

Review Paper

Information Literacy Instruction: Determining the Place of Library Professionals

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ABSTRACT

The present article is a review of information literacy (IL) outlook in the present academic perspective. The paper discusses as how from the traditional bibliographical instruction, it has been advanced as a tool for library and information professionals to streamline the profession and their position. The article points out the expected outcome of IL can only be achieved with the collaborative endeavor of library professionals and teaching staff. The existing models of information literacy instruction have also been highlighted along with brief overview of information literacy content. The academic dishonesty and the accountability of academic libraries are explained briefly. IL is the basic pre-requisite of lifelong learning, the article exhorts international, national and local governments should have information policies and strategies with emphasis on assessment. Library professionals are predictable to play a key role in extending cognitive abilities of the users to make IL to be a great success.

Keywords: Information literacy; Information literacy instruction; Teacher-librarian collaboration; Information literacy models; Academic dishonesty; Lifelong learning; Information literacy assessment; Critical thinking

1. INTRODUCTION

The concept of information literacy (IL) is wider, deeper and more comprehensive in it and is more than just ability to read and right. In fact, the IL aims at streamlining the informal education by making an individual to get the right question and find the answer by his own. Information literacy may be regarded as the extension of tradition bibliographic extension and user education programme. But by the time the concept is formed, its significance and implementation has been considered essential from the academic perspective. Even corporate world also feels a need to have it to have sustainable knowledge economy¹. In fact, it is pervasive concept, and is prevalent in almost every sector, although with different tags.

Zurkowski² first coined the phrase 'information literacy' in 1974. He used it in a context with regard to solve the problems that one may come across in day to day life with all kinds of information sources. Peter³ in his study, found out that there are different dimensions of literacy such as information literacy, digital literacy, new literacy, media literacy, critical literacy, e-health literacy, new media literacy and 25 different types of literacies in which information literacy is mostly cited literacies. Some new conceptions of literacies were also found such as transliteracy, metaliteracy and multimodal literacy. Some thinkers have started using the term 'Information Literacy 2.0'⁴ as it considers the inclusion of the socio-technical and communicative dimensions⁴. Bruce⁵, *et al.* have suggested the concept of 'informed learning' over 'information literacy' or 'information literacy education'. They say that it is holistic

approach which gives emphasis on using information at every step of education while IL consist of developmental skill. It has been accepted as the extension of traditional information literacy perspective. In short, there might be several definitions and delineations of the concept IL. Nevertheless, it itself possess the needed clarity and the focus should be on to achieve it rather than further delineation as the basic parameters are common in all conceptual debates⁶.

The focal point of the paper is to highlight the necessity of information literacy instruction (ILI), its implementation by library professionals, initiative to be taken by them for collaboration with faculty members, assessment of ILI program to make it more fruitful.

2. INFORMATION LITERACY INSTRUCTION: IT'S NECESSITY

It is the 'Presidential Committee on Information Literacy: Final Report' that puts the librarians at the front for delivering information literacy instruction (ILI) for the students at the college or university level⁷ and rightly so. Today, the information universe consists of multitude resources with number of complex subjects and different physical medias. Sometimes a user may have the knowledge that the information needed is available in the library or thorough the library networked databases; but he does not know how to get it⁸. In this scenario, a librarian can explain to the user how a database can be useful to the users, how to create a account in particular database, how to set keywords, using advanced search options, using truncation, wildcard, setting alarm to get updated information with regard to his topic. Hence the library people

are supposed to have pedagogical knowledge⁹. It is through ILI that librarians form a connection with users informing them what the former have and how can they get it¹⁰. Library instructions are equally important where there is tendency to avoid the library, low level assignment and low library usage¹¹. Perceiving physical environment of the library on students' part equally keep importance with regard high utilization of library. Negative perception or threat is a major source of generating library anxiety⁸. The large size of the library and lack of knowledge where things are kept make the students incapable to make use of it. They do not understand how to begin and what to do which results in feeling of being lost¹². For the students having low self-efficacy, a library appears as a great puzzle where the arrangement of documents, grammar of class numbers, utility of e-resources, searching mechanism and specialised services need to be interpreted using the medium of instruction to bring the students at ease in terms of using the library services.

An Internet can not be solution to all. A wise user already understands that search engines though fast enough to process any query would bring less fruitful results⁷. A study conducted at San Jose State library revealed library instruction resulted in 16 per cent decrease in the use of websites other than libraries¹³. Sometimes knowledge and comfort with the technology often create the feeling among the users that they hardly need any training¹⁴. Even such users need guidance in the use to retrieve subject specific and value added information. Too much emphasis on technological aspect should not result in neglecting basic and other enduring component of IL¹⁵. Libraries being indispensable component in informal education and having the goals to make information literate to its users, instruction is the powerful medium to enact the same.

3. COLLABORATION OF LIBRARY PROFESSIONALS AND TEACHING STAFF

Often IL has been thought as a sole responsibility of library professionals. They themselves sometimes think that implementation of it is what the task assigned only to them. Kuhlthau found that at several points students were expected to have contact with their teachers to discuss their topics and further themselves in the next stage of information search process¹⁰. So while teachers' role is interpreting the subject domain for the students, it is responsibility of academic librarians of relating that interpreted knowledge with multitude resources and making them accessible to them. A deep thought reveals the fact that academic libraries are mostly contributing to the success of standard second of ACRL's information literacy standard¹⁶. An access to the scholarly resources is ensured by marketing the resources befitting to the needs of users. IL in this respect is mostly concerned with what libraries have and how expected patrons can locate it. Other four standards are equally important. They can only be achieved when there is joint collaboration of library professionals and teaching staff. When information specialists are unknown to any subject domain, subject specialists are best to assist while the former has the ability to adapt to such circumstances to hone students' skill in getting relevant document against their information need¹⁷. There are several studies quoting the

successful collaboration between faculty members and library professionals¹⁸⁻¹⁹. Gross and Witte²⁰ explored teacher-librarian collaboration in the context of professional preparation for future and concluded that if collaboration is taught, it is likely to be affecting positively in the future which would be helpful in imbuing information literacy for lifelong learning¹³.

Often information literacy programs are organized by library faculty only without the involvement of teaching faculty²¹. The librarians should have plan and ability to convince faculty members to get involved in imparting instructions. It can be easily observed and realised by the librarians that teachers do not regard them as their equals in academic position. Unfortunately, students misinterpret the role of librarian and information professionals and keep themselves away concerning their queries. Hence a sustainable partnership between librarians and faculty members is highly expected. Otherwise the wrong notions in students' mind would be too stubborn to change⁸. Even though there is strong opportunity for both librarians and faculty members to collaborate, still concerns are raised regarding the preparedness of the current professionals or upcoming candidates who are ready to adapt to the current situation²².

4. MODELS OF INFORMATION LITERACY

Models are assistive in implementing information literacy to the practitioners and professionals²³. It has been found that IL models prove useful in categorisation of skills and it becomes guide for trainers with regard to setting objectives of programme and its implementation. It helps the academic community to acknowledge the competencies and sub-competencies and spurs them to achieve it their academic pursuit²⁴.

The Big6 of Eisenberg and Berkowitz is an information problem solving approach consisting of six stages. One need to complete all the stages, though need not to follow them in sequence and can follow any step according one's need. It can serve as a strong foundation for developing curriculum or syllabus for problem solving skills²⁵. Carol Kuhlthau developed his IL model on the basis of his investigation of the library search process of college bound high school seniors using quantitative method which ultimately resulted to the discovery of six step ladder of information search process²⁶. ACRL information literacy standard exhibits the attribute of information literacy that ideal information literate students should have²⁷. The SCONUL seven pillars of information literacy serve to impart a set of skills i.e. lens to the learners which is not a linear based approach²⁸. The skill based approach however, has been criticised on the ground that it gives less attention to social, cultural, historical and technological aspects²⁹. The Information Literacy Process Model of Library Anxiety measures how library anxiety affects the information literacy on three distinct levels – input, processing and output. The model is important in that it makes aware regarding negative effects of library anxiety of each stage of information search process and it can be prevented by understanding this model and having curative measures for each stage⁸. UNESCO's information literacy model gives much importance to process of information management such as storing, refusing, and recording, preserving and disposing which is clearly reflection

of UNESCO's mission³⁰. Doyle's attributes of an information literate person model regard apt information to be the base for decision making, critical thinking and problem solving³¹. Jennifer Sharkley has talked about the necessity of Information Fluency Model which integrates theories, ideas and components of IL, critical thinking and technology into course structure³². There may be several models available which might have been there to strengthen IL movement, users sometimes may not stick to only one model and can integrate several models which works best for him³³. In this case, hybrid model may be used. A few thinkers have tried to find out the lacuna with the existing model as Justine Martin regards some standard as ACRL as static as against today's more dynamic information. In short, a model may become obsolete with the passage of time. It fails to keep pace with the advances in technology, society, and learning theory. As such, new models are required expressive of impact of social media, information populations and technology used for the dissemination of information²³. Again they should be expressive of 'broader views' instead of being a library centric model³⁴.

5. CONTENT OF INFORMATION LITERACY

Course related instruction is one of the important part of library instruction³⁵. That's why information literacy is called marketing rather than teaching³⁶. Content of IL is important in that it must have been comprehensive enough to cover all the aspects and make the person information literate. The content must be supportive to institutional goal, objective of course programme and overall expected learning outcome must be fulfilled through it. The following should be the focal point of during the instruction program.

- Understanding the nature of information and determining exact information need
- Accessing the information needed. This includes the knowledge of variety of information sources, selecting the appropriate source including print and non-print and retrieval mechanism
- Judging the information need on the basis of appropriateness. Actually, it refers the evaluation of all the resources including traditional, networked and digital resources using established criteria as well as criteria specific to the new information environment³⁷
- Documentation³⁸, plagiarism and copyright issue, in short ethical issue
- Understanding the social and economic aspect of the information as has been expected in the 5th standard of ACRL²⁷.

While designing the content one should be kept in mind IL is more than 'library skill'. In fact, it is meta skill comprehensive of all disciplines²⁴.

6. METHODS OF INFORMATION LITERACY INSTRUCTIONS

Instruction is important in so far as it removes the anxiety³⁸ and increases the confidence and channelises the seeker in the right direction of information search process. There are two type of instruction methods – synchronous and asynchronous.

In former, instructors and participants interact with each other at the same time. It may take F2F or online or may be in the form of one shot session or virtual world. Asynchronous instruction does not want instructors or learners to be present at the same time. Online instruction may asynchronous in its nature. Library signage, guidebooks, images, manually written instructions and self-help kiosks are a few examples of asynchronous instructions². Traditionally librarians are still using one shot session to conduct IL classes, but they themselves admit that it is really a herculean task to cover a large amount of material within the limited time^{39,40}. Multiple instructions sessions allow students to retain everything from the previous sessions and increase their ability in constructing and using information searching strategy⁴¹. The selection of information literacy instruction method is important as the communication is as vital as the content itself. Walsh⁴² in his book reflected upon following ILI methods

- Traditional lecture vs active learning
- Traditional lecture vs learner-centered instruction
- Traditional vs self-directed independent learning

Using one method does not mean rejecting the others or one is not replacement for the other. He has rightly pointed out that face-to-face or traditional lecture method serve important in bringing cognitive and behavioural outcomes. However, it should be supplemented by other teaching methods, some audio-video aids and models. In short, there should be integration of several methods to serve the purpose.

At some time 'Flipped Classroom Model' has been suggested to overcome a few problems which may come across during information literacy teaching. Still several studies also have proved to be contrary ones⁴³. An attempt has also been made to decide the relevancy and effectiveness of instruction models such instruction based on credit course and course-integrated library instruction. However, no extreme decision was possible and hybrid model was proposed⁴⁴. But credit courses offer extensive exercise and information with regard to the set goals of IL². A discussion on the selection of model regarding teaching method is important in that it assist the librarians to find themselves as a teacher⁴⁴.

7. USING INFORMATION LITERACY INSTRUCTION TO REGULATE ACADEMIC DISHONESTY

Academic dishonesty has crossed the threshold of personal life. It is deeply rooted in politics, economics, media, business and social life. Education is not exception to it. It shows the professional incapability, degradation of one's ethical standard and growing trend towards the lack of faith⁴⁵. No institution can develop itself or create inventive minds to build a nation unless it stops supporting such nasty practices. ILI can play a great role to prevent academic misconduct which is visible in the form of plagiarism, cheating, altering academic documents, presenting false documents, gaining access to the prohibited documents. Academic community has its own practices and norms for academic writing and research including the standards around attribution, citation, plagiarism and copyright violation. There can be debate as to who would keep the students aware against this deadly virus. Library professionals can accept this

challenge and convincingly prepare the academic community to use proper strategies, tools and technology to find, to filter, to evaluate, and create relevant and accurate information. Plagiarism is the most severe hallmark of academic dishonesty. The increased access to online databases, explosion of WWW and the number of students graduate or post graduate every year have worsened the problem⁴⁶. There needs to be a separate session on academic dishonesty under ILI classes organised by the academic libraries wherein librarians have to clarify its importance, different forms of academic misconduct with special focus on plagiarism, how one can commit it knowingly or by negligence and the ways to follow strictly the ethical standard to upgrade the education and research. They must teach different types of sources including e-resources, the techniques to access, judicious methods of validating the documents as per need, incorporating it by following particular citation style including different forms of attributions and citation management.

8. INFORMATION LITERACY'S CONNECTION WITH LIFELONG LEARNING

The end of formal education does not mean the end of learning process. The person who does not understand this fact is doomed to failure. Our work, experience, sometimes necessity or sometimes personal interest provides the reason for learning⁴⁷. When it is considered as process, informal learning is described as lifelong learning⁴⁸. Nevertheless, it involves conventional campus learning, workplace open learning, modular flexible learning programmes, correspondence-based distance learning courses and most recently web or multimedia-based courseware⁴⁹. In fact, IL is the basic prerequisite for lifelong learning and to become successful in the classroom, in graduation or post-graduation or at the workplace⁷. ACRL and ALA through their documents have always linked IL with lifelong learning⁵⁰. There is direct connection of IL with self-efficacy and lifelong learning. IL increases your self-efficacy and self-efficacy enables one to be cognitively and mentally strong enough to overcome any difficulty which lay ahead and is required to achieve the targets of lifelong learning. In its report to the nation, National Knowledge Commission has stated⁵¹ "the quality of higher education in most of our universities leaves much to desire". Hence, the concern has been raised by the committee pertaining to the quality of higher education which fails to create 'inclusive society' which provides strong foundation for 'knowledge society'. Inclusive society means society where people have the capability to transform information into knowledge which empowers them to enhance their livelihoods and contribute to the social and economic development of communities. Thus lifelong learning has been aptly defined as "a deliberate progress on throughout the life of an individual, where the initial acquisition of knowledge and skills is received and upgraded continuously, to meet challenges set by an ever changing society" and hence lifelong learning should be the fundamental aspiration for all the citizens⁵². IL is the mode to quench this quest and put within the context of learning theories⁵³. In a knowledge society every learner is a life-long learner. Thus knowledge is a power. The knowledge

society is not only information markets in which knowledge and knowledge products and services are sold, but a space in which business, enterprises, academic institutions and industry sectors are provided with the opportunity to collaborate in the sharing and transformation of their information and knowledge into multitude of ideas, opportunities and solutions that creates economic and social wealth⁵⁴. That's why it is logical to have all international, national, and local governments should have formalised information policies and strategies with IL³⁸ to work on different social, economic and political background. IL needs to be integrated across the curriculum if it is to make successful⁵⁵.

9. INFORMATION LITERACY ASSESSMENT

The information literacy (IL) concept, its implementation and assessment are with some obstacles revolving around them¹⁴. The IL assessment is required for three reasons⁵⁶ -firstly, it can directly be applied to increase students learning, second, it is part of accountability and as a final point the results can be used to rectify the parts where we are committing mistakes. It is a great opportunity of introspection that is highly needed to keep consistency with the goals of the program. The result would direct to the path leading to the success provided that output needs to be analyzed in terms of inadequacy. There is one wonderful study⁵⁷ which claims to have successfully added to the growing literature on the assessment of IL and narrates how IL rubrics have helped in understanding and promoting IL goals at Carleton College, a small liberal arts college in Minnesota.

The assessment may be course specific or institutional. While the former is predetermined and mandated plan, the latter has the flexibility and may employ several strategies depending upon the course-instructor⁵⁸. The formative and in-session assessment is also useful to gauge the skills existing with the students and accordingly make refinements in the instruction sessions⁵⁹. The assessment is also possible by using the portfolios⁶⁰. The assistance of faculty members may be sought in creating rubrics or specialised bibliographies assignments⁶¹. It emphasizes the student's entire research process, exercises, brainstorming, and concept mapping worksheets, search strategy process and results, comparison among the databases and allows assessment of the entire body of work rather than just finished product³⁷. Oakleaf³⁴ has suggested the use of 'information literacy instruction assessment cycle' for the assessment of students which in itself is tool of learning for instructors. To sum of up the whole thing, assessment is as important as designing and implementing the program.

10. INFORMATION LITERACY AND CRITICAL THINKING

A question may arise whether critical thinking is part of information literacy or it is a separate field of study. Albitz⁶² has well reflected upon this issue. Information literacy seems to be more skill based while critical thinking is cognitive concepts which even include meta-cognition or thinking about thinking which he thinks absents in information literacy. But in the present context, when IL keeps the goal to create the ability in a person so that he would become a lifelong learner

enhancing his capacity in personal and professional life, the existence of critical thinking is inherent in it, though there can be some issue with regard to the role to be played by library professionals. ACRL standards of IL have intertwined the component of critical thinking considering its significance, yet it has not been developed as separate model³². This directly affects ILI. Critical thinking equally plays major role in subject specific domain where faculty members are more significant in shaping cognitive arena. Powell⁵², *et al.* talks about three basic assumptions of critical information literacy.

- It is always based on particular ideology or perspective
- Democratic system with equity provides ideal surrounding for the evolvement which ultimately results in sound decision making
- It leads a person to transformative action.

Though technological competence is essential component of IL, yet its overemphasis has resulted in negligence of teaching critical thinking which is necessary to make the students' better learner⁶³. Critical thinking is the practice which is need to be rooted and nurtured from the school so as to reap the fruits of success by the students' of higher education⁶⁴ and it is the art which leads to inquiry-based approach promoting active learning⁶⁵.

11. ROLE OF INFORMATION PROFESSIONALS

Paul Zurkowski' work in 1970s has placed libraries and librarian at the face as a pioneer in information literacy movement. Further bibliographic databases in the 1970s, CD-ROM's in 1980s and online databases and e-resources for last two decades have made the libraries to put themselves as an expert in the retrieval of information. The library professionals were thought as the specialist in the grammar of searching without whom researchers would find themselves to be standstill in their academic venture⁶⁶. Librarians have made information access and evaluation core to their professional skill set which keeps of prime concern in the world of information overload, misinformation, complex information retrieval systems and natural inclination of the people to be satisfied⁶⁷. In short, library professionals have to work as negotiator for what the user needs and how can he get it. While instructional abilities of librarians are seen and tested for some library related job position in other countries⁶⁸, Indian libraries are yet to be prepared for the same. Essentially, the main challenge to librarians has been to utilise digital technology with resources⁶⁹. The libraries and information centers are full of 'details'⁷⁰. The responsibility lies with the librarians to solve the maze of details so as to make them able to navigate thorough gigantic sea of information thus increasing library use. Today IL aims to strengthen the cognitive abilities to lead oneself on the path of lifelong learning which means to learn by their own. Hence apart from regular literacy programs, they should be modified for adding some essential component such as critical thinking, self-efficacy in which the role of the librarians need be defined followed by assessment strategies. Information literacy provides a way to the academic librarians to re-articulate their educational approach thus streamlining their place in education and re-organise their jurisdiction to sustain the professional

from external threats⁷⁰. There is one good example of Saint Leo University⁷¹ as how faculty librarians supported quality enhancement plan by using ACRL IL Standards and critical thinking. Visual literacy content may in addition be used to increase comprehension of students⁷². The visual literacy includes the aptitude and ability to critically use, produce and analyze images. This is new set of skills which needs to be a part of students' learning. It is the responsibility of information professional to widen the horizon of information literacy to pursue the learning abilities of the person by his own³⁷.

12. CONCLUSIONS

The concept of information literacy (IL) is pervasive and it is evident in every field of human life, though it may exist with some other name. Information literacy would foster among the students' the feeling of global citizenship by making them understand human rights, human duties while considering cosmopolitan belief⁷³. It is evident that library professionals are too cautious about their role in implementing IL and they want to make it as a major instrument to uphold their profession. It is positive sign that information literacy instruction (ILI) has been seen in the broader perspective and regarded as essential to make oneself good learner. Its scope has been widened to that extent which is not even controlled lonely by library professionals. IL should be seen as a factor influencing the whole education rather relating it strictly with library mechanism. This kind of viewpoint will promote collaboration between librarians and teaching faculty members. IL is still evolving concept and some cognitive concepts such critical thinking and self-efficacy should be made integral part of it beyond any controversy. Only such integration will enhance 'individual's understandings and abilities to identify personal need for information, assess current knowledge and identify gaps; locate, review and evaluate information and data professionally and ethically, and the ability to apply knowledge gained, and present the results'⁷⁴. However, to achieve this objective ILI program needs apt planning and assessment following required alterations for improvement, effectiveness and appropriateness to make it a grand success.

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