Global information literacy standards and frameworks - implications for the reimagined India

Padrões e estruturas globais de alfabetização em informação - implicações para a Índia reimaginada

Estándares y marcos globales de alfabetización en información - implicaciones para la India reimaginada

DOI:10.34117/bjdv10n3-051

Originals received: 02/19/2024
Acceptance for publication: 03/08/2024

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ABSTRACT
The present paper is the outcome of the efforts to review the global scenario of information literacy standards and frameworks and its implications in reimagining Indian higher education in the digital environment. Several initiatives have been taken by the institutions at the global level all over the world in order to develop information literacy standards and frameworks. However, for the present study author has selected only major initiatives that are accepted and used by academic fraternity to create information literate citizens. While exploring studies on information literacy in Indian scenario author found that very frequently the topic has been researched by many researchers but not yet any standard or framework has been developed for information literacy in India. The author emphasizes the need to have uniform standards at the university level to conduct an information literacy program at all levels of higher education, in order to cater information needs of generation next in the digital environment. It will result in creating responsible information literate citizens even in a multidimensional digital environment.

Keywords: information literacy, higher education, standards of information literacy, ACRL framework, digital environment.

RESUMO
O presente artigo é o resultado dos esforços para revisar o cenário global dos padrões e estruturas de alfabetização informacional e suas implicações na reconfiguração do ensino superior indiano no ambiente digital. Várias iniciativas foram tomadas pelas instituições em nível global em todo o mundo para desenvolver padrões e estruturas de alfabetização informacional. No entanto, para o presente estudo, o autor selecionou apenas as principais iniciativas que são aceitas e usadas pela comunidade acadêmica para criar cidadãos alfabetizados em informação. Ao explorar estudos sobre alfabetização informacional no cenário indiano, o autor descobriu que o tema foi frequentemente pesquisado por muitos pesquisadores, mas ainda não foi desenvolvido nenhum padrão ou estrutura para alfabetização informacional na Índia. O autor enfatiza a necessidade de ter padrões
uniformes no nível universitário para conduzir um programa de alfabetização informacional em todos os níveis de ensino superior, a fim de atender às necessidades de informação da próxima geração no ambiente digital. Isso resultará na criação de cidadãos responsáveis e alfabetizados em informação mesmo em um ambiente digital multidimensional.

**Palavras-chave:** alfabetização informacional, ensino superior, padrões de alfabetização informacional, estrutura ACRL, ambiente digital.

**RESUMEN**

El presente artículo es el resultado de los esfuerzos para revisar el escenario global de estándares y marcos de alfabetización informacional y sus implicaciones en la reconfiguración de la educación superior india en el entorno digital. Varias iniciativas han sido tomadas por las instituciones a nivel global en todo el mundo para desarrollar estándares y marcos de alfabetización informacional. Sin embargo, para el presente estudio, el autor ha seleccionado solo las principales iniciativas que son aceptadas y utilizadas por la comunidad académica para crear ciudadanos alfabetizados en información. Al explorar estudios sobre alfabetización informacional en el escenario indio, el autor descubrió que el tema ha sido investigado con frecuencia por muchos investigadores, pero aún no se ha desarrollado ningún estándar o marco para la alfabetización informacional en la India. El autor enfatiza la necesidad de tener estándares uniformes a nivel universitario para llevar a cabo un programa de alfabetización informacional en todos los niveles de educación superior, con el fin de satisfacer las necesidades de información de la próxima generación en el entorno digital. Esto resultará en la creación de ciudadanos responsables y alfabetizados en información incluso en un entorno digital multidimensional.

**Palabras clave:** alfabetización informacional, educación superior, estándares de alfabetización informacional, marco ACRL, entorno digital.

**1 INTRODUCTION**

Significance of information in day to day, life is inevitable; it is an important factor for the survival of human beings. Search for information is a natural phenomenon that each individual is in the need of information for some or other reason. Information can be defined as data, fact, news, or anything which answer the questions a person having in his/her mind to solve a particular problem. It can be available in different forms and formats, sometimes tangible or sometimes in an intangible setup. The concept of information has been defined by information scientists in a variety of contexts. Clarke and Summers (1981) in the New Webster’s dictionary, defined information, it may be news or intelligence communicated by word or in writing: data or facts: knowledge derived from reading or instruction, or gathered in any way. According to Buckland (1991) information has to do with becoming informed. It is a reduction of ignorance and
uncertainty. Further he mentioned three most important uses of information—first, when someone is informed about something, what he or she knows earlier is changed, in this sense information is consider as process. And it may consider as the act of informing and communicating knowledge. Second usage is ‘Information as knowledge’—the information which reduces uncertainty could be consider as information as knowledge, the knowledge which cannot be touch or measure in any direct way, means that is intangible. It has to communicate, express, and represent in some tangible or document format. The third usage is that the things presented as informative, in this sense information can be viewed as a thing. It includes data, text, documents, objects, and events. Having the quality of imparting knowledge or communicating information, whatever information is stored and retrieve from the systems should be consider as ‘information as a thing.’ Further Reitz (2004) in the dictionary for Library and Information Science defined information as ‘information or text available in a readily understandable form to which meaning has been attributed within the context of its use’. In a more dynamic sense, the message is conveyed by the use of a medium of communication or expression, whether a specific message is informative or not depends in part on the subjective perception of the person receiving it.

2 SIGNIFICANCE OF THE STUDY

Information is conceptualized generally as something which students need during their studies when they construct meaning about the topic in the process of learning (Eskola 1998). The contemporary era is the digital era, where students are digitally born and facing the challenge of information explosion due to technological innovations. Information is available in various modes, mediums, and formats at the fingertips of the students. It is an age of knowledge and information revolution, where inculcating information literacy skills among the students at all level of higher education become prior responsibility. Students need to be trained about the identification and selection of the right information, filtering of information, evaluation, and proper use of obtained information or presentation of information. They must develop strategies to handle an overflow of information. The obvious provider of these strategies is the information literacy librarian. (Bridges 2005). In this dynamic digital environment, the role of librarians becomes crucial to make students information literate. The professional requirements are constantly changing; the means of storing and making information available is continually changing with the innovation of information technology. The
academic librarian in the past was an intermediary between the information and the seeker of that information. However the role is changing drastically, today they are instructors or facilitators. As part of this new role, the academic librarian must now identify specific competencies and develop strategies to help users to acquire these competencies in the digital environment (Birks & Oesleby 2003).

Several initiatives have been taken by the institutions at the global level all over the world in order to develop information literacy standards and frameworks. However, for the present paper author has selected only major initiatives that are accepted and used by the academic fraternity to create information literate citizens.

3 CONCEPTUAL FRAMEWORK

In the field of library and information science many organizations are working for information literacy education on the global level. Several higher education institutions across the globe have formed committees in the campus to with the agenda that to include information literacy as a graduation outcome. If we look back in 1989, a final report of American Library Association (ALA) presidential committee on information literacy, presented four components of information literacy i.e. “the ability to recognize, when information is needed, - to locate – to evaluate, and use effectively the needed information (American Library Association 2006).

4 MAJOR INITIATIVE AT GLOBAL LEVEL

Thus the ALA report defines information literacy as “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. To be information literate, then, one needs skills not only in research but in critical thinking.”

Further report says, “To have such society will require school and colleges that understand and integrate the concept of information literacy into their learning programs. Educational institution should play a leadership role in promoting advantage of the opportunities inherent within the information society. Because, information literate people have learned how to learn, because they know how knowledge is organized and how to find needed information and use that information in a particular manner that others can learn from them. These are the people who are prepared for lifelong learning and they always find the information needed for any task or decision.”(American Library Association 2006)
In 1990, the National Forum on Information Literacy (NFIL) was founded in order to respond to the Final Report recommendations of the ALA Presidential Committee. NFIL is an “alliance of over 75 organizations working toward national and international awareness of the information literacy and encouraging activities leading to its acquisition.” Further in March 1998, NFIL issued A Progress Report on Information Literacy: An Update on the American Library Association Presidential Committee on Information Literacy: Final Report.

Further in 1998 the American Association of School Libraries (AASL) and the Association of Educational Communications and Technology (AECT) published Information Literacy Standards for Student Learning. The AASL/AECT standards provide detail competencies for students in school level.

Since 1989, in the absence of national standards, many schools and university systems have developed information literacy competency standards (Library Association, 2000).

In 1999, The Society of College, National and University Libraries (SCONUL), the working group on information literacy published “Information skills in higher education: a SCONUL position paper” (SCONUL, 1999). The paper introduced the Seven Pillars of Information literacy skills model. The model has been adopted by many librarians and teachers all over the world to inculcate information literacy skills among the students. The model was revised in 2011 and then reviewed in 2015. The model outlined the relationship between information and IT skills and their potential progressive development within the higher education curriculum. (DaCosta, n.d.).

Figure 1 - Seven Pillars of Information Literacy

Source: https://www.sconul.ac.uk/sites/default/files/documents/coremodel.pdf
Further, a division of the American Library Association (ALA), - Association of College and Research Libraries (ACRL), in the year 2016 brought new framework for information literacy in higher education. The framework consists of six frames arranged in alphabetical order but did not follow a particular sequence in which they must be learned.

1. Authority Is Constructed and Contextual
2. Information Creation as a Process
3. Information Has Value
4. Research as Inquiry
5. Scholarship as Conversation
6. Searching as Strategic Exploration. (ACRL 2016)

The present framework is based on a cluster of interconnected core concepts with flexible options for its implementation. It visualizes information literacy as extending the bend of learning throughout students’ academic as well as social learning goals. Definition of information literacy is offered by this framework is emphasizing dynamism, flexibility, individual growth, and community learning:

“Information literacy is the set of integrated abilities encompassing the reflective discovery of information, the understanding of how information is produced and valued, and the use of information in creating new knowledge and participating ethically in communities of learning.” (ACRL 2016)

Each frame consists of the learner’s knowledge practice and disposition that are developing their information literate abilities. “The Framework offered assistance for librarians to redesign instruction sessions, assignments, courses, and even curricula. It promotes to collaborate on pedagogical research and involve students in that research. It allows wider conversations about student learning, scholarship of teaching and learning, and the assessment of learning on local campuses and beyond.” (ACRL 2016)
Table 1 - ACRL Framework (2016)

| Authority Is Constructed and Contextual | Identifying the credentials and specialization of author or creator before referring his or her work. Learners understand to critically examine all evidence and to inquire about origins and suitability of the content for their information need. |
| Information Creation as a Process | Understanding the importance of the information creation process, lead students to make refined choices when matching information materials with their information needs. |
| Information Has Value | Students will learn to use and make responsible use of information as creators and will understand their rights when participate in an academic and research society. |
| Research as Inquiry | Learner seeks multiple perspectives during information gathering and assessment. Their abilities to refine research questions will increase, they will learn to use more advanced methods of research, and also to explore more inter-disciplinary perspectives. |
| Scholarship as Conversation | Learners’ familiarity with the sources of evidence will develop. Entry in the Scholarly conversation for novice learners will become easy with the help of existing methods and modes of discourse in the field. |
| Searching as Strategic Exploration | Students would understand that information searching is a contextualized and complex experience that is affected by the cognitive, affective, and social dimensions of the learners. |


5 DIGITAL ENVIRONMENT AND INFORMATION LITERACY SKILLS

Studies conducted on information literacy in the digital environment emphasize that the digital environment presents many opportunities to develop students’ information literacy skills. Markless (2009) explored a new conception of information literacy for the digital learning environment in higher education and recommended a new framework for information literacy in higher education with a rationale for its appearance. The further study covered the importance of developing information literacy and the influence of the digital environment. A study conducted by Reedy and Goodfellow (2012) proposed a framework for digital information literacy for Open University students. The study points out how digital literacy is different from information literacy. The study introduces various levels and stages of digital information literacy skills. Lawal (2017) studied information literacy and the future of digital information services at the University of Jos Library. The study explored the current developments in digital information resources at the University. It examines some of the new opportunities and challenges in digital information services presented by the changing context with respect to information literacy and the need for digital information literacy skills training. Findings provided relevant policy considerations in digital information literacy practices for academic libraries in Nigeria.

There are many online avenues that can be used by libraries to create a digital information literacy program. While discussing information literacy in the digital environment in United States DaCosta (n.d.) said that many librarians have looked to
online tutorials as a means of providing 24/7 instruction and to appeal to the different learning styles of the Google generation. Some libraries have developed subject or task-specific tutorials, such as citation or plagiarism. Some libraries have only been able to add links to resources, or contact details for subject librarians, but others have been able to develop information literacy instruction. Further author specified there are databases like Primo, which stands for Peer-reviewed instructional materials online and is produced by the instruction section of the ACRL. This can be used to find materials related to information literacy or library skills in general and sub-divided by subject area. The further author described that many academic libraries in the United States have taken the opportunity to incorporate library resources and support within their institutional virtual learning environments (VLE), known as course management systems (CMS), and have chosen to make use of LibGuides, which are provided on a Web 2.0 platform and are easy to create. They allow for multimedia content to be incorporated, as well as widgets and applications compatible with Facebook, Twitter, and other social networking software. LibGuides are general and course-specific guides, websites and portals, and also for library instruction. The ease with which they are created has encouraged librarians to prepare a guide, rather than a handout, to supplement teaching and to even add to the guides during class sessions. LibGuides are hosted on a server controlled by Springshare, which is an advantage to libraries that are unable to access their own institutional server. The author also indicated that the assessment of information literacy skills is equally important while teaching it.

6 INDIAN SCENARIO

In order to understand the Indian scenario for information literacy, existing literature was examined. Regarding relevance of information literacy in the digital environment Mishra and Mishra (2010) mentioned that information literacy in library services is required not only to optimize the use of library resources but also to train the users about authenticity of information sources and access that information from the World Wide Web. Librarians have to inculcate skills like web searching techniques, evaluation of online information resources and establishing authenticity and reliability of online information resources among the library users. Juin (2011) studied the role of school librarians in promoting information literacy among school students based on the ACRL standards of information literacy. Golwal (2011) conducted a case study on E information literacy and developed subject wise tutorials for M.Sc. And Ph. D. students
of Dr. Babasaheb Ambedkar University Marathwada. Sarman (2013) studied information literacy skills of the university students in the electronic environment. The study provided recommendations to the university libraries for the integration of information literacy content into the university curriculum as well as to create thinkers who can make maximum utilization of information in a wider information and communication technology environment. Kamatchi (2013) developed a web-based information literacy module for pre-service teachers in Chennai and tested the effectiveness of the module to develop the information literacy skills of pre-service teachers in the digital environment. Kale (2013) did an experimental study to assess the information literacy skills of student-teachers and develop a module to inculcate information literacy skills among the student-teachers. Aminian (2014) studied students' information literacy level in three educational disciplines of human sciences, fundamental sciences, and engineering and compared it with the existing standards of ACRL. Pattar (2015) investigated the design and development of Information Literacy Programs and Practices in the Electronic Environment with Special Reference to Engineering College Libraries in Mumbai. Nachiappan (2015) explored Information and computer literacy skills among research scholars of Alagappa University. Gandhe (2017) found that Indian higher education is lacking in the inclusion of information literacy skills in the learning environment. There is no standard framework of information literacy is available which will match the Indian Universities' education system. The further author mentioned that in the Indian scenario, the definition of information literacy needs to be modified and basic library skills must be included in the set of required skills. It is down to the librarian to ensure that the information literacy teaching remains pedagogically sound, regardless of the medium. Singh (2017) assessed the information literacy competency of postgraduate students and instruction initiatives of agriculture university libraries in north India.

The literature review confirmed that in India many types of research have been done on the topic of inculcation of information literacy skills among students or researchers at various levels and in several ways. Majorly based on ACRL framework or researcher has developed their own tutorials or modules to conduct the program.

7 FINDINGS AND SUGGESTIONS

Although it is evident from the existing literature that in India the topic of information literacy has been researched by many researchers in various scopes, but not
a single uniform standard or framework has been developed by the Indian information scientists. Except some of the autonomous colleges' incorporated information literacy as one of the subjects into their course work. And by introducing research-oriented project activities they are trying to induce the use of information literacy skills. Recently University Grant Commission (UGC) introduced an information literacy program for some courses, but the assessment and outcome of the course need to be researched. Therefore there is a need to develop a comprehensive information literacy framework or guidelines at the university level in order to impart information literacy skills among the students, especially in the digital environment. In India, librarians do conduct programs like library orientation, user education, and library tour and also develop user manuals to offer easy use of library resources and services. Further, they name it information literacy programs, however, is a true sense, the concept of information literacy is much more comprehensive and profound in itself. We train our students to search library material in the library through OPAC, however, we are not training them or inculcating skills of critical analysis of resources available on the World Wide Web. They should know the responsible and ethical use of information and information technology.

8 CONCLUSION

The development of information literacy is a continuing process, so many of the skills need to be introduced at a simple level and reinforced at increasingly sophisticated levels to develop depth as the student progresses through his or her studies. Information literate students are competent, independent learners. They know their information needs and actively engage in the world of ideas. They display confidence in their ability to solve problems and know what relevant information is. They manage technology tools to access information and to communicate. (Colorado educational Media Association, 1994,.). The system is requiring training our students to face the challenges that are imposed by the information and communication technology during the teaching-learning process and while handling the vast array of information. Then only technology will become a blessing rather than a curse and it will also help to create responsible citizens.
REFERENCES


