

REDEFINING INFORMATION LITERACY IN INDIAN CONTEXT

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Introduction

Information literacy is the ability to search and use information effectively. This is a very broad meaning of information literacy. Many experts have explained meaning of information literacy through various definitions. This paper elaborates all the existing definitions of information literacy and tries to redefine it from Indian Perspective.

Conceptual Development of Information Literacy

The concept of information literacy was first introduced by Paul Zurkowski, the president of the US Information Industry Association, in his proposal submitted to the National Commission on Libraries and Information Science. He recommended that a national programme should be established to achieve universal information literacy within the next decade. 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 molding information solutions to their problems (Zurkowski, 1974).

Burchinal (1976) redefined information literacy in terms of skills for locating and using information for problem solving and decision making. Hemlink (1976), a consultant for mass communication research linked information literacy with public media. Owens (1976) linked Information literacy with the active citizenship (Owens, 1976). In 1979, Information Industry Association defined information literacy contradicting with Zurkowski's linkage of information literacy with workplace. Garfield quoted this definition as, information literate is the person who knows the techniques and skills for using information tools in molding solutions to problems (Garfield, 2001:210). Taylor linked the library profession with information literacy, and noted that the concept suggested that many problems could be solved through the use of information, that knowledge of information resources is necessary, and that there are strategies for the acquisition of information (Taylor, Copyright © 2017, Scholarly Research Journal for Interdisciplinary Studies

1979). According to Behrens, the definitions of the 1970s highlighted a number of requirements for information Literacy, but did not reach the point where they identified the actual skills and knowledge required for information handling at that time (Behrens, 1994).

By the start of 1980s, new information technologies had begun to permeate society. (Horton, 1982:14) reported the survey of the information infrastructure of the United States carried out by the Information Industry Association. This survey referred to Information literacy as a gap which divides the information sophisticate who knows how and when to use the technology and does so easily and efficiently from the information naïve who cannot use the technologies and hence has limited access to knowledge resources.

In 1980, Forest Horton introduced the phrase ‘computer literacy’ that has to do with increasing our understanding of what the machine can and cannot do (Horton, 1982:14). Oslen and Coons differentiated these two phrases i.e. information literacy and computer literacy. They suggested that information literacy, then, as opposed to computer literacy, means raising the level of a awareness of individuals and enterprises to the knowledge explosion, and how machine-aided handling systems can help to identify, access, and obtain data, documents and literature needed to problem-solving and decision making (Oslen and Coons, 1989) Demo (1986) also emphasized on use of technology in processing, storing, retrieve and transmitting vast information. He suggested that in order to master these technologies a new intellectual skill i.e. information literacy skills was needed. According to Demo, only people who possessed the necessary skills would be able to benefit fully from the information age.

Kulthau(1987) considered information literacy within literacy spectrum and pointed that Information literacy is closely tied to functional literacy. It involves the ability to read and use information essential for everyday life. It also involves recognizing an information need and seeking information to make informed decisions. Information literacy requires the abilities to manage complex masses of information generated by computers and mass media, and to learn throughout life as technical and social changes demand new skills and knowledge.

Jan Oslen and Bill Coons also considered information literacy within the literacy spectrum. They defined information literacy as understanding the role and power of

information, having the ability to generate and manipulate it using electronic processes. In short information literacy is a necessary expansion of the traditional notion of literacy, a response to the revolution in which we are living (Oslen and Coons, 1989:8).

In the middle of 1980, due to advent of information technology, information handling started to become technology centered. According to Demo (1986), along with traditional literacy skills, information literacy forms the common prerequisite for lifelong learning. Demo highlighted the definition of information literacy made by Aurora College Library. Martin Tessmer, in 1985 developed this definition as, information literacy is the ability to effectively access and evaluate information for a given need.

In 1987 Patricia Breivik reported that in order to improve undergraduate education, it would become vital for libraries to integrate fully with the learning process (Breivik, 1987:46). In the same report, Breivik also tied the information literacy skills with lifelong learning. Behrens (1994:314) agreed with Breivik and quoted her explanation about it :

To accomplish lifelong learning, students need to become information literate whereby they:

1. Understand and processes for acquiring information, including systems for information identification and delivery;
2. Can evaluate the effectiveness of various information channels, including libraries, for different kinds of needs;
3. Master basic skills in acquiring and storing their own information;
4. Articulate, responsible citizens in considering public policy issues relating to information.

In 1989, Patricia Breivik and Gordon Gee published a book which focused on the role of libraries in attaining improvements in higher education and lifelong learning. In this book, they stated that in an information society, the ultimate measurement of the quality of undergraduate education is whether students are self directed, independent learners. They believed that the library has a pivotal role in education. They emphasized the importance of partnership in striving for information literate graduates (Breivik and Gee, 1989).

In the same year i.e. in 1989, ALA published its Presidential Committee Report on Information Literacy. The report emphasized the importance of achieving information

literacy and stressed that it could be achieved only by means of a new model of resource-based learning. In the same report, ALA defined information literacy as to be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information (ALA, 1989:1). The report incorporated all the foremost issues that appeared in definitions of information literacy throughout the 1980s and, most importantly, identifies the actual information handling skills required for information literacy. As a result of this report, the National Forum on Information literacy was established to continue promoting the concept of information literacy in the United State (Breivik, 1990).

By the end of 1980s, the definition of information literacy became distinct and consisted the clear set of skills in information handling.

The above definitions during 1980s focused on following issues:

- Library literacy or computer literacy is not enough.
- Emphasize should be given on skills to handle information by using information technology.
- Libraries should be seen beyond the repositories of information.
- Development of critical thinking skills required for evaluating the information.
- Information literacy is essential for lifelong learning.
- Teaching of information literacy is the joint responsibility of library and education discipline.

By the start of 1990s, ALA's definition of information literacy was generally accepted. Information literacy was being considered as a part of the wider literacy continuum. Many higher education institutions formed campus wide committees to work towards including information literacy as a graduation outcome and several groups and individuals explored information (Behrens, 1994). As like Demo and Breivik, Rader also thought information literacy as an important mean for lifelong learning. Author extended the definition of information literacy adding that information-literate people know how to be lifelong learners in an information society and becoming information literate is essential for survival in the future. He stressed that information Literate citizen will be prepared to acquire and use information appropriate for any situation, within or beyond the library and globally (Rader,

1990). Apart from these definitions, Doyle defined information literacy much clearly and distinctly. Through his Delphi study, Doyle defined an information literacy as: the ability to access, evaluate, and use of information from a variety of sources (Doyle, 1992:2). He also defined information literacy in terms of attributes of a person. An information literate person

1. Recognizes that the accurate and complete information is the basis for intelligent decision making.
2. Recognizes the need for information.
3. Formulates questions based on information needs.
4. Identifies potential sources of information.
5. Develops successful search strategies.
6. Accesses sources of information including computer-based and other technologies.
7. Evaluates information.
8. Organizes information for practical application.
9. Uses information in critical thinking and problem solving.

This was the first detailed definition from an information literate person point of view. Doyle clearly mentioned the set of skills required to be information literate.

Shapiro and Huges (1996) defined information literacy comprehensively as a new liberal art that extends from knowing how to use computers and access information to critical reflection on the nature of information itself, its technical infrastructure, and its social, cultural and even philosophical context and impact. This definition was made after advent and stabilization of information technology and its usage in information handling. Obviously this dimension was reflected in their definition as “knowing how to use computer and access critical information”. They also mentioned other dimensions of information i.e. social, cultural and philosophical which could be important regarding application of information.

In 1997, Bruce offered a phenomenographical approach for researching and defining information literacy. She suggested a relational model for information literacy. She developed seven conceptions of information literacy among her sample of higher educators. According to her definition information literacy is : 1. The use of information technology; 2. The use of information sources; 3. Executing a process; 4. Controlling information for

retrieval; 5. Gaining knowledge; 6. Extending knowledge; and 7. Gaining wisdom (Bruce, 1997).

By the end of 1990, various dimensions other than technology and lifelong learning were linked with information literacy. These dimensions were artistic view, critical thinking social, cultural and philosophical perspectives in information handling. Doyle's definition during 1990s was the clear definition of information literacy stating attributes of information literate person.

There is a considerable discussion on the terms: information literacy and information skills. Majority of the research and initiative in the field of information literacy was taken in United States, but in United Kingdom, relation between these two terms was debated. There were different approaches in using terms 'information literacy' and 'information skills' and many definitions have been suggested by several organizations, institutions and authors (Virkus, 2003). One of these definitions was suggested by Standing Conference of National and University Libraries (SCONUL) Information Skills Task Force and quoted by Bainton (2001). It reflected the twin dimensions of the 'competent information user' at the base level and 'information-literate person'. For the latter level of information skills, the term information literacy was used. Therefore, according to SCONUL, both information skills and information technology skills were seen as essential parts of the wider concept of information literacy. For the development of the information literate person SCONUL proposed seven sets of skills which are known as Seven Pillars Model. The pillars show an interactive process whereby information use progress through competency to expertise by practicing the skills.

The Chartered Institute of Library and Information Professional (CILIP) Policy Advisory Groups (PAGs) described information literacy as: we have adopted the commonly accepted distinction between information literacy and skills. Information literacy is about providing all members of society with the information competences necessary to function effectively within society-it might be termed functional information literacy. The debate over information skills relates to the higher level of competence of information specialists (CILIP, 2001).

The Big Blue Project funded by Joint Information Systems Committee (JISC), UK reported both the terms as synonyms (JISC, 2002). The Glossary of Information Terms at the

British Open University (OU) also supported the same by defining Information literacy as : as skill that involves being able to use information successfully, including finding information, searching using various tools (e.g. internet, database) and being able to critically evaluate the results (OU, 2003).

On the basis of deep study of definitions of information literacy made by SCONUL, CILIP and OU it would be said that information literacy is a set of (information) skills. In other words information literacy is an umbrella term under which information skills and information technology skills are covered.

Association of College and Research Libraries (ACRL) defined Information literacy as a set of abilities requiring individuals to recognize when information is needed and the ability to locate evaluate and use effectively the needed information (ACRL, 2000). ACRL has also developed information standards for higher education in 2000.

According to Webber and Johnston (2002) information literacy is the adoption of appropriate information behavior to obtain, through whatever channel or medium, information well fitted to information needs, together with critical awareness of the importance of wise and ethical use of information in society.

According to Bruce (2002) the idea of information literacy, emerging with the advent of information technologies in the early 1970s, has grown, taken shape and strengthened to become recognized as the critical literacy for the twenty-first century. Today, information literacy is inextricably associated with information practices and critical thinking in the information and communication technology environment.

Prague declaration (2003) defined information literacy as it encompasses knowledge of one's information concerns and needs, and the ability to identify, locate, evaluate, organize and effectively create, use and communicate information to address issues or problems at hand, it is a prerequisite for participating effectively in the information society, and is a part of the basic human right of lifelong learning.

As quoted by Virkus (2003), Boekhorst claimed that all definitions and description of information literacy presented over the years can be summarized in three concepts:

1. The ICT concept: information literacy refers to the competence to use ICT to retrieve and disseminate information.

2. The information sources concept: information literacy refers to the competence to find and use information independently or with the aid of intermediaries.
3. The information process concept: information literacy refers to the process of recognizing information need, retrieving, evaluating, using and disseminating of information to acquire or extend knowledge. This concept includes both the ICT and the information (re) sources concept and persons are considered as information systems that retrieve, evaluate, process and disseminate information to make decisions to survive, for self-actualization and development

There is also a discussion on all the available definitions of information literacy i.e. what information literacy exactly means? Hepworth (2002: 23) stated that “gradually we are seeing increasingly detailed descriptions and greater consensus about what it means by information literacy; however different communities tend to describe the phenomenon in slightly different ways with varying degrees of comprehensiveness”.

As defined by US-National Commission on Library and Information Science (2003) and quoted by Web and Powels (2004), information literacy encompasses knowledge of one’s information concerns and needs, and the ability to identify, locate, evaluate, organize and effectively create, use and communicate information to address issues or problems at hand, it is a prerequisite for participating effectively in the information society, and is part of the basic human right of lifelong learning.

Information literacy elements were defined by Bundy (2004) under three main headings:

1. Generic skills: problem solving, collaboration, team work, communication, critical thinking.
2. Information skills: information seeking, information use, information technology fluency.
3. Values and Beliefs: using information wisely and ethically, social responsibility and community participation.

The Alexandria Proclamation (2005) on information literacy and lifelong learning proclaimed that information literacy lies at the core of lifelong learning. It empowers people in all walks of life to seek, evaluate, use and create information effectively to achieve their

personal, social, occupational and educational goals. It is a basic human right in a digital world and promotes social inclusion of all nations.

The Research Information Network (RIN) (2010) defined information literacy as it is important to adopt a broader interpretation of information literacy, which (i) recognizes that 'information' must be taken to include research data; and (ii) clearly also encompasses the ability to manage, and where appropriate preserve and curate one's own information and data

Bawden (2001) argued that the term information literacy has been widely and confusingly used in the literature. A number of other related terms have also been used for the same, or similar, concepts including computer literacy, library literacy, media literacy, network literacy, digital literacy and informacy.

Muir & Oppenheim (2001:172) surveyed the world-wide developments on national information policy and concluded that "information literacy has no agreed definition" and "a number of people have offered their views on what they think information literacy is". Policy Advisory Group (PAG) also supported the same and expressed a need for an agreed definition of the term "Information Literacy" and also expressed the need to distinguish it from information skills (PAG, 2002: 45).

Several other terms and combinations of terms have been also used by different authors: 'info literacy', 'informacy', 'information empowerment', 'information competency', 'information literacy skills', 'information literacy and skills', 'information handling skills', 'information problem solving skills', 'information fluency', 'information mastery' etc. '

In the current decade some authors expressed the need of redefining the information literacy so as to keep pace with changing education environment. Wilder in his chronicle "Information literacy makes all the wrong assumptions" in 2005, raised some objections on the established concept of information literacy. His observations were as follows:

1. Information literacy remains the wrong solution to the wrong problem facing librarianship. It mistakes the nature of the internet threat, and it offers a response at odds with higher education's traditional mission. Information literacy does nothing to help libraries compete with the internet and it should be discarded.
2. Librarian should not assume that college students welcome their help in doing research online. He suggested that as information literacy instead segregates those skills from

disciplinary knowledge by creating separate classes and curricula form them. There is no better way to marginalize academic librarianship.

3. Information literacy is also harmful because it encourages librarians to teach ways to deal with the complexity of information retrieval, rather than to try to reduce that complexity. He suggested the solution that the library creates system that eliminate the need for instruction.
4. It is not possible to teach information literacy to all students. He suggested that to do so would require enormous and coordinated shifts emphases and resources allocation, none of which is either practical or politically realistic.

In conclusion, Wilder (2005) suggested that the most important thing libraries can do to educate students is not technological in nature. We must change the way we think of students and of librarians. Students are apprentices in the reading and writing of their chosen disciplines, and librarians are experts who can help them master those tasks. Here is an educational function that creates real value within our institutions.

In other study in order to give answers to questions raised on his chronicle, Wilder (2013:151) stated that “for my purpose information literacy is not a synonym for the academic library’s instruction function. It refers instead to an approach to instruction as codified in ACRL’s Information literacy competency standards for higher education, as well as standardized tests such as those produced by Standardized Assessment of Information Literacy Skills (SAILS) and the Educational Testing Service and as prescribed in requirements for the regional accrediting bodies. The word codified is key here, as information literacy is designed in part so as to allow for quantitative assessment, as, for example in measuring the library’s impact on student learning.

Bruce, Hughes and Somerville (2012: 524) stated that the ‘nuances in information literacy need to be differentiated between 1) the skills associated with using information in an ever expanding range of contexts, representing a functional view of information and information literacy; and 2) the process of using information to learn, including communicating and creating in these contexts, representing transformative interpretations of information and information literacy.

Kutner and Armstrong(2012:25) expressed the need of reconsideration of information literacy definition and standards in order to remain relevant within global learning context. They concluded that “the predominantly skill-based approach facilitated particularly by the information literacy standards with which are most familiar, the ACRL’s Information Literacy Competency Standards for Higher Education, is not sufficient to facilitate teaching of twenty-first century ‘deep Information Literacy’, which we feel encompasses additional content-based engagement with the social, cultural, economic and political contexts of information access, retrieval, use and creation”. The researcher is not agreed with this conclusions as ACRL has developed these standards in 2000, but in recent years by considering the global and changing education, ACRL has developed specific standards for specific disciplines like, IL standards for Teacher Education, Science and Engineering, Nursing, Journalism, anthropology and sociology etc in which above expectations are seems to be reflected.

Martin conducted a study of four British information literacy models in order to refresh the concept of information Literacy. He tied the information literacy with the learning. In results, he noted that critical thinking, lifelong learning, and empowerment, transformational, holistic, and flexible are reoccurring words and phrases model authors use to express their visions for refreshing Information Literacy. These value-laden terms help express an overarching theme in all four models: to articulate information literacy as integral to learning (Martin, 2013: 117). In a report to ACRL about these four models, Martin noted that “rather than assuming information literacy is attained through brief, one time experiences, it needs lifelong and continuous refinement best realizes by becoming an explicit part of the learning experience” (Martin, 2013:6). From above discussion it is understood that Information literacy cannot be achieved through one time course, rather, it is to be considered as lifelong learning concept and needs continuous and timely refinement.

Redefining the Definition

After going through all the developmental process of information literacy, its definitions and contradictions, following points have been observed:

1. All the definitions have been made by foreign researchers.

2. There is no authorized definition which is unanimously accepted, however, ALA definition of Information literacy is generally used.
3. Recent definitions focus on skills regarding handling of electronic information and less attention is given to library skills which are essential in Indian Education scenario. Because, even in these days, library seems to be an inactive entity in most of the Indian institutions where main library activity is book circulation. Therefore in Indian scenario, we need to modify the definition of information literacy and basic library skills must be included in the set of required skills.
4. It is agreed that information literacy is related to skills required for efficient handling of information; however, by the need of time, the 'security' is the missing dimensions in all these definitions. Secure accessing; storing and communicating information is also the important dimension of information literacy. This issue has been considered in the present research while developing and implementing the programme.
5. Information literacy is not a concept of only teaching, rather, it is to be learned and needs the base of psychology and learning theories.
6. There should be a continuous and timely refinement in the definition and concept of information literacy so as to keep pace with changing global education system.

By considering, all the above definitions and contradictions on it, researcher defines information literacy for teacher education in terms of attributes of an information literate teacher as follows:

- Information literacy is a set of abilities through which a teacher is able to:-
 1. Identify the exact need of information by considering the understanding level and previous knowledge of students.
 2. Select appropriate source of information from library and other sources.
 3. Access appropriate and adequate information securely from selected source.
 4. Evaluate the information and information source.
 5. Process the accessed information.
 6. Apply information ethically and effectively in teaching- learning process.

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