CHAPTER-2

INFORMATION LITERACY: DIFFERENT DIMENSIONS
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The concept of Information Literacy has gained its importance with the popularity of digital media and Internet. The use of Internet has affected the entire human community in such a tremendous way that the countries have started taking IL as important as the general literacy. Though the term was coined in 1974 by Paul G Zurkowski, a number of efforts were taken up at a later stage. The establishment of American Library Association’s Presidential Committee on Information Literacy in 1989 and eventually the creation of National Forum on Information Literacy by national and international organizations established the importance of the IL education (Association, American Library, 1989). In 1999, Society of College, National and University Libraries in UK (SCONUL) published ‘The seven pillars of Information Literacy’ as a seminal development (SCONUL Working Group on Information Literacy, 1999). In 2003, National Forum on Information Literacy, UNESCO sponsored an international conference in Prague. As the recent development in 2009, in the US, president Barack Obama declared the month of October as the Information Literacy Awareness Month “… to recognize the important role information plays in our daily lives, and appreciate the need for greater understanding of its impact.” (Wikipedia, 2011). Information Literacy is not an isolated concept. There are various types of literacy which are related to the concept of IL. It is necessary to
discuss the other dimensions of literacy which will help better to understand the importance of IL.

MEDIA LITERACY

Today's era is the era of media. In the last ten years media has started influencing people to a great extent. The demand for media has increased manifold. It has not restricted its influence only in entertainment, it has started showing its magic in every walk of life. Media literacy refers to the critical approach in listening and watching media information. The critical appreciation of the information provided by the electronic as well as print media is the need of the hour. The media literate person is able to comprehend the information provided so that he/she recognizes the need to and ways to use it in effective manner.

COMPUTER LITERACY

Computer literacy refers to the ability to use computer in handling different jobs. The ability further refers to handle jobs using various software like word processing, spreadsheet, power-point etc. It can be defined as the knowledge and ability to use computers and related technology efficiently. Another valuable component of computer literacy is knowing how computers work and operate. Computer literacy is a vital part of information literacy. In today's age of Internet, and information explosion, information literacy does not convey any meaning for the users of information without computer literacy. To search, organize and use right information for the right purpose,
computer literacy is a must. To put it simply, information literacy can not be addressed without addressing computer literacy.

**NETWORK LITERACY**

Network literacy is the literacy which is related to networked environment. It can be World Wide Web, Local Area Network, Wide Area Network. The ability to search, organize and use information in an effective manner in networked environment can be considered as one the aspects of information literate person.

**DIGITAL LITERACY**

Today digitization of information has taken up in a big way by various organizations. The handling of information in this digital environment has become a must for any research worker, entrepreneur, industrialist or students. For example, there are innumerable number of organizations which are engaged in selling study modules of various subjects studied under different boards. A lot many CD are available in the market. Selection of right digital source, searching it efficiently and using the retrieved information in the digital media is one more aspect to be information literate person.

**LIBRARY LITERACY**

Library literacy refers to the use of library resources and services effectively for the right purpose. Libraries possess bundles of resource materials printed and electronic. A library literate person knows how to search information
sources for right information, how to use it for right purpose and how to respect the ethical and legal part of the information searching and finally how to acknowledge the sources. Information literacy and library literacy are almost synonymous, with a difference of the range of sources used. Information literate person would know how to handle information which is collected from outside the libraries also.

**VISUAL LITERACY**

Learning takes place in various ways. Visual learning takes place when mental knowledge is formed with some kind of visual communications. Generally in schools, there are many visual learners, though not explored most of the time, who learn better through visual media.

Visual literacy can be defined as the ability “...to understand and use images, including the ability to think, learn, and express oneself in terms of images”. Visual literacy can be understood in the light of following concepts (Hortin & Braden, 1982). **Visual learning** which according to Moore and Dwyer, (Dwyer & Moore, 1994), is “the acquisition and construction of knowledge as a result of interaction with visual phenomenon”. **Visual thinking**, according to Wileman, (1980, p 13), “organizes mental images around shape, lines, colors, textures, and composition”. **Visual communication** according to Moore and Dwyer, is “using visual symbols to express ideas and convey meanings”. Visual literacy, in other words, is the ability to understand the concept through vision. For example, the colors and shapes of things can be understood only
through vision. The knowledge about certain things is accumulated through visual communications only.

ISSUES RELATED TO IL AND SCHOOL EDUCATION IN INDIA

The awareness about Information Literacy has taken its leap a few years ago. It is evident that the school education system in India has not taken it up as a serious issue yet. The students and teachers extensively use information from innumerable sources. But this extensiveness surely lacks effectiveness and authenticity. The pressure in completing syllabus, and regular evaluation of the students' work hardly leave any scope to think about proper way of searching and using information. Moreover, the socio-economic conditions, the disparities in the urban and rural sectors and most importantly the existing education policies do not encourage the learning to happen independently. In this situation the issues related to implementation of IL strategies in school system are numerous which are discussed below.

1. Education Policy

For the promotion of information literacy a suitable education policy is a must. A directive from the government to the educational institutions to take the steps towards implementation of IL is needed. In Scotland, such an initiative has taken place. National Information Literacy Framework, Scotland, has already given directives to the educational institutions to take the steps towards awareness and implementation of IL (Irving & Crawford, Skills for everyone', Caledonian University of Glasgow, 2007-08), 2008). The Caledonian University of Glasgow has published a manual 'Skills for
everyone' which is authored by Christine Irving & John Crawford published in 2007-08 where module for IL implementation plan is given.

In USA, as mentioned in Eisenberg's article, American Association of School Librarians published new standards for student learning in 2007. It is mentioned that the instruction methods are 'drastically' changed to make it more collaborative one where 'students themselves feel empowered.'

In October, 2006, the first national Summit on Information Literacy at National Education Association (NEA) headquarter in Washington DC brought together well over 100 representatives from education, business, and government to address America's information literacy deficits keeping market globalization as the main issue. This successful collaboration was sponsored by the National Forum on Information Literacy, Committee for Economic Development, Educational Testing Service, the Institute for a Competitive Workforce, and National Education Association (NEA). A major outcome of the Summit was the establishment of a national ICT literacy policy council to provide leadership in creating national standards for ICT literacy in the United States.

In India, in a 45 page document of National Policy on Education 1968, revised in 1992, (MHRD, 1968) a three line statement is as follows;

"Together with the development of books a nation-wide movement to improve the existing library and establishment of new ones will be taken
up. Provision will be made in all educational institutions for library facilities and the status of librarians improved.”

These fleeting lines show lack of initiatives on the part of the policy makers towards the improvement of library use. Though there is a wave of change specially in the school education policies, still the concept of IL has not yet reached the table. The existence and differences in criteria of various evaluation agencies like ICSE, CBSE and a number of state boards have made the situation more difficult. There may be some political and social factors which do not allow the system to be uniform. It is a difficult situation indeed for the policy makers. The role of Human Resource Development (HRD) Ministry is extremely crucial in this sense. There is a dire necessity of restructuring and reforming educational goals and policies where independent learning must be the focus.

2. Socio-economic factors

According to Ms Geeta Gandhi Kingdom (Kingdom, 2010) one-third of India’s population (roughly equivalent to the entire population of the United States) lives below the poverty line and India is home to one-third of the world’s poor people. India has 22 per cent of the world’s population but 46 per cent of the world’s illiterates, and is home to a high proportion of the world’s out of school children and youth. On the positive side, the base of India’s education pyramid may be weak, but it has emerged as an important player in the worldwide information technology revolution on the back of substantial numbers of well educated computing and other graduates.
In this difficult situation it is very important to strengthen the foundation of the Indian education system and thus give stress to the development of primary and secondary level.


NCERT's National Curriculum Framework 2005 has arrived as a wave of change to the educators and the policy makers. In this document of almost 250 pages, only 2 pages are devoted to library services. Though it is said that ‘library should be given lots of importance in the day to day learning of the school’, but there is no mention about how to give importance. NCERT is the nodal agency for national curriculum setting. Except for central boards, a good number of state boards also follow NCERT curriculum. Unfortunately, there is no mention about information literacy. So it is absolutely clear that the people who are the brain of a country’s education system are not convinced, if not unaware, about the idea of making students information literate.

4. Awareness

Being a relatively new concept, the awareness about IL is not substantial in India. The teaching in schools is mostly teacher oriented. There is no provision in the training curriculum of the teachers to know about IL. The system does not provide scope to a child to learn independently. It is extremely important for the teachers to have ample knowledge about any concept per se to motivate school students.
5. Present scenario of Indian school libraries

According to IFLA/UNESCO School Library Manifesto, “the school library provides information and ideas that are fundamental to functioning successfully in today's information and knowledge-based society. The school library equips students with life-long learning skills and develops the imagination enabling them to live as responsible citizens”.

Preeti Mahajan, (Mahajan, 2010) in her article published online in Library Philosophy and Practice 2010, mentions that according to the 5th All India Educational Survey, done by NCERT along with NEUPA, in 1993 only about 40% of the schools have libraries that too in public schools. The number of the trained librarians working in the schools is still less. Although the central government has made libraries a priority to help raise the literacy rate, yet these are not receiving the right attention as revealed by the NCERT survey of 1993. Needless to say that the school libraries are the neglected sectors in India. In a survey done by Indian Library Association in 1998, it is observed that most of Delhi Government primary schools did not have libraries at all. They are not able to provide the basic services to the students. So it is too much to expect from the staff to promote information literacy among students.

6. Lack of ethics

In the entire school education system of India, the students are never taught about plagiarism or copyright issues. Most of them might not even know
what plagiarism is. These issues are never addressed. The current
central boards and various state boards have not mentioned anything about
these issues. And because of this unawareness, in the age of tremendous use
of communication technology, the students are more prone to fall into
plagiarism and violate the Copyright Act. Even the facilitators are not
aware of these facts and the solutions to that.

The mis-use of information is very much prevalent in today’s world. Illegal
downloading of various software, using pirated versions of software,
uploading and downloading various music or video files are activities
which are very common today. If the government wants to stop this, the
school should be the focus area for awareness programmes.

THE IL STANDARDS OF ACRL

The Association of College and Research Libraries approved the final
version of Information Literacy Standards in 2000 for higher education.
In the present study though students are from the middle school level,
the ACRL standards hold good for them as well. The standards and
performance indicators are discussed here.

Standard 1: The information literate student determines the nature
and extent of information needed.

The performance indicators are as follows:

1. The information literate student defines and articulates the need for
information.
2. The information literate student identifies a variety of types of potential information sources.

3. The information literate student considers the cost and benefits of acquiring the needed information.

4. The information literate student re-evaluates the nature and extent of the information need.

**Standard 2: The information literate student assesses needed information effectively and efficiently.**

The performance indicators are as follows:

1. The information literate student selects the most appropriate investigative methods or information retrieval systems for assessing the needed information.

2. The information literate student constructs and implements effectively designed search strategies.

3. The information literate student retrieves information online or otherwise using a variety of methods.

4. The information literate student refines search strategies if necessary.

5. The information literate student extracts, records and manages the information and its sources.
Standard 3: The information literate student evaluates information and its sources critically and incorporates selected information into his/her knowledge base and value system.

The performance indicators are as follows:

1. The information literate student summarises the main ideas to be extracted from the information gathered.
2. The information literate student synthesizes main ideas to construct new concepts.
3. The information literate student validates understanding and interpretations of the information through discourse with other individuals, subject area experts and/or practitioners.
4. The information literate student determines whether the initial queries should be revised.

Standard 4: The information literate student individually or as a member of group, uses information effectively to accomplish a specific purpose.

The performance indicators are as follows:

1. The information literate student applies new and prior information to the planning and creation of a particular product or performance.
2. The information literate student revises the development process of the product or performance.
3. The information literate student communicates the product or performance effectively to others.

**Standard 5:** 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 performance indicators are as follows:

1. The information literate student understands many of the ethical issues surrounding information and information technology.

2. The information literate student follows laws, regulations, institutional policies and etiquette related to the access and use of information resources.

3. The information literate student acknowledges the use of information sources in communicating the product or performance.

The present study views the data collected from various school students in the light of the above mentioned standard and performance indicators. Though all the performance indicators could not be used because of the level of the students but overall the IL level could be understood from these standards and performance indicators.
OVERVIEW OF RELATED LITERATURE

Johnson (Johnson, 2003) in her article presents an annotated bibliography of recently published literature on library instruction and information literacy in academic, school, public, special and other types of libraries. She says that 10% of the articles deal directly with the assessment whereas many more discuss the need for IL. The practitioners of school library media centres concentrate on the collaboration of IL and school curriculum. There are some research models as well described in the article.

According to Zorona Ercegovac (Ercegovac, 1998), IL studies "close the gap between the information rich and information poor, which is the first step towards achieving IL equity among the citizens of a country." She defines IL with the same line of thought of P Montogomery (Montgomery, 1993), as the ability to recognize, access, locate and use when the information is needed. Zorona says that the information literate person would know how to use information from various sources. According to Zorona and Montogomery, additional IL skills include the ability to analyze, interpret and evaluate information retrieval.

The American Library Association’s Presidential Committee (1989) recommends six-pronged approach to IL as follows:

‘...a) knowing when a person has a need for information, b) identifying information need to address a given problem or issue, c) finding needed information, d) evaluating the information, e) organizing the information, and f) using the information effectively to address the problem or issue at hand.’ It further describes critical thinking as the critical component of IL, which ‘is the ability to evaluate retrieved information from a variety of sources.’
The committee alleges that the ‘users are still similar to hunters and data gatherers than competent searchers.’

Correia and Teixeira (Correia & Teixeira, 2003) provide an overview of some of the recent developments. They say that though information literacy is the key concept of information society and knowledge development, there is very little progress in promoting that. Correia and Teixeira discuss about different standards of IL. The Society for College, National and University Libraries, UK, has developed a model for IL. These standards and models initially addressed higher education and then extended to schools (Snavely, 2001).

The American Association of School Librarians has done a remarkable job in incorporating the IL standards in school curriculum. The School Library Association (SLA) of UK is active in promoting IL in schools through several SLA Publications.

Weber and Johnson (Webber & Johnson, 2000) include the following elements while defining IL,

- "competency in selecting and interacting with the most appropriate source of information, whether that be in print, electronic or other person;
- feeling comfortable with the tools needed for that interaction;
- communicating information effectively and appropriately;
• taking an intelligent critical approach to information in whatever form and appreciating the changes in information economy that affect what is presented;
• using and managing information effectively in a personal and work context;
• developing a sense of oneself as an information literate person”

The handbook ‘Colorado students achieve power @ your library: standards for information literacy and school library programs’, published by a committee of Colorado State Library, (Colorado State Library, 2002) emphasizes that the librarians should collaborate with the teachers to insure that the students improve academic achievements through information literacy standards.

Rockman (Rockman, Stregthening connections between information literacy, general education and assessment efforts, 2002) in his article describes Information Literacy as “international phenomenon.” He says that IL is “no longer just a library issue. It is the critical issue of twenty first century, of keen importance of all educational stakeholders, including faculty, librarians and administrators.” He adds “those individuals who are knowledgeable about finding, evaluating, analyzing, integrating, managing, and conveying information to others effectively and efficiently are held in high esteem. They are lifelong learners, and can stay globally connected in our multicultural world.”

In another article, Rockman (Rockman, 2002a) says that librarians can do the assessment in collaboration with the faculty members and it would not be an extra work if done in organised way.
Farmer (Farmer L., 2001), says that the librarians should be able to 'translate' IL concepts into terms which are used by different academic domains. He also says that the teachers who are aware of IL concepts, will collaborate more with the librarians for teaching-learning process. In a case study of 664 campuses of higher education, only 185 had a formal IL requirement and only 22% were aware of and used the Information Literacy Competency Standards for Higher Education (ACRL 2001b). The majority of settings (55%) considered as the librarians as ones responsible for IL instruction, while another 24% mentioned team teaching by librarians and academicians.

Alan Bundy (Bundy A., 2003) discusses about the initiatives taken in Australia. 'Information Literacy Standards (University of South Australia, 2001) is being used in a wide range of Australian educational contexts. Its comprehensive introduction is particularly useful in establishing information technology fluency as a subset of information literacy.' The Australian and Newzealand Institute for Information Literacy (ANZIL) established in 2003, aims to support organizations, institutions, and individuals in the promotion of information literacy incorporating with the educational process. Through professional development, promotion, marketing and advocacy, and research, the ANZIL will "identify, foster, facilitate and support best practices in information literacy."

In Australian and New Zealand 'Information Literacy Framework: principles, standards and practice' (Bundy A., 2004) says that to develop information literate graduates, "librarians will have to break out of their traditional reactive mode [and] become leaders and innovators in their
interaction with faculty', students and administrative leaders.” The framework also says that the librarians need to come out of their shells and actively take part in educational pedagogy. They should prove their credibility and competencies in course design to incorporate IL concept in the mainstream. The librarians should also act strategically in collaboration with the faculty members of the institutions. According to Doskatsch, (Bundy A., 2004) the librarians should:

- cultivate the development of a common educational philosophy
- giving priority to services and initiatives that are most likely to improve faculty -librarian relationships
- implementing quality assurance strategies for all critical services
- being thoroughly acquainted with the institution’s strategic plan
- predetermining the role of the academic teaching librarian in the educational mission of the institution
- communicating ways in which libraries (and the academic teaching librarian) can contribute to the educational mission of an institution
- owning and using the language of those to be influenced.”

In Scotland, with UK Government’s initiative ‘The Information Literacy Project’ has began in 2004. (Irving & Crawford, 2010). The initial focus was to synthesise IL in secondary and tertiary education system. But eventually it has been extended to primary education at one end and workplace on the other. The government has adopted IL as a serious issue and has said that to make the country economically strong, IL needs to addressed very seriously. In 2009 the UK Government has organised a
workshop on pre-primary kids’ LILAC 2010 (The Librarians Information Literacy Annual Conference) Limerick. (Librarians’ Information Literacy Annual Conference © LILAC 2010., 2010). According to the Government it is ‘cradle to grave’ educational strategy which would make the entire country information literate.

An action Research is done with the high school students of Redwood High School, USA with the Information Literacy promotion module and standard, developed by American Association of School Librarians (AASL) and the Association for Educational Communications and Technology (AECT), published in 1998, in Information Power (Farmer L., 2001). In 1999, International Society for Technology in Education (ISTE) published overlapping technology standards for students. The standards offer a well researched and effective instruction. The case study done by Bay Area School Reform Collaborative (BASRC), shows the existing level of information literacy of that school and the role of higher authority and librarians.

In most of the articles and studies, it is found that there is very less work done for school students. Especially in India, there is hardly any empirical studies done about IL and school students. The present study will show the actual situations of the students of different zones of India as far as their information literacy levels are concerned. At the same time the study has considered the conditions of school librarians and their attitude towards the students and their learning. The teachers’ attitude towards libraries and the use of library resources in the teaching-learning process is also examined. Finally the investigator has tried to suggest how the librarians can help to
generate a module for enhancing information literacy of school students taking the light from ACRL standard of IL.
REFERENCES


