Connecting Libraries to a New Information Landscapes through Information Literacy: A Review of Current Trends

*Shriram Pandey and **Avantika Tripathi
*Assistant Professor, Dept. of Library and Information Science, Mohanlal Sukhadia University, Udaipur (Rajasthan) India; Email:drshrirampandey@gmail.com
**Library Trainee, The LNMIIT, Jaipur (Rajasthan) India; Email: avantikatripathi777@gmail.com

_____

Abstract
Libraries often have various users interaction and connectivity programs in terms of workshops, orientations etc. These programs provide an opportunity to users with a framework for interacting with information. Recently, Information Literacy models and its techniques have given a new dimension to the library services. Paper explores the concept of Information Literacy through a literature survey and discusses possibilities and future of Information Literacy Models and Techniques for Library and Information Centers.

_____

Keywords: Information Literacy, Library orientations, Library Literacy.

1. Introduction

The modern world is known as information technology and here information technology is taking a new shape day by day. In universe there are lots of information so the national forum on information literacy (NFIL) created in 1989 s a response to the recommendation of American Library Associations' Presidential Committee on Information Literacy describes information literacy as "the ability to know when there is a need for information to be able to identify, locate, evaluate and effectively use that information for the issue or problem at hand."

Information Literacy is the ability to recognize information when it is needed or in context. It leads to efficient wise and ethical use of and understanding of and makes the person capable to recognize information when it is needed and it also inform the user for searching and evaluating the document. Information Literacy is the vital process for modern changing world in all disciplines for effective teaching and learning in any institution. According to UNESCO, proclamation of Alexandria on Information Literacy and lifelong learning of 2005 states that," Information Literacy lies at the core of lifelong learning. It empowers people in all walks of life to seek, evaluate use and create information effectively to achieve their personal, social, occupational and educational goals it is basic human rights in a digital world and promotes social inclusion of all nations". CILIP (Chartered Institute of Library and Information Professionals)," Knowing when and why you need information where to find it, and how to evaluate, use and communicate it an ethical manner."According to The Society of College , National and University Libraries (SCONUL) Information Literacy is ," Information literate people will demonstrate an awareness of how they gather use, manage synthesis and create information and data in an ethical manner and will have the information skills to do so effectively."

In modern world library and educational institutions use Demos, Tutorials, course materials, animated and e- multimedia programs, E-content for providing the effective teaching and learning environment in the institution which completes and fulfill the potential work in library through bibliographic instructions. Information Literacy is the lifelong learning process which deals with only information which is needed by the user in electronic or manual form.

2. Literature Reviewed

Information Literacy is used both as an umbrella term that encompasses computer internet (or network), digital and media literacy's. It has more of theoretical base and it also promotes lifelong learning. Since 1973, Reference Services Review has published an annual annotated bibliography of materials focused on library instruction and, information literacy (Rader, 2000) .Some of the important studies with their key highlights are discussed in table 1.0 below:

Table 1.0: Summary of Review of Literature on Information Literacy

Title	Reference	Main Contribution/Thrust Areas
Information Literacy 1973-2002: A Selected Literature Review	Rader,2002	Reviewed the literature related to information literacy from 1973-2002 and find that a high interest of information literacy in educational communities and also discussed that librarians have been dealing with information skills training for several decades.
A new direction for library and information science: the communication aspect of information literacy.	Koltay, 2007	Coupling information literacy and communication in library and information science education.
Information Literacy, "New" literacies ,and Literacy	Buschman, 2009	A review of concepts of literacy and information literacy
An information literacy integration model and its application in higher education	Wang, 2011	He developed information literacy integration model which is based on practical experience in higher education and it also could be used or adopted by both librarians and academics when they integrate information literacy from lower to higher into an undergraduate programs.
A model for information literacy course development; a liberal arts university perspective.	Loo, 2006	Derived a new model for information literacy which helps in course development and provide a real practice environment and it also integrate with library staff.
Analyze search ,evaluate(ASE)process model: Three steps towards information literacy	Gross.et al...2013	Developed ASE process model that is easy to understand and remember and that can be used as the basis for a variety o IL interventions.
Information literacy-related practices in the legal workplace: the applicability of kuhlthau's model to the legal profession.	Lawal. et al…2014	The cognitive and affective dimensions in information seeking and implication through Kuhlthau's Information Search Process Model for curriculum design, teaching method and learning experience.
Towards Information fluency: applying a different model to an information literacy credit course.	Sharkey, 2006	Developed fluency model is a fairly new model to the library profession; it can be used by instruction librarians and their faculty partners to explore alternatives to their current instructional program.
Good Idea: Instructional design model for integrating information literacy.	Mullins, 2014	He developed a two model- one is ADDIE (analysis design ,development, implementation, valuation) design model is traditionally used to develop information literacy instruction and content. And other is IDEA (interview, design, embedded, assess) modelis a library specific systematic approach to integrated information literacy instruction and resource within academic courses.
Confirming the relational model of Information Literacy	Catts, 2005	Developed a concept that how quantitative method can be used to generalized finding from qualitative research through seven phases of relational model.
Integrating information literacy into graduate liberal arts curriculum: A faculty-librarian collaborative course model.	Xiao,2007	Developed collaborative course model for information literacy instruction for liberal arts students.
Information literacy and librarian faculty collaboration: A model for success	Li, 2007	He developed a model of success. The goal of this model to make information literacy an integral part of the academic curriculum.

Proposing a meta literacy model to redefine information literacy.	Jacobsonn and Mackey,2013	He developed meta literacy model for encourage learners to continuously reflect on their own thinking and literacy development in these fluid and network spaces.
Information Literacy as a catalyst for educational change: a background paper	Bruce,2004	This paper will review key models and standards associated with information literacy in the educational sectors, and elaborate the role of information literacy education in transforming our information society into a learning society
Six frames for information literacy education: a conceptual framework for interpreting the relationship between theory & practice	Bruce et al…2006	Propose a model – six frames for information literacy education.
Seven faces of information literacy	Bruce,2003	Propose a model for IL- seven faces of information literacy.
The SCONUL seven piller of information literacy	SCONUL,2011	Introducing seven pillars of information skills model.
Information literacy and the Mckinsey model	Donaldson,2004	Propose a program that uses the Mckinsey strategic problem-solving model for teaching information literacy to MBA students.
PLUS Model	Herring,1996	Propose a PLUS information skills model which is well suited to school.
Information Literacy in the knowledge society: Empowering learners for a better tomorrow	Chakravarty, n.d	Present a current status of Information literacy and emerging roles of libraries and schools of LIS education in augmenting the information literacy campaign.

These studies highlights an important issue and background information on information literacy, supplies many valuable suggestions on assessing the information skills of students, and also provides examples of questions from existing testing instruments, student learning interactions and learning/orientation programmes.

3. Information Literacy Models and Reference Manuals

Information Literacy method comprises the methods and techniques which could expose the library users, students and researcher knowledge and experiences by which they can developed their understanding, critical thinking, practical skills and interests in their areas. There are several widely known models of Information Literacy that have been developed through research and Evaluation and have many similarities among the models. Some well known Information Literacy models are with brief descriptions is listed in table 2.0:

Table 2.0: Summary of Different Models on Information Literacy

Name of the model	Given By	Year	Description
Research Process Model	Stripling & Pitts	1988	It is a 10 step process for research model focusing on higher level thinking, resulting in higher quality products; reflection questions for the steps in the process encourage a thoughtful approach for research. This model guides student through the stages of creating a research paper.
Kuhlthau Model (Information search Process)	Carol Kuhlthau	1989	This model shows how users approach the research process and how a user confidence increases at each stage. These stages include initiation, selection, exploration, formulation, collection, presentation and assessment.
The 8 Ws Model	Annette Lamb	1990	Wondering, wiggling and weaving are the first three steps of the eight- stage learning model that teaches students to connect their personal thoughts and ideas about their world with genuine research and action. A project based learning environment gives the student the opportunity to explore it involves wondering about a social issue wiggling through information and weaving elements together.

The relational model	Bruce	1997	This model frames information literacy in terms of seven different ways of seeing and experiencing information use and Reflects the experience of higher educators, including Academics from a range of disciplines.
Seven Faces of Information Literacy	Christine Bruce	1997	Offered a relational model as part of a fresh approach to information literacy, challenging the Traditional behaviorist model still cherished by many librarians.
The Alberta Model	Dianne Oberg	1999	It is a five stage model with one element common to each of the stage. It suggests some strategies for guiding learners through the research process.
The Seven Pillar Model	SCONUL	1999	This model defines the core skills and competencies (ability) and attitudes and behaviors (understanding) at the heart of information literacy development in higher education.
The Big 6	Eisenberg & Berkowitz	2000	Big six is a six-stage model to help anyone solve problems or make decisions by using information. It also calls Information Literacy, Information Communication or ICT skills or a process.
Research Cycle	Jamie Mckenzie	2000	The Research Cycle model helps us to make up their own minds, create their own answers and show independence and judgment.
Pathways to Knowledge	Pappas and Tepe,	2002	The Information Inquiry Model by Pappas and Tepe delineates pathways to knowledge and is meant to encourage students to continuously explore and reassess information as they go about their information seeking or retrieval processes. The model consists of six steps, namely appreciation and enjoyment, pre-search, search, interpretation, Communication and evaluation.
The i-skills cycle	JISC	2003	JISC has defined i-skills as : the ability to identify, assess, retrieve, evaluate, adapt, Organize and communicate information within an iterative context of review and reflection.
Guided Inquiry	Carol Kuhthau & Ross Todd	2010	It is carefully planned, closely supervised targeted intervention of an instructional team of school librarians and teachers to guide students through curriculum based inquiry units that build deep knowledge and deep understanding of a curriculum topic and gradually lead towards independent learning.
Spl Model	University of Phoenix's	2010	The Scholar Practitioner Leader model is a structure implemented by the University of Phoenix's school of advanced studies (SAS), in an effort to provide a foundation that promotes scholarly leaning that spans a lifetime. As result of scholarship, the model enables individuals to make significant societal contributions both socially, and professionally; in doing so, this individual is in a position to have positive influence as a leader of local national and global communities.
Three spheres of Information Literacy	Geoff Walton	2010	This context leads to the interaction with sources (e.g., databases, e-journals, books, e-books, peer and tutors etc) and in so doing brings about the interplay of an individual's behavioral, cognitive, met cognitive and affective states.
The PLUS Model	James Herring	2013	PLUS is an acronym that both pupils and teachers will find easy to remember. It breaks Information skills into four main parts:- Purpose, location, use, self- evaluation.

Models were developed to define information literacy and outline information seeking process (information problem solving process, the research process). They are like a roadmap for navigating through the information-seeking process. Additionally, there are many reference manual/test manual/style manual prepared in recent past which serve as guidelines for developing information literacy curriculum, and can be used to frame curriculum objectives; learning outcomes; course content; and assessment criteria. Some of keys Information Literacy Reference/Policy Manual are given in table 3.0 below:

Table 3.0: Summary of Different Information Literacy Reference/Policy Manual

Information Literacy Reference Manual	Given By	Year	Description
A Library Advocate's Guide to Building Information Literate Communities	American Library Association	2001	This manual provides a wealth of tools, tips and techniques to help you deliver an important message.

Training Manual on Human Rights Monitoring	United Nations Publication	2001	This Training Manual (Component One of the package) provides practical guidance principally for the conduct of human rights monitoring in United Nations field operations, but it may also be useful to other human rights monitors.
Manual for devoloping literacy and adult education programmes in minority language communities	UNESCO	2004	This manual is about planning and implementing education-for-development programs for adult speakers of minority languages. It is written for members of the minority language communities and for the outsiders—provincial and district trainers, supervisors and others—who work with and support the communities
The Health Literacy Style Manual	Maximus	2005	This manual helps people to understand health information and health systems which is makes difficult for people with limited literacy.
Communication Skills for Social Workers: A trainers manual	Kevin Barnes-Ceeney and Amanda Naylor	2005	This communication training the trainers' skills manual is designed to facilitate trainers to deliver interactive, participatory training on communication skills for social workers.
WINISIS Training Manual in Hindi language published	UNESCO	2007	This Manual help the library professionals working in academic, special and public libraries as well as students of library science courses in installing the WINISIS software and its web application tools GENISIS; create and manage bibliographic or full-text databases
Teachers manual on Formative assessment	CBSE	2010	This manual is specially designed for teachers.
The before and after of an Information Literacy Policy	Lockhart,Janine	2011	This paper outlines the stages that were followed in developing an information literacy policy and its subsequent implementation at the Cape Peninsula University of Technology (CPUT). The paper clearly highlights the challenges and opportunities presented during the process. The paper also presents results of a mini information literacy audit conducted in CPUT to gauge how faculties were responding to the policy guidelines
21st Century Skills in Career and Technical Education Resource Manual	CTE	2013	The purpose of this manual is to provide career and technical educators with a resource to assist them in assuring 21st century skill development is an integral part of every CTE program's curriculum. This field guide and related publications are designed to help the CTE instructor plan and deliver quality 21st century learning to all students
Manual Guide of The Induction Program for New Employees in the Federal Government	Federal Authority	2013	This Manual is designed to provide advice and to support the ministries and federal entities in creating/updating their Induction programsfor the new employees, so they become an integral part of the personnel at the ministry/federal entity.
The Information Literacy Test Manual	Madison Assessment	2014	The Information Literacy Test (ILT) is a manual of 60 item multiple-choice test developed by librarians and assessment specialists. The ILT is based on the Association of College & Research Libraries (ACRL) Information Literacy Competency Standards
Library Policy Manual	Pulaski Technical college	2015	This manual provide the whole information and system of Pulaski College Library

4. Conclusion

Information Literacy models and its techniques have given a new dimension to the library services. Libraries often have various users interaction and connectivity programs in terms of workshops, orientations etc. These programs provide an opportunity to users with a framework for interacting with information. Library and information centers deliver information literacy programs are limited to kind of library instruction are not in a broad perspectives by applying relevant models but kind of library instruction. Information models can be applied predominantly in libraries should focused on print documents (books) as preferred sources; readers' mostly begin their search for information on a particular topic; general reading and research purposes and information resources equip users with appropriate knowledge.

References

1. A., Loo. (2006). A model for information literacy course development: A liberal arts university perspective. Retrieved January 9, 2016, from http://www.emeraldinsight.com/doi/abs/10.1108/00242530610660799

2. C., Bruce, S., Edwards, & M., Lupton. (2006, January). Six Frames for Information literacy Education: A conceptual framework for interpreting the relationships between theory and practice. Retrieved January 13, 2016, from http://www98.griffith.edu.au/dspace/bitstream/handle/10072/14028/36236.pdf?sequence=1 Bruce

3. C., Bruce. (2004). Information Literacy as a Catalyst for Educational Change. A Background Paper. Retrieved January 14, 2016, from http://eprints.qut.edu.au/4977/

4. C., Donaldson. (2004). Information Literacy and the McKinsey Model: The McKinsey Strategic Problem-Solving Model Adapted to Teach Information Literacy to Graduate Business Students. Retrieved January 20, 2016, from https://www.webpages.uidaho.edu/~mbolin/donaldson.pdf

5. D., Traboulay. (2007). Integrating Information Literacy into the Graduate Liberal Arts Curriculum: A Faculty-Librarian Collaborative Course Model. Retrieved January 13, 2016, from http://eric.ed.gov/?id=EJ884714

6. Guided Inquiry: Carol Kuhlthau and Ross Todd. (n.d.). Retrieved November 09, 2015, from http://webcache.googleusercontent.com/search?q=cache:6dxyw_MvzKwJ:https://icwc.wikispaces.com/file/view/Guided+Inquiry.doc

7. H., Li. (2006, August 21). Information Literacy and Librarian-Faculty Collaboration: A Model for Success. Retrieved January 15, 2016, from http://www.white-clouds.com/iclc/cliej/cl24li.pdf

8. H., RADER. (2002). Information Literacy 1973-2002: A Selected Literature Review. Retrieved January 4, 2016, from https://www.ideals.illinois.edu/bitstream/handle/2142/8464/librarytrendsv51i2i_opt.pdf

9. Hannelore B. Rader, (2000) "Library instruction and information literacy – 1999", Reference Services Review, Vol. 28 Iss: 4, pp.378 - 400

10. Information Literacy. (n.d.). Retrieved November 11, 2015, from http://www.informationliteracy.org.uk/

11. International Federation of Library Associations and Institutions (IFLA). (n.d.). Retrieved November 11, 2015, from http://archive.ifla.org/IV/ifla65/papers/078-119e.html

12. J., Buschman. (2008, May 8). Information Literacy, "New" Literacies, and Literacy. Retrieved January 6, 2016, from http://scholarship.shu.edu/cgi/viewcontent.cgi?article=1064&context=lib_pub

13. J., Sharkey. (2006). Towards information fluency: Applying a different model to an information literacy credit course. Retrieved January 12, 2016, from http://www.emeraldinsight.com/doi/abs/10.1108/00907320610648770

14. K., Mullins. (2014, December 4). Good IDEA: Instructional Design Model for Integrating Information Literacy. Retrieved January 13, 2016, from http://www.sciencedirect.com/science/article/pii/S0099133314000664

15. L., Wang. (2011). An information literacy integration model and its application in higher education. Retrieved January 7, 2016, from http://www.emeraldinsight.com/doi/abs/10.1108/00907321111186703
16. M., Bent, & R., Stubbings. (2011, April). The SCONUL Seven Pillars of Information Literacy. Retrieved January 18, 2016, from http://www.sconul.ac.uk/sites/default/files/documents/coremodel.pdf
17. M., Gross, B., Armstrong, & D., Latham. (2013, July 11). The Analyze, Search, Evaluate (ASE) Process Model: Three Steps Toward Information Literacy. Retrieved January 11, 2016, from http://www.tandfonline.com/doi/abs/10.1080/02763915.2012.780488
18. R., Catts. (2004, January 8). Confirming the relational model of information literacy. Retrieved January 14, 2016, from http://www.sciencedirect.com/science/article/pii/S1057231704000694
19. R., Chakravarty. (n.d.). Information Literacy in the Knowledge Society: Empowering Learners for a Better Tomorrow. Retrieved January 14, 2016, from https://core.ac.uk/download/files/418/11883592.pdf
20. T., Jacobson, & T., Mackey. (2013). PROPOSING A METALITERACY MODEL TO REDEFINE INFORMATION LITERACY. Retrieved January 12, 2016, from http://www.comminfolit.org/index.php?journal=cil
21. T., Koltay. (2007, October 4). A new direction for library and information science: The communication aspect of information literacy. Retrieved January 4, 2016, from http://www.academia.edu/3344646/A_new_direction_for_library_and_information_science_The_communication_aspect_of_information_literacy
22. The Research Cycle. (n.d.). Retrieved November 10, 2015, from http://www.fno.org/dec99/rcycle.html
23. V., Lawal, C., Stilwell, R., Kuhn, & P., Underwood. (2014, May 15). Information literacy-related practices in the legal workplace: The applicability of Kuhlthau's model to the legal profession. Retrieved January 12, 2016, from http://lis.sagepub.com/content/46/4/326.abstract
24. Welcome to the Big6. (n.d.). Retrieved November 11, 2015, from http://big6.com/

❖