

Towards Information Literacy: Faculties attitude and pedagogical practises followed by science teachers at MES Abasaheb Garware College

Vandana R Shelar

Abstract

This paper is to describes essentiality of Information Literacy skills that makes individuals competent life long learner.IL teach individual to find, evaluate , sought, filter and use information effectively . This enhances students perception and they can enjoy learning .How do faculties make use of ICT in teaching? Which are the Pedagogies they use to teach their students? What do the teacher think about the role played by Librarian in the development of IL skills amongst the students ? A survey was conducted for taking views form faculty on information literacy. Pedagogical practises followed by them were asked. This paper is a result of the findings of the survey.

Keywords: Information Literacy, Pedagogical Practises, MES Abasaheb Garware College

1. Introduction

Tremendous progress has taken place, with the introduction of computers and communication technologies affecting every aspect of the human life . A huge amount of information is being generated in a variety of formats, all over the world, raising the question on its credibility, reliability and authenticity as a result, individuals are puzzled by abundance of information and the diversified resources available for finding solutions to their problems. In such an environment of information overload, the acquisition, organization retrieval and dissemination of information has not only become essential in today's date but beyond that an individual needs to taught research skills and logical thinking to effectively use the information. Information literacy (IL) promotes development of critical thinking, helps individual to become more self-directed, and presume greater control over their own learning.

Paul Zurkowski, the President of Information Industry Association, in 1974 introduced the concept of information literacy for the first time in a proposal submitted to the US National Commission on Libraries and Information Science (NCLIS).

In the proposal, he advocated the establishment of a national program aimed at achieving universal information literacy within ten-year time frame. The idea was to make individuals and organizations aware of how machine-aided handling systems can help to identify, access, analyze and obtain data and documents needed for problem solving and decision-making. He defined Information Literacy as

“People trained in the application of information resources to their work can be called information literates. They have learned techniques and skills for using the wide range of information tools as well as primary sources in moulding information solutions to their problems.”

However, the American Library Association's final report in 1989, gave the most excepted definition of Information Literacy and features of Information Literate person as follows

To be information literate, a person must be able to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information. Producing such a citizenry will require that schools and colleges appreciate and integrate the concept of information literacy into their learning programs and that they play a leadership role in equipping individuals and institutions to take advantage of the opportunities inherent within the information society. Ultimately, information literate people are those who have learned how to learn. They know how to learn because they know how knowledge is organized, how to find information and how to use information in such a way that others can learn from them. They are people prepared for lifelong learning, because they can always find the information needed for any task or decision at hand .

Radar(1991). Gave a much broader definition of information literacy

Emphasizing that information literacy is essential for survival in the future, she argues that information literate citizen will be characterized by an ability to acquire and use information appropriate to any situation, within and beyond the library, both locally and globally. This will be brought about by a variety of rather general competencies, so that information literate people will be able to:

- ◆ Survive and be successful in an information/ technology environment;
- ◆ lead productive, healthy and satisfying lives in a democratic society;
- ◆ deal effectively with rapidly changing environments;
- ◆ ensure a better future for the next generation;
- ◆ appropriate information for personal and professional problem solving;
- ◆ have writing and computer proficiencies.(Rader 1991)

Doyle (1992) gives a somewhat expanded version of these points , in defining information literate person as someone who:

- ◆ Recognizes that accurate and complete information is the basis for intelligent decision making;
- ◆ Recognizes the need for information;
- ◆ Formulates questions based on information need;
- ◆ Identifies potential sources of information;
- ◆ Develops successful search strategies;
- ◆ Access sources of information including computer-based and other technologies;
- ◆ Evaluates information;
- ◆ Organizes information for practical application;
- ◆ Integrates new information into an existing body of knowledge ;
- ◆ Uses information in critical thinking and problem solving ;8 (CS 1992)

This was one endeavor to further explore more concrete and elaborate definition of IL, It was a virtual replica of ALA's.

Doyle, however, went on to enumerate ten specific attributes that represented tangible steps in the progression through accessing, evaluating, and using information. She isolated the following ten attributes: recognition of an information need; recognition and concession of the importance of reliable information to intelligent decision making; formulation of questions based on information need; identification of information sources; development of search strategies; accessing information sources; evaluating information; organization of information for application; integration of new information into existing knowledge base; information use for critical thinking and problem solving.

The competencies required by these attributes have close similarity to those constituting Eisenberg and Berkowitz Big Six main skills. These six skills are follows

1. Task Definition
 - 1.1 Define the problem
 - 1.2 Identify information requirements
2. Information – Seeking Strategies
 - 2.1 Determine the range of sources
 - 2.2 Prioritize sources
- 3 Location and Access
 - 3.1 Locate sources
 - 3.2 Find information
- 4 Information Use
 - 4.1 Engage(read, view,etc)
 - 4.2 Extract information
- 5 Synthesis
 - 5.1 Organize
 - 5.2 Present
- 6 Evaluation
 - 6.1 Judge the product
 - 6.2 Judge the process

2. Need for Information Literacy

Today there is a need to make society aware of the overflow of information being generated in different forms and formats, People should be taught to use these electronic gadgets by conducting information literacy programmes at different educational levels. Information Literacy initiatives have to be designed to concentrate on the outcome of the development of ICT's.

“Information literacy is a prerequisite for lifelong learning and is common to all disciplines, to all-learning environments, and to all levels of education. It enables learners to engage critically with content and extend their investigations, become more self-directed, and assume greater control over their own learning” (CAUL, 2004).

The contemporary environment of rapid technological demands that library professionals to regularly update themselves so that they are adequately competent in handling information as well as technological tools to act as a successful interface between users and their information for better utilization of library resources . The majority of librarians today are involved in learning and developing diverse technology skills and specialized expertise to ensure their survival in the emerging technological environment because they are the key players in enhancing accessibility to library resources, and supporting all academic and research activities IL has impact on education and research for creating awareness among society .

3. Information Literacy and Higher Education

Higher education aims to impart better understanding and perception amongst students to make good citizens out of them. Due to higher education one can achieve greater degree of proficiency for self development. Higher education standing on three pillars

- ◆ Teaching Learning process
- ◆ Research
- ◆ And extension

It is related to awareness and knowledge and is one of the basic fundamental right of individual. During the agricultural period of Indian history, academic institutes like elementary schools, colleges and universities were viewed as a mode for passing down to the student all the necessary skills for effective citizenry. Libraries were considered as a heart of these educational institutes. They were the repositories of knowledge, forming an integral part of education. Libraries have a long history, starting with the chained and closed-access libraries of ancient times to the present-day hybrid, digital, and virtual libraries using the latest technology for providing information services. In today's environment of rapid technological change, a paradigm shift has occurred in content as well as pedagogy. The shift is seen from conventional teaching method to ICT based instruction. Every schools, colleges and universities are trying to use ICT into learning programme to make student information literate. Students are supposed to develop a variety of competencies at the end of the academic course they are pursuing.

Challenges of developing information literacy in the Higher Education depends on following factors.

- ◆ Information Overload by various means
- ◆ Diversified subjects at academic level
- ◆ Curriculum frame work
- ◆ Faculty Cooperation

With the above mentioned factors information can empower and enable or overwhelm and confuse individual. One is challenged on a daily basis to negotiate through vast amount of information in a variety of formats. In this situation only dissemination of information is not only sufficient, the user of information should be taught to make the best options provided to him/her to enhance their knowledge to perform a particular task.

Today, introduction of specialization begins at very early stage subjects like industrial chemistry and industrial microbiology , biotechnology are incorporated at first year undergraduate level syllabus .Individual can get Bachelor degree in it many times. It so happens that the curriculum does not encourage, enhance and incorporate the logical thinking and research skills amongst individual. This could be overcome by faculty members by incorporating information literacy skill at this young age. Even though separate marks are not kept for IL , the pedagogies may use project and assignment methods to develop such skills. In this context the librarian needs to play a vital role in promoting IL to students.

Considering faculties role and cooperation the investigator decided to conduct a study to find their perceptions on IL and role played by library personnel's in teaching learning process and various pedagogical tools used by them in teaching process at MES Abasaheb Garware College.

4. Target Population

The structured questionnaire was circulated to 68 permanent science faculty members teaching at undergraduate level. Faculty members play a vital role in inculcating IL amongst the students through faculties them these skills would be percolated to undergraduate and post graduate students. Moreover, it is a well-known fact that the academic community is the largest consumer and producer of the information.

5. Objectives

The study was designed to investigate faculty perceptions, attitude towards role of Librarian in promoting IL and pedagogical practises followed by them in teaching This study was conducted in Sep 2010 with the following objectives:

- ◆ to determine how science teachers assess the information from the library to teach their students
- ◆ to explore the various pedagogical practises employed by teachers to develop information literacy in their students ;
- ◆ to seek faculty perceptions of the role of librarians to make students information literate and act as a catalyst in teaching learning process and lastly
- ◆ to collaborate with faculty, and to provide better information services to the students

6. Methodology

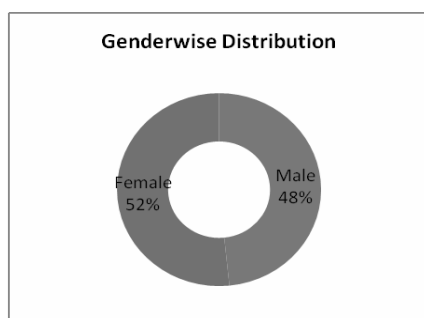
Bearing in mind the above objectives a questionnaire was prepared and distributed. The care was taken that investigator gets ample time to interact with the teacher personally. For this, prior

appointments were taken looking at the convenient time from the busy teaching and practical schedule of the teacher. Out of 68 teachers 62 of them responded to investigator and returned filled questionnaire making the respondent rate 91%

7. Data Analysis and findings : Data collected was analyzed and findings are as follows

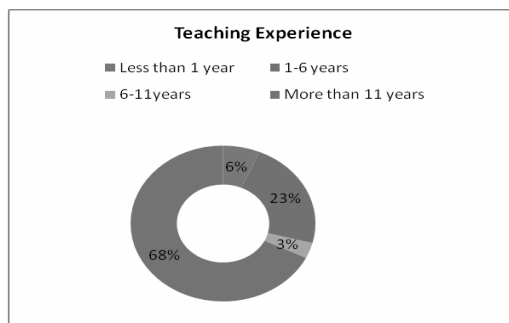
7.1 Gender wise Distribution Table 4.1

Male	30
Female	32



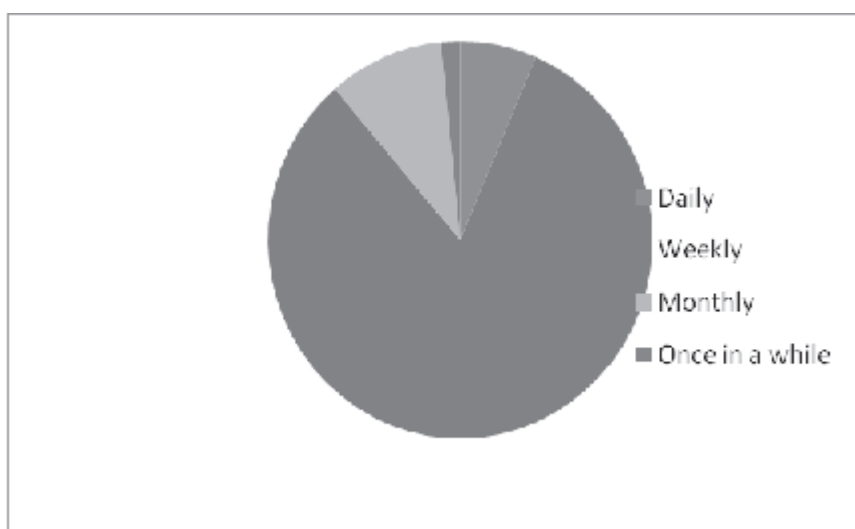
7.2 Teaching Experience Table 4.2

Less than 1 year	04
1-6 years	14
6-11years	02
More than 11 years	42



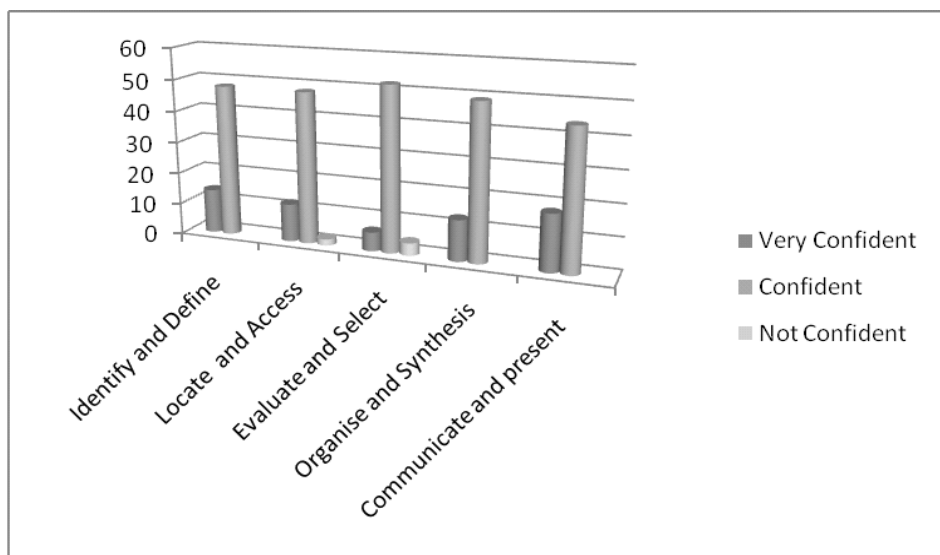
7.3 Frequency of Library visit Table 4.3

Daily	04
Weekly	51
Monthly	06
Once in a while	01



7.4 IL Information Skills Rate of faculty members (Based on Big 6) Table 4.4

	Very Confident	Confident	Not Confident	No Opinion
Identify and Define	14	48		
Locate and Access	12	48	02	
Evaluate and Select	06	52	04	
Organise and Synthesis	13	49		
Communicate and present	18	44		



7.5 Pedagogical Practices

Curriculum covers separate marks for project in following subjects

Statistics

Electronics

Physics

Computer Science

7.6 Allocation of assignment and project

All of them give assignment to their students to enhance their self learning

7.7 Use of ICT in teaching

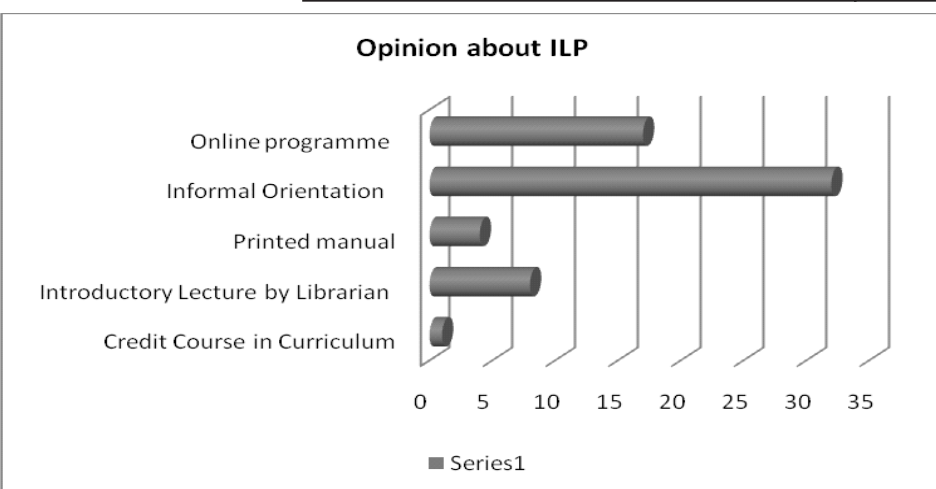
All of them (100%) use web 2.0 tools like Google books, Slide share and You tubes to make their teaching effective. However they rely totally on Google search engine to retrieve information.

7.8 Information Literacy programmed should be conducted for

FYBSc	48
SYBSc	28
TYBSc	62

7.9 Preference of ILP

Credit Course in Curriculum	1
Introductory Lecture by Librarian	8
Printed manual	4
Informal Orientation	32
Online programme	17



7.10 Opinions on role of Librarian in promoting IL

All respondents agreed to following statements

- ◆ Cooperative planning between the teacher and the library staff enhances the classroom curriculum and has positive and significant effect on academic achievement
- ◆ The library staff and the teacher should collaborate to determine the information skill that will be needed for research project or unit of study

Vandana R Shelar

- ◆ Teachers are aware of the role of library in helping students to access evaluate and use information from variety of sources
- ◆ Teachers design students research/projects/assignments that incorporates Information Literacy Skills
- ◆ When teachers and librarian collaborate to design ILP student performance increases.

8. Conclusion

IL is essential skill required for 21st century. It is an ongoing process required by every one no matter a teacher or a student . Collaborating with the faculty a librarian has to take active role in teaching learning process by promoting Information Literacy programme.

References

1. American Library Association (ALA) (1989): ALA Presidential Committee on Information Literacy, 10 January, ALA, Washington DC, www.ala.org/ala/acrl/acrlpubs/whitepapers/presidential.htm (accessed on 21 June 2010)
2. CAUL Information Literacy Assessment Research Project (2002): <http://www.caul.edu.au/meetings/caul20012info-lit-assess.doc> (accessed on 30 June 2010)
3. Doyle, C (1992), "Outcome measures for information Literacy with in the education goals of 1990", Final Report of the National Forum on Information Literacy, p. 8 ,available at : www.ed.gov/database/ERIC_Digest/ed372756.html (accessed on 4 July 2010)
4. Eisenberg, M.B. (2008), "Information literacy: essential skills for the information age", *DESIDOC Journal of Library and Information Technology*, Vol. 28 No. 2, pp. 39-47.
5. Rader, H.B. (1995): *Information Literacy and the Undergraduate Curriculum*, *Library Trends*, 44(2), Pp.270-8. (accessed on 4 July 2010)
6. Singh, Sahshi P. (2008) "Catalytic role of information literacy in educational change:a case study of University of Delhi ",*Library Management* Vol. 30 No.3, 2009 pp. 163-175.
7. Zurkowski, P.G. (1974), *The Information Service Environment Relationships and Priorities*, National Commission on Libraries and Information Science, Washington, DC, p. 6.

About Author

Mrs. Vandana R Shelar, Librarian, MES Abasaheb Garware College, Karve Road, Pune - 411004
E-mail : vandanashelar@gmail.com; vandana_shelar@rediffmail.com