# LEARNING APPROACHES IN INFORMATION LITERACY INSTRUCTIONS

**Charudatta Achyut Gandhe, Ph. D.**

*Librarian, Adarsha Comprehensive Collge of Education and Research, Pune*

*Abstract*

*This paper focuses on one of the instructional dimensions i.e. learning instructions. The research method adopted was literature review. Analysis revealed that various learning approaches are being used while implementing information literacy programs. Along with teaching information literacy, an equal emphasis is also given on learning of information literacy. Various learning theories, learning styles applied for information literacy learning General Approach, relational approach, backward design approach and constructivist approach.*

*Keywords: Information Literacy, Information Literacy Instructions, Learning.*

**Introduction:**

Information Literacy is the very important in now day. Many library professionals are now conducting Information Literacy Programs in their libraries. Many are experimenting in various dimensions of information literacy i.e. teaching, learning, curriculum, assessment etc. Through interdisciplinary approach, many concepts in pedagogy are considered important in information literacy. When an information literacy program is designed, one need to consider curriculum of the program, the types and nature of instructions (teaching and learning) and assessment of the participants. It is also established that program should be discipline specific and should plan instructions accordingly. While planning instructions to be given, we need to consider the both, teaching and learning instructions. Both the instructions are important and should be used simultaneously in program. This paper focuses on one of the above dimensions i.e. learning instructions. The research method adopted was literature review. Analysis revealed that various learning approaches are being used while implementing information literacy programs. Along with teaching information literacy, an equal emphasis is also given on

learning of information literacy. Various learning theories, learning styles applied for information literacy learning.

## IMPORTANCE OF LEARNING

Brendle (2006) highlighted the importance of learning. According to him, instead of directly teaching students how to search for their information needs, engage students by having them compare and evaluate what they find in comparison with librarian and faculty resources. He further described that let students explore, compare and evaluate search tools so that they realize that there are other search tools available. To affect students' lifelong learning, that is, their cognition, behavior, and information literacy skills, we must encourage them to critically compare and evaluate all resources and search tools. To prove his statements, he conducted a research and proposed two graded assignments, compared and evaluated resources and compared and evaluated search tools. The findings showed that the students achieved efficiency in accessing the desired information as ability of comparison and evaluation of resources were developed (Brendle, 2006).

Some authors also established a relationship between learner and information literacy. Bruce (1997) contended that in order to fully explore learning process, a clear understanding of the relation between the learner and the subject studies must be sought in combination with an evaluation of the learner's perspective of information and the learning environment. Bruce described three pedagogical approaches to information literacy learning: 1) the relational approach 2) the constructivist approach and 3) behaviorist approach. Much literature was found regarding relational and constructivist approach but there was no evidence of applying behavioral approach in information literacy learning.

## RELATIONAL APPROACH:

Bruce (1997) stated that the aim of relational models is to promote an holistic experience of learning that involves the ability to perform information literacy tasks, such as formulating an information problem and finding an appropriate solution to these problems. Lupton (2004) also explored the relational perspective of information literacy by examining the students' relationship with information within a problem-solving scenario in higher education. According to her, there is a strong connection between information literacy and learning by examining the students' attitudes towards an assessment task. She proposed three categories describing their level of engagement with an essay and with the underlying

information literacy practice. These are seeking evidence, developing an argument and learning as a social responsibility. Lupton's research emphasized that information literacy cannot be de contextualized from learning process and as such it is seen not as a characteristic of the learner, but as a response to context. Edward's (2006) relational model of information literacy examined students in a higher education context. He focused on learner's experience of information searching when using internet and library databases rather than the accomplishment of an assessment task. He identified four main categories that described different ways of experiencing the each and revealed different awareness structures, different approaches to learning, and different search outcomes. These four categories are 1.Looking for a needle in a haystack. 2. Finding way through maze. 3.Using the tools as a filter. 4. Planning for gold. He concluded that there is a major conceptual gap between student in the first category, who experienced information, and those in category 2, 3, 4 whose conceptual engagement with the process of searching is illustrated by increasingly complex ways of interacting with the tools and complemented by reflective topic and search formulation practice.

Australian educators Bruce; Lupton and Edwards (2006) through their collaborative work promoted a systematic classification of information literacy through "Six Frames of Information Literacy". They did not present information literacy as a theory of learning, but proposed that the participants' perspectives of teaching and learning influences their interpretation of, and attitude towards information literacy (Bruce et. al, 2006). The relational approach was promoted as one of the six frames and described the relationship between learner and information literacy in terms of complex and different ways of interacting with information. According to relational model (Bruce, 1997), this frame supports the view that in order to improve learning we need to understand the students' perspectives and appreciate the variation in the students' conception of information literacy. This relational model frames information literacy into seven different ways of experiencing information use through active and reflective engagement with the relevant information practices. Bent and Stockdale (2009, 44) considered information literacy to be a recursive learning process rather than a simple ladder of skills to be attained. He explained, information literacy can be thought of as individual's attitude to their learning and research such that they are explicitly thinking about how they use, manage, synthesize and create information, in a wise and ethical manner to the benefit of society as a part of learning life".

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## BACKWARD DESIGN APPROACH:

Backward design approach is also used for learning information literacy. According to Wiggins and McTighe (2005, 338) backward design is an approach to designing a curriculum or unit that begins with the end in mind and designs toward the end. In other words, instructors decide what the students should learn and then structure the class or curriculum to achieve this goal. Fox and Doherty (2008) also used backward design for information literacy instructions. They collaboratively created podcasts to address the need to increase students' information literacy competency. They found use of this design is effective in learning of information literacy.

## CONSTRUCTIVIST APPROACH:

Another approach i.e. constructivist approach is also widely used in information literacy education for learning information literacy. Much literature was found on leaning techniques using constructivist approach. Tutorials can be a method of learning of information literacy. Many of the best tutorials consistently incorporated the use of active learning. Unlike lecture-based format, these tutorials provided students with opportunities to interact and test few ideas as the lessons progressed (Dewald, et.al, 2000).

Edwards (2000) detailed the use of online tutorials for graduate level education students and he noted a shift in user expectations, commenting that users want to receive information from both inside and outside the academic library. He offered that the flexible nature of the web allowes students to obtain instruction services "as many times as they want." Beile and Bote (2004) also studied the efficiency of online tutorials; in fact they concluded that an online tutorial may produce the same cognitive outcomes as face to face library instruction.

Donaldson (2005) developed a five-module tutorial "Library Research Success". It is interactive, modular and based on active learning. However, this tutorial was made only for the

students of Business Management, the feedbacks from faculty, students are positive, and the college is trying to adapt this tutorial to meet the needs of other student groups

Armstrong and Georges (2006) conducted a research to measure the effectiveness of a highly interactive animated tutorial that aims to teach basic information literacy concepts to undergraduates and to determine which factors enhance learning. Findings showed that animated tutorial is effective in imparting information literacy concepts to undergraduate students. Students responded positively to the interactivity and game like nature of the tutorial.

Yang (2009) conducted a survey of current technologies used in creating information literacy online tutorials in academic libraries in USA. He surveyed 372 online tutorials on the library website of 100 academic libraries. About one third of surveyed academic libraries have developed their own online tutorials. Most of the tutorials teach search skills of specific databases. Tutorial contents also include general introduction to library resources, research in a subject area. One third of tutorials had been created by using tutorial software. The approaches used in developing tutorials include pdf, HTML. Ganster and Tiffany (2008) also developed online tutorials devoted for specific course. Using Blackboard course management system, the authors created an online tutorial tailored to the required World Civilizations Course at the University of Buffalo. In this tutorial, the researchers added the elements like clear terminology, a quiz for self-assessment, opportunities for active learning and individual e-mail feedback between students and librarians and applied them to a specific course. After testing the online tutorials, the researchers discovered that students and instruction librarians at University of Buffalo were open and willing to use online tutorials as an addition to instructions. They also observed that the online tutorials provide supplemental interactive materials for students to engage in subsequent to the librarian's presentation and a vehicle for absent student to learn the material.

Problem Based Learning (PBL) is another constructivist learning techniques used in education widely. This technique is also useful in information literacy learning. Several authors have carried out researches and found PBL technique effective in learning information literacy. PBL provides a means to introduce information literacy in a more complex way, especially to students who think they already know how to search for information   effectively (Macklin, 2001).

Diekema and others (2011) also supported the problem based learning that might enable students to experience information literacy in a richer way. PBL facilitates the recursive use,

evaluation and synthesis of information. It requires that students seek out the information, determine its value, and then synthesize that information with the information provided by other group members. This can be a very messy process, which invariably produces more questions, requiring students to seek out additional information to solve their problem

Spence (2004) also supported the same by stating that PBL technique is explored as a potentially useful instructional approach for information literacy. Problem based learning can be more engaging than traditional demonstration-based library instruction.

Snavely (2003) also recommended the PBL approach in information literacy instruction. According to him, PBL closely integrates information literacy with disciplinary content, and enable students to learn subject matter, information seeking, evaluation and synthesis skills, and critical thinking all at the same time. It could be integrated within a course or an entire curriculum, and can provide opportunities to practice and further refine their information literacy skills.

Another constructivist technique is video games. These are also used as a mean of learning information literacy. Gumulak and Webber (2011) conducted research to identify what motivates young people to play video games, and the extent to which video games are perceived as facilitating learning and information literacy. Findings showed that respondents used a variety of tests to solve gaming problems and to choose new games. They also reported information behavior of respondents. It shows that they were carrying out activities that corresponded to models of information literacy and these activities are mapped to SCONUL seven pillars models.

Mitchell and Hiatt (2000) carried out a case study of their experience using the POGIL (Process-Oriented Guided-Inquiry Learning) technique. It is teaching method based on constructivist principles that enables students to learn through grasp interaction and problem solving. This is the method suggested as being effective in delivering information literacy skills and content. It uses structured worksheets to take students through "understand" "identify", "analyze", and "create stages of learning". These stages are parallel to Bloom's taxonomy. The POGIL approach includes a wide range of pedagogical and assessment techniques. It allows the instructor to employ mix pedagogical techniques and provided students with documented frameworks, which they could use outside of the class.

**Conclusion:** It could be clearly stated that information literacy instruction needs a systematics planning. Though we are using various teaching and learning techniques, appropriate pedagogical approaches should be taken into consideration.

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