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Information Literacy—Need for an Urgent Action in India: A Strategic Approach

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ABSTRACT

The paper discusses lagging behind of the developing countries (with special reference to India) in taking initiatives and carrying out projects for developing, promoting and implementing information literacy (IL) education and training programmes and projects. Pointing to the IL situation in both academic and corporate context as well as in the context of business and management education, it emphasises that without a push of external help through financial aid and professional expertise. India would not be able to properly address, both the IL issue and the prerequisite issues of upgrading and developing their information and information systems infrastructure. It proposes strategy for addressing the IL issues which would help individual institutions to intensify and broaden their existing activities in the field of IL promotion and implementation and start new ones wherever necessary.

Keywords: Information literacy, ICT, skill-based literacies, information literacy in India.

1. INTRODUCTION

Information literacy (IL) is a set of abilities requiring individuals to "recognise when information is needed and have the ability to locate, evaluate, and use effectively the needed information".[1] IL is increasingly important in the contemporary environment of rapid technological change and proliferating information resources. Because of the escalating complexity of this environment, individuals are faced with diverse, abundant information choices—in their academic studies, in the workplace, and in their personal lives. Information is available through libraries, community resources, special interest organisations, media, and the Internet. Information comes to individuals in unfiltered formats, raising questions about its authenticity, validity, and reliability. In addition, information is available through multiple media, including graphical, aural, and textual, which pose new challenges for individuals in evaluating and understanding it. The uncertain quality and expanding quantity of information pose large challenges for society.[2] The sheer abundance of information will not in itself create a more informed citizenry without a complementary cluster of abilities necessary to use information effectively. IL forms the basis for lifelong learning. It is common to all disciplines, to all learning environments, and to all levels of education. It enables learners to master content and extend their investigations, become more self-directed, and assume greater control over their own learning. There is big gap between India and rest of the developed countries as they have been striking a asymmetry in the access and use of the vast repositories of information and knowledge available in the world.

Despite the widely spread use of the information and telecommunications technology (ICT) in India, it seems that the situation has not significantly ameliorated. India continues to suffer from low utilisation of the most important resource of the present time: information and knowledge. One of the reasons for this is the information illiteracy of all segments of society. Lack of knowledgeable, skilled and efficient

use of information and knowledge causes wastage of other resources and directly effects the productivity in all spheres of life and work—in education, research, business and administration. India is short of the multiple impact of the efficient use of the information and knowledge resources. Therefore, urgent and energetic addressing of the IL issue in India is necessary so that further widening of the gap between India and the rest of developed countries be abridged.

2. IL: CONCEPT, MEANING AND DEFINITIONS

Information is available from many sources and in many formats, such as printed text, television, videos, library databases, websites, etc. To be a information literate, one need to know why, when, and how to use of all these tools and think critically about the information they provide. IL is concerned with teaching and learning about the whole range of information sources and formats.

IL aims to develop both critical understanding and active participation. It enables people to interpret and make informed judgments as users of information sources; but it also enables them to become producers of information in their own right, and thereby more powerful participants in society. IL is about developing people's critical and creative abilities. Digital media, particularly the Internet, has significantly increased the potential for active participation; but it has also created an environment of bewildering choices. IL is broadly the skill which allows us to express, to explore and to understand the flow of ideas among individuals and groups of people in a vastly changing technological environment ... the process, skills and habits of accessing and using ideas and information are undergoing revolutionary changes. IL refers to this set of complex, integrated, higher-level skills appropriate to our age[3].

IL is the ability to access, evaluate, and use information from a variety of sources. As students prepare for the 21st century, traditional instruction in reading, writing, and mathematics needs to be coupled with practice in communication, critical thinking, and problem solving skills[4].

The American Library Association's definition of the term[5] is, 'to be information literate an individual must recognise when information is needed and have an ability to locate, evaluate and use effectively the information needed. Ultimately information literate people are those who have learned how to learn. They know how to learn because they know how information is organised, how to find information and how to use information in such a way that others can learn from them'.

Hughes and Jackson[6] express it simply, 'IL involves knowing your way around in the information world'. IL has been defined as a set of abilities to 'recognise when information is needed and have the ability to locate, evaluate, and use needed information effectively'.[7]

More specifically, IL can be defined as a set of abilities to:

- Determine the extent of information needed
- Locate and evaluate information
- Incorporate selected information into one's knowledge base
- Use information ethically, legally and with an understanding of economic and social issues.

3. IMPACT OF ICT

Empowerment of people through IL is an important prerequisite for harnessing ICTs for education and fostering equitable access to information and knowledge. IL enhances the pursuit of knowledge by equipping individuals with the skills and abilities for critical reception, assessment and use of information in their professional and personal lives. IL is related to information technology skills, but has broader implications for the individual, the educational system, and for society. Information technology skills enable an individual to use computers, software applications, databases, and other technologies to achieve a wide variety of academic, work-related, and personal goals. Information literate individuals necessarily develop some technology skills.[8]

The process of IL requires not only the learning of a constellation of skills but also a new way of thinking in order to derive meaning from learning. Technological storage and sharing of information has increased the availability of data tremendously. Much of this information is available only through telecommunications. IL in telecommunications is achieved when learners know when to use online resources, how to access information competently, how to evaluate information as to accuracy and pertinence for each need, and how to communicate this information effectively. Learners who are able to do this will have lifelong skills they will need in the Information Age.[9]

Since Internet is a common information and communication tool, IL is often understood as digital

literacy. Computer/digital literacy is a first essential, but beyond that there remains the huge black hole of information; that is the awareness that information can be of help, that the resources exist if one can know where to look, that the skills to use the resources can be learned, and that once the information is acquired there is still some critical evaluation yet to be done.

4. SKILL-BASED LITERACIES

The initial concept of literacy, which goes considerably beyond simple ability to read and write, has been complemented in recent decades by 'skill-based literacies', concepts developed to deal with an information of increasing complexity and developing technologies.

4.1 Library Literacy

Bawden emphasised self-sufficiency as an essential part of library literacy, arguing that this allows 'the ability to make an intelligent decision about the best way to answer an articulated question, to pursue a more or less efficient organised search for the answer, and to know when the intervention of a specialist is necessary'[10]. Gilton regards library literacy 'not as the presence or absence of skills, but as progressive stages...the library literate can follow a systematic path or search strategy to locate texts and evaluate the relevance of the information'[11]. She suggests, by analogy with the progressive stages of literacy itself, from total illiteracy to full literacy, there may be several stages of library literacy:

- Pre-library literacy (library illiteracy)—the individual cannot find a book on the shelf without assistance.
- Semi-library literacy—the individual can find books in a catalogue and on the shelf, and find articles in simple readers' guides
- Library literate—the individual can follow a systematic search strategy to locate and evaluate the most relevant information on a given topic
- Library fluent—understands patterns of communication and publication and is able to generalise and modify a search strategy to meet a variety of information needs.

Library literacy is often taken as synonymous with 'bibliographic instruction', library skills, and the like. It was one of a number of terms considered by Snavely[12] as alternatives to IL to best describe the newer type of formal instruction in library, and other, information resources. The term has somewhat fallen into disrepute as being too much, even exclusively, centred on library resources, though in practice it has often encompassed a broader scope: 'good library instruction has always transcended what its name implies'.[13]

4.2 Media Literacy

This term is used to imply critical thinking in assessing information gained from the mass media like television, radio, newspapers and magazines, and (increasingly) the Internet. 'Media literacy, the movement to expand notions of literacy to include the powerful post-print media that dominate our informational landscape, helps people understand, produce and negotiate meanings in a culture made up of powerful images, words and sounds. A media literate person—and everyone should have the opportunity to become one—can decode, evaluate, analyse and produce both print and electronic media'[14]. Media literacy has an obvious overlap with more general concepts of information literacy, since the information gained from these sources often overlaps with, and complements, that from more formal library sources.

4.3 Computer/IT Literacy

Computer literacy according to chambers English Dictionary is competence in the use of computers. This definition conceals the fact that there is a spectrum of views as to what this 'competence' involves, somewhat analogous to the variation in definition of 'literacy'. Most common has been a pragmatic skills-based approach. In practice, this translates to an introduction to the skills required to operate a variety of computer applications packages—word processing, databases, spreadsheets, etc. together with some general IT skills, such as copying disks and generating hard-copy printout. The text introduces these skills in a structured format of overview, build-up exercises, checklist of commands, self-assessment tests, and assignments.

Kuhlthau advanced the concept of IL further when she included library skills and computer literacy in the definition[15]. Kuhlthau's work pointed the way toward the integration of IL with curriculum and presages the current development of the concept of IL with the library media center as the starting platform. Bawden and Robinson[16] also find it helpful to distinguish between 'skills-based literacies', such as computer or library literacy, which essentially indicate a competence in handling information in a particular setting or context or format, and more general capabilities[16]. These wider conceptions of

IL stress capabilities beyond a simple competence in retrieving or communicating information. They highlight that to deal with the complexities of the current information environment, a complex and broad form of literacy is required. It must subsume all the skill-based literacies, but cannot be restricted to them, nor can it be restricted to any particular technology or set of technologies, and understanding, meaning and context must be central to it.

IT literacy as having two clear components[17] skills in the use of tools, which is regarded as very useful but extremely limited, and an understanding of how the technological world works. IT literacy, ability to evaluate critically the benefits and costs of information technologies, the term information technology literacy, or IT literacy, may also have carried with it an initial connotation of a somewhat broader perspective than computer literacy. However, in practice the terms have been used largely synonymously—certainly so in a library/information context—to indicate a set of basic competencies with computer and telecommunications systems. All these skills-based literacies emerged to meet the needs of a more complex information environment, with new technologies, and a wider variety of media and services. Centred around a core of skills, all of them moved beyond this, showing that, as with literacy itself, these seemingly simple forms of literacy require a wide spectrum of skills, knowledge, understanding and attitudes. This leads to a consideration of a form of literacy appearing from the outset to be based on rather wider premises than one or more skills: IL.

5. INTERNATIONAL EFFORTS TO DEVELOP IL

5.1 The USA

Librarians all over the world are teaching people a variety of library and information skills. Each year since 1973 the number of publications related to user instruction and IL are increasing. During the past decade many librarians are sharing their experiences and expertise related to information skills at various national and international conferences.

In the USA some professional organisations related to education, law, nursing and medicine have already begin to address lifelong educational needs for their professionals. In Australia, Bruce and Christine[18] have expertly defined IL as seven distinct areas, viz, information technology, information sources, information process, information control, information construction, information extension, and wisdom experience.

5.2 The UK

During the past three decades academic and schools librarians in the UK are actively involved in developing theories and programmes related to user instruction and IL. The ex-polytechnic universities and schools in particular have experimented with and set up a variety of information skills and instruction programmes. In 1998, SCONUL (Society of College, National and University Libraries) created a task force to prepare a statement on information skills for higher education. SCONUL proposed seven sets of skills developed from a basic competence in library and information technology skills. In March 2002, Scotland hosted an international conference on Information Technology and IL addressing a variety of topics related to IL teaching and information technology.

5.3 Australia

Australian Library and Information Association policies and guidelines reflect the general position of the Association on issues that have an impact on the library and information sector, and provide direction and advice to those who choose to consider the policies and guidelines for their own use.

5.4 Africa

Librarians in several African countries are working on global information environment by teaching information skills. At the University of Botswana, librarians have integrated information skills instruction throughout the curriculum. In recent years, South African librarians and teachers have collaborated to improve learning instruction for lifelong learning. A noteworthy project with help from the Ford Foundation and the Readers Digest Foundation has helped the Western Cape Librarians develop curriculum-integrated IL programmes in academic institutions.

5.5 Canada

The information policy of the Canadian government among many other information concerns promotes an information-literate population. During the past three decades, Canadian academic librarians have been teaching their students library and information skills. Instructional librarians in academic libraries are continuing to address the challenge of integrating information skills instruction into the total curriculum.

6. IL IN INDIA

The National Literacy Mission (NLM) in India was set up in May 1988, with an objective to assess

the strengths and weaknesses of the earlier programmes, and to accord a new sense of urgency, seriousness and emphasis with fixed goals, clear time frame and age-specific target groups. The NLM defines literacy as acquiring the skills of reading, writing, and arithmetic, and the ability to apply them to day-to-day life. In order to address the challenges of ICT cost of connectivity and IT literacy, Information Technology Task Force was formed in 1998. Accordingly, the IT Action Plan for India is also prepared containing 108 recommendations covering both bottleneck areas and broad promotional measures that are crucial for boosting IT in India[19] The year 2000 saw another remarkable development in the application of ICTs in India. In order to boost e-commerce in India, the government passed the Information Technology Bill in May 2000. It is considered as the nations' bold initiative to set up regulatory and legal framework for e-commerce. It provides a legislation to facilitate e-commerce and to tackle the growing number of cyber crimes[20].

By and large most of the e-Governance and computerisation initiatives across the country use ICT as a means to achieve a more effective delivery of government services and better governance in general. Government initiatives across the country, such as computerisation and networking of departments, call for training the people to become IL.Looking at the literature published in India; it is observed that there is very little output. There are no specific standards, reports and policy guidelines for IL brought out either by government, professional associations or the institutes of higher learning.

7. PROPOSED STRATEGY

There is an ongoing need for clear, coherent and authoritative documents that define IL and provide a rationale for its implementation in India. National document or policy statement of this kind will also need to be followed up with an ongoing process of monitoring at a national level. In addition to broad statements of purpose, there is a need for more specific documentation outlining frameworks for curriculum development and practice. A document of this kind would need to include a clear model of learning progression, details of specific learning outcomes, expressed in terms of competencies; and criteria and procedures for evaluation and assessment. Well-intended documents and frameworks are worthless without trained staff to implement them. Elements of training in IL should be included in initial and in-service training programmes, and be available as part of teachers' ongoing professional development. Distance and Open University learning may be appropriate in many circumstances, but this should be complemented by sustained opportunities for face-to-face tuition and through EDUSAT programme.

Despite the changing and sometimes ephemeral nature of the content of media education, teaching materials can have a long shelf life if they are carefully and professionally produced. IL does not by any means have to be a 'high tech' enterprise, but it should at least reflect the levels of access that students and teachers have to technology outside the campus/school environment.

IL practice should obviously reflect current theoretical advances in our understanding of people's relationships with media, and of pedagogy. In terms of pedagogy, issues that are in need of more systematic and sustained research might include the nature of student learning about the course; the relations between 'conceptual' and 'affective' dimensions of course education; and the relations between 'theory' and 'practice'.

There is a need for international dialogues and exchanges to be sustained, rather than merely in the form of one-off conferences taking place every year. International exchange will be much less superficial if practitioners have more sustained opportunities to visit each others countries, e.g., through a system of longer-term internships.

All the above elements are inter-related. If any one of these is missing or weakened, it puts the entire construction at risk. For instance, policy documentation or curriculum frameworks in the absence of professional development can be merely a matter of empty rhetoric. Professional development and self-organisation by teachers is fairly meaningless if there are no clear curriculum frameworks for them to work within. Policy, teaching and research should be interconnected: development in one area should support development in the others.

8. CONCLUSION

IL—the ability to access, evaluates, and use information from a variety of sources—is central to all successful learning and by extension to all successful living. IL and digital literacy are central topics for the information science. They are associated with issues as varied as information overload, lifelong learning, knowledge management, and the growth of the information society. Naturally, they have been much discussed in the literature, but not perhaps, as much as their importance deserves; in particular,

they have not impinged much on the practitioner. Practical implementation of, and support for, these sets of skills, understandings and attitudes, apart from the library instruction setting, has been patchy at best. This may in part be due to the confusion caused by the varied terminologies and meanings as discussed in this paper. The discussion above is intended to clarify the subject area, and hopefully lead to greater take-up of these ideas. Two main points emerge. First, it is possible, and clearly appealing, for those interested in this area to spend a great deal of time discussing the finer points of, usually mutually contradictory, definitions. The best antidote to this is to adopt a Popperian position of explaining, rather than defining terms. The labels attached to these concepts do not matter; the concepts themselves, and their significance for practice, do. Second, it is tempting, again as is clear from the discussion, to express these ideas in terms of sets of particular skills to be learnt, and competences to be demonstrated. While this may be valid for some limited purposes, it is too restrictive overall; even in the supposed skill-based literacies, broader considerations soon intrude.

To deal with the complexities of the current information environment, a complex and broad from of literacy is required. It must subsume all the skill-based literacies, but cannot be restricted to them, nor can it be restricted to any particular technology or set of technologies. Understanding, meaning and context must be central to it. It is not of importance whether this is called IL, digital literacy, or simply literacy for an information age. What is important is that it should be actively promoted, as a central core of principles and practice of the information sciences.

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"Information literacy is the adoption of appropriate information behaviour to identify, through whatever channel or medium, information well fitted to information needs, leading to wise and ethical use of information in society"

Johnston & Webber

About the Author

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