tape, satellite TV, CD-ROM, and computer-based learning, as well as local intranet/extranet and web-based learning. Though most commonly associated with higher education and corporate training, e-learning encompasses learning at all levels, both formal and non-formal that uses an information network the Internet, an intranet(LAN) or extranet(WAN) whether full or in part, for the course delivery, interaction and facilitation.