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SIGNIFICANCE OF INFORMATION LITERACY IN DIGITAL ENVIRONMENT AMONG ACADEMIC COMMUNITY AND ROLE OF LIBRARY PROFESSIONALS

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ABSTRACT

Information is a basic need to survive academic community. The present digital environment has changed the traditional and restricted mode of information generation and communication into online mode. The technological changes with tools have created a positive threat to academic community and it provides a huge opportunity for whole academic community to uplift their education and research activities. But, the uncertain quality and expanding quantity of information pose major challenges and threats to the academic society. The information literacy is a set of abilities requiring information users to recognize when information is needed and have the ability to use effectively the needed information. The role of library professionals becomes very important and crucial in such situation because ICT has brought drastic changes in the field of acquisition, organization, management and dissemination of information in present digital environment.

Keywords: Information Literacy, Digital Era, Library Professional, Academic Community etc.

INTRODUCTION

Information is a resource that is naturally needed in all human endeavors; very crucial to the development of a nation, without which there would be no society. Thus, it is now commonly observed that the material prosperity of a nation is linked almost directly to its information wealth. Information availability and its free flow through an effective dissemination network represent a necessary pre-condition for the emergence of a crop of well-informed citizenry. With the recent developments in Information and Communication Technologies and globalization of information it is easier for individuals to access information from anywhere and at anytime. Proliferation of information in a variety of forms, formats, and the amount has made the contemporary era 'information intensive' with manifold choices to access and retrieve information. However, this requires the skills to exploit the best choice among the myriad. Furthermore, the current scenarios confuse users evaluating the quality and authenticity before they consume information. All these intricacies pose challenges for individuals in accessing and retrieving information efficiently, sifting and evaluating its authenticity, validity, and reliability for its effective use. Here arises the need for Information Literacy (IL), which nurtures critical thinking and discernment about the whole gamut of information and its varying formats, prior to its consumption.

INFORMATION LITERACY

Information Literacy is a transformational process where the learner needs to find, understand, evaluate, and use information in various forms to create for personal, social or global purposes. Information literacy is a set of abilities requiring individuals to recognize the information with the ability to locate, evaluate, and use effectively. Information literacy (IL) is currently understood as embracing the ability to define a problem, find information to solve the problem, evaluate information and use it effectively. Information literacy as a way to move efficient access, evaluation and use of information should be taken into account and used for improving information for the end-users. It is a set of information and knowledge of skill that enable individuals to recognize when information is needed and when it is not, how to locate, evaluate, integrate, use and effectively communicate information in an ethical way. In short information literacy means knowing information about information. Information literacy refers to a constellation of skills revolving around information research and use. Hence, the library professionals should acquire the skills to access and use efficiently and effectively the myriad sources of information, information and communications technology, search techniques and knowledge of e-resources so as to satisfy successfully the various complex information needs of the users. Information Literacy is defined as the ability to know when there is a need for information, to be able to identify, locate,

evaluate, and effectively use that information for the issue or problem at hand (<http://www.infolit.org/> access on 22.12.2016). Figure-1 shows the meaning of information literacy.

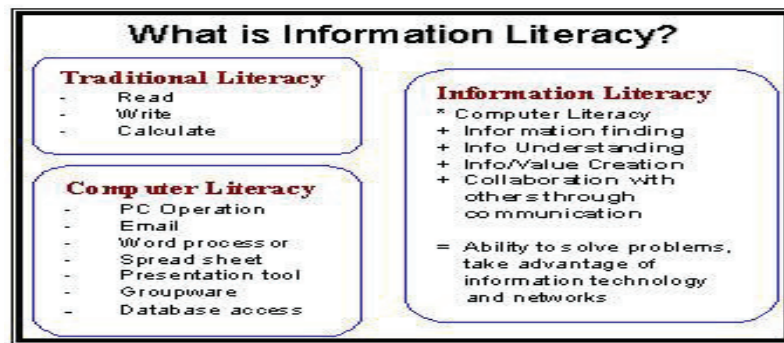


Figure-1: Meaning of Information Literacy

(Source:<https://www.pinterest.com/librarianelle/information-literacy/>)

Information literacy comprises the competencies to recognize information needs and to locate, evaluate, apply and create information within educational, cultural and social contexts. It is important to the competitive advantage of individuals, enterprises, regions and nations and provides the key to effective access, use and creation of content to support economic development, education, health and human services, and all other aspects of contemporary societies, and thereby provides the vital foundation for fulfilling the goals of the Millennium Declaration and the World Summit on the Information Society. It further extends beyond current technologies to encompass learning, critical thinking and interpretative skills across professional boundaries and empowers individuals and communities. The concept of IL advocates equipping people for successful use of information. In the age of information and knowledge society, every person need to be information literate and be able to recognize the need of information including the ability to locate, evaluate and use of the information and it play a vital role in learning, education and research in present emerging knowledge society.

DEFINITION OF INFORMATION LITERACY

According to the American Library Association (1989) -“Information literacy is a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information.”

CILIP (2013) defines IL as “Information Literacy knows when and why you need information, where to find it, and how to evaluate, use and communicate it in an ethical manner.”

According Jagtar Singh (2008) - An information literate person must learn to know, to do, to be and to work together. He should be able to make sense, ensure quality, learn independently, think critically, and use information ethically and strategically.

Doyle (1992) defined an information literate person as one who:

- Recognizes the need for information;
- Recognizes that accurate and complete information is the basis for
- Intelligent decision making;
- Identifies potential sources of information;
- Develops successful search strategies;
- Accesses sources of information, including computer-based and other technologies;
- Evaluates information;
- Organizes information for practical application;
- Integrates new information into an existing body of knowledge
- Uses information in critical thinking and problem solving

GENESIS OF THE TERM INFORMATION LITERACY

The first informal type information literacy program had recorded during seventeenth century when Library of German University has started a lecture program for their users to make aware them about reference books and its use, study techniques, how to use the library etc. (Salony,1995; Virkus&Metsar, 2004).After this, Christine Bruce has traced the use of the term information literacy during late 1960s and relates it to early developments in computer-based information technology, but this term was not used widely until 1980s. In a formal way, the term Information Literacy was first introduced in 1974 by *Paul Zurkowski* president of the

Information Industry Association and very popular among academic community. According to Zurkowski, "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 21 molding information solutions to their problems" (Eisenberg, Lowe and Spitzer, 2004). The development of information literacy began with a publication, 'Nation at risk 'in 1983 and another publication- "Educating the students to think: The role of school Library media programme. In 1987 by adding library literacy and computer literacy, the term was advanced by Kuhlthau. In 1988, the American Association of School Librarians, a branch of the American Library Association published "Information Power National Guidelines" for school library media programmes. The stated mission of Information power' was to ensure that students and staffs for effective usage of new ideas and information. Information literacy has become an important concept since the arrival of the information age.

DIFFERENT CONCEPTS OF INFORMATION LITERACY

Different concepts of Information Literacy have been evolved from library instructions and information skills-focused programs, such as Information Fluency, User Education, Library Instructions, Bibliographic Instructions, Information Competencies, Information Skills, User Training and User Orientation. The table-1 shows the different concept of IL and its applications.

Table-1: Dimension of Information Literacy

Library Orientation	Library Orientation concentrates on using a library and its sections including location of resources
Bibliographic Instruction	Bibliographic Instruction emphasizes to find out documents in the library. It relates to user training on information search and retrieval.
User Education	The User Education is related with the mechanics involved for using particular resources.
Training on Information Skills	Training on information skill is related with the phenomena associated with the use of technology to retrieve information in the library
Information Competencies	It compound skills and goals of information literacy.
Information Skill-	It focuses on information abilities
Information Fluency	It concerns with capability or mastering of information competencies.

MAGNITUDE OF INFORMATION LITERACY

Information Literacy is a comprehensive and never ending life long process. It has a wide range of fields such as Computer Literacy, Network Literacy, Web Literacy, Digital Literacy, Media Literacy, Visual Literacy and Critical Literacy etc. and each type of information literacy has its specific nature and characters. The different magnitudes of IL are summarized in table-2.

Table-1: Magnitudes of Information Literacy

Computer Literacy	Computer literacy is competence in the use of computers. It includes skills required to operate a variety of computer application programs like, word processing, databases, spreadsheets, etc. together with some general IT skills.
Network Literacy	It is the ability to properly manage, connect and organize, evaluate and get information in a right way.
Web Literacy	It is a subset of information literacy requires the ability to access, search, utilize, communicate and create information on the World Wide Web (WWW).
Digital Literacy	It refers to an ability to access, collect, organize, evaluate and use of digital resources and services in an effective way.
Media Literacy	It is the ability to comprehend and create images in variety of media in order to communicate effectively.
Visual Literacy	Visual literacy is the ability to understand and use images
Critical Literacy	It is ability to evaluate critically the human, intellectual and social strength,

	benefits and costs of Information Technology (IT).
Scientific Literacy	Scientific literacy is the knowledge and understanding of scientific concepts and processes which are required for personal decision making.

DIGITAL LIBRARY

Digital libraries are repositories of high quality human generated information in digital form at multiple dedicated servers connected over different electronic networks. The purpose of digital library is:

- ❖ To acquire, store and information and knowledge in digital form.
- ❖ To enhance cost-effective and quick delivery of information
- ❖ To build up communication and cooperation between government, research, business and educational communities.
- ❖ To contribute lifelong opportunity.

One of the most frequently quoted term in the field of library and information science in recent time is digital library. Digitization means the conversion of any fixed or analogue media such as books, journals, articles, photos and paintings into electronic form through scanning, sampling etc., where they can be stored and manipulated by a computer (Kaur,2009). The main aim of digital library is to provide quick access to obtain the required information and allow users for remote access by breaking the physical boundaries via national and international network because users need well digitized information for their research and professional activities now. At present the libraries are facing great transformation and challenges with emerging web based services to cater to its potential users. With growth and popularity of digital libraries, users are accessing a vast amount and variety of e-resources library resources in anytime, anywhere and anyway (24X7) modes which was not possible in traditional library services but for proper utilization of these resources users must be “technological literate” which means that users should have knowledge of technology literacy, computer literacy, web literacy, visual literacy and media literacy. Digital library facilitate users at great extend for accessing to wide range of information resources through network. Figure 2 shows how peoples are connected in a network environment.



Figure-2: Shows the connection of peoples in network
(Source: <http://generationsafe.ikeepsafe.org/>)

SIGNIFICANCE OF INFORMATION LITERACY FOR ACADEMIC COMMUNITY

Information is the basic requirement of academic community for their academic activities and it is important as food, air and water. If supply of information stop to academic community, it will die. Therefore, Information has a great value in leaning, education and research process. In present ICT era apart from the traditional printed sources, information is available in abundance, in various forms and formats. Photographs, images, audio, and video and online are all valid source of information. Due to significant changes in the information environment in content, are affecting academicians and academic activities in several ways. Information is available through libraries, community resources, special interest organization, media, and internet is free of any geographical boundaries. Thus, there is so much of unfiltered information that finding exactly what academicians want is not a simple process.

The question of authenticity, validity, and reliability of culled out information clubbed with expanding quantity is also a serious problem, and needs valid consideration (Kuffalikar and Rajyalakshmi, 2006). The TCC General Education Assessment Plan characterizes information literacy as the core competency for academic community and described its impotence as -"A person who is competent in information literacy recognizes when information is needed and has the ability to locate, evaluate, and use information ethically and legally and

effectively". In figure-3 showing that an academicians achieved his academic excellence with the help of information literacy competency.



Figure-3: Achieving academic excellence through information literacy
(Source: <https://pixabay.com/en/career-man-career-ladder-silhouette-111932/>)

In an academic system, students get motivated, inspired by their teachers during course of their studies. Teachers are expected to be well read and constantly up-to-date in their fields of specialization. Their reading interests, current awareness, subject knowledge have direct impact on their learning, teaching and research activities. The ability to find and use of appropriate information to resolve academic problems, make decisions, conduct research etc. which have become obligatory requirements for academicians to keep pace with the present digital environment. Digitized information, networked world and Information and Communication Technologies (ICTs) have become necessities in order to stay abreast in the current globalized knowledge based society. Present society has been transformed by the rapid development and diffusion of information and ICT in to fields of education and research. This enormous growth of information is also posing numerous challenges in our academic life because over abundance of information may lead to confusion to academic community. Now, the process of identifying and selecting information has become very complex and difficult for faculties and research scholars to carry out their education and research. This realization has led to appear the term 'Information Literacy (IL) which has very significant implication in university system for today's knowledge based society. IL is also important segment of universities because it prepares people for professional carries and help to enter and adopt of all branches of knowledge. IL enables individuals to participate with greater understanding in academic affairs. The 21st century has brought enormous in higher education throughout the world as a result of new information and technological developments. Information overload and ICT instability have resulted in info-stress and techno-stress among academic community. Information literacy provides elbow support during these stressful moments. Moreover in today's state of information explosion, the internet is open to anyone to post any information; therefore evaluation of information becomes essential which is facilitated by information literacy.

ROLE OF LIBRARY PROFESSIONALS IN INFORMATION LITERACY

Change is inevitable because nothing is permanent in this world and it is also true for libraries which are witness of a lot of changes in last two decades. Therefore, it need to change library professional's attitudes towards current ICT programs according to the situations to meet the new challenges because of changed the complete scenario of libraries due to ICT and globalization effect. Now a day library become the center point of research based learning and role of library professionals are changing radically with shifting the learning & research paradigms. In present digital environment users' attitudes shifted from text based learning to e-resource based learning. The recognition of rapid technological changes together with proliferation of information sources has initiated the shifting of instructions from library to information literacy. Increasingly as information comes to users in unfiltered formats, the users raise questions about its authenticity, validity, and reliability and these posed new challenges for the users because without proper information literacy it is very difficult to find out authentic information from most authentic source and it also required a particulate literacy skill. The word information is being used widely due to information explosion which occurred due to digital archives on Internet.

Library professionals have to play a significant role to promote information literacy among library users. Dynamic and quality information is the growing demands in the present set of environment. Due to technological impediments the Librarians require sound knowledge in collection, organization, management of knowledge and disseminate according to the demands of the user (Mishra & Mishra, 2010). There exists a gap between librarians and users' information needs. To bridge this gap users need to educate and re-educate themselves time to time to acquire new skill and competencies for new role and they need to cultivate the concept of lifelong learning for information literacy skill. Librarians are competent in collecting, organizing, evaluating and providing access to information in all formats. Barathi (2013) reported that librarians have to

play many roles in this digital society as: subject expert, global information providers, resource managers, creators, preservers, navigational guides, communicators, financial managers etc. He has an active role in the electronic information environment as an educator, trainer, collaborator, manager, leader, and advocate. Regarding integration of information literacy in academic curriculum, role of the librarian is most significant in the teaching learning environment by including appropriate criteria for outcome measurements regarding information literacy. Library professionals need to play an important role in education process by making academicians aware of the need and motivation the use of information as a new knowledge and new ability. Library personals have to identify the best suited mixture of computer skills & knowledgewith subject knowledge to produce effective program for educational excellence. They must try to build new paradigms for information dissemination and accept their role as educator and knowledge manager first and foremost (Lallaisangzuali, 2013).

CONCLUSION

Adopting of emerging information and communication technology in library services will facilitate academic community to meet their academic needs. In present digital environment information literacy has a lot of significance because information literacy competency ensures the maximum utilization of the information resource as well as optimization of information handling capabilities. Due to digital movement there are a enormous information are available in a variety of formats which require specialized equipment to read the information inscribed in it. Technology does not help the persons who don't know how to handle it. Information Literacy is indisputably an indispensable concept for the users' empowerment to enrich their information access capability which not only helps to empower the user but also act as lifelong learning for capacity building. Library professionals have a crucial role to provide refined tailor made information to the users. Developing adequate collaboration and cooperation among the staff and user for the success of information literacy is one of the crucial functions of the library especially in digital environment

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