

Information Literacy Skills and Competencies among University Students: A Pilot Study at Tumkur University, Karnataka

Hemavathi B.N.*, Ramesha**

Abstract

The purpose of this paper is to assess and determine the information literacy skills among the postgraduate students of Tumkur University, Karnataka. The present study has made an attempt to study the skills and the competencies required in locating, searching, evaluating and in the ethical use of information among the postgraduate students of Tumkur University. Structured questionnaires were randomly distributed among the students of postgraduate departments which are located in the Tumkur University Campus, Tumakuru. The postgraduate students of the academic year 2015-2016 were considered for the study. 300 filled questionnaires were received and same has been recorded in MS Excel for data analysis. The paper reveals that, very less number of postgraduate students are looking information to be familiar with the current developments in their subject and Searching techniques and search approaches are exists among them. But the study has evidenced the poor level of skills and competency in locating, evaluating and in the ethical use of information among the postgraduate students of Tumkur University. The paper suggested to practicing library and information professionals of Tumkur University to strengthen their efforts to educate the postgraduate students on the skills required for them to locate, search, evaluate and use information ethically, which is essential for their academic activities.

Keywords: Information Literacy; Information Literacy Skills; Information Literacy Competencies; Tumkur University; Postgraduate Students.

Introduction

Information literacy (IL) is set of abilities requiring individuals to 'recognize when information is needed and have the ability to locate evaluation and use effectively the needed information' (ALA Presidential Committee on Information Literacy: final report, 1989). Information Literacy is increasingly important in the contemporary environment of rapid

technological change and proliferating information resources. Because of the escalating complexity of this environment, individuals are faced with diverse, abundant information choices in their day-to-day life. Along with the awareness on different information sources, learners must have set of skills and abilities required for optimum utilization of the great quantity of information which is available in media including textual, graphical and aural.

Definition

The Alexandria Proclamation of 2005 describes information literacy and lifelong learning as the "beacons of the Information Society, illuminating the courses to development, prosperity and freedom. Information literacy 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 a basic human right in a digital world and promotes social inclusion in all nations." As said by ACRL (2000) Information Literacy forms the basis for lifelong

Author's Affiliation: *Research Scholar, Department of Library and Information Science, Bangalore University, JB Campus, Bangalore and Assistant Professor, Department of Studies and Research in Library and Information Science, Tumkur University, Tumakuru-572 103, Karnataka, India.
**Professor, Department of Library and Information Science, Bangalore University, JB Campus, Bangalore, Karnataka, India.

Reprint's Request: Hemavathi B.N., Assistant Professor, Department of Studies and Research in Library and Information Science, 1st Floor, Dr. V S Acharya Memorial Block, Tumkur University, Tumakuru-572 103, Karnataka, India.
E-mail: bn.hemavathi@gmail.com

Received on 14.03.2017, Accepted on 25.03.2017

learning. 'Information literacy is common to all disciplines, to all learning environments and to all levels of education. It enables learners to master content and extend their investigations become more self-directed and assumes greater control over their own learning and an information literate individual is able to 'determine the extent of information needed, access the needed information effectively and efficiently, develop effective information search strategies, locate and retrieve its sources, organize, synthesize, use and apply information, incorporate selected information into one's knowledge base, use information effectively to accomplish a specific purpose, understand the economic, legal and social issues surrounding the use of information and access and use information ethically and legally'.

Literature Review

Developing lifelong learners is central to the mission of higher education institutions like universities. By ensuring that individuals have the intellectual abilities of reasoning and critical thinking, and by helping them construct a framework for learning how to learn, colleges and universities provide the foundation for continued growth throughout their careers, as well as in their roles as informed citizens and members of communities. Gaining skills in information literacy multiplies the opportunities for students' self-directed learning, as they become engaged in using a wide variety of information sources to expand their knowledge, ask informed questions, and sharpen their critical thinking for further self-directed learning. ACRL (Framework for information literacy for higher education 2016).

Saeid Baroutiana and Barbara Kensington-Millerb (2015) were examined the usefulness of integrating information literacy as an auxiliary workshop into a postgraduate Food Processing course, with the focus on course and subject related information. The results indicated improvements in the students' information literacy skills with the slight increase in their confidence level too. Mugyabuso J. F. Lwehabura, M J F (2016) assessed the information literacy skills among 1st year postgraduate students at Sokoine University of Agriculture Tanzania with the aim of determine the challenges and problems facing by them in terms of searching and user of various information sources. The findings revealed that good number of students demonstrated significant deficiency in their

information literacy knowledge and skills further the author recommended to introduce the information literacy course mandatorily for postgraduate and undergraduate students to become an effective independent learners.

Need and Purpose of the Study

Information literacy makes students to achieve their academic objectives, expand their knowledge and capability, and play multi-disciplinary role in the present knowledge society. The students with information literacy skills can approach to the required information accurately and timely. They can evaluate information competently and use information precisely and productively. To enhance the quality in the student's performance in their academic activities and growth of their knowledge, information literacy is very much essential. No such type of study has been carried out to assess and evaluate the information literacy skills among postgraduate students of Tumkur University, Tumakuru. With this background the present paper has made an attempt study the student's skills in locating, searching, evaluating and in the ethical use of needed information in their academic activities.

Objectives of the Study

To find out the postgraduate students awareness and competency in:

- Identifying the sources of needed information
- Searching of needed information on world wide web
- Evaluation of obtained information from different information sources
- Ethical use of information

Methodology

The present study adopted the survey method. Structured questionnaires were distributed randomly among the students of postgraduate departments which are located in the Tumkur University campus, Tumakuru. The postgraduate students of the academic year 2015-2016 of postgraduate departments of Tumkur University were considered for the study. The sampling technique given by Krejcie, Robert V and Morgan, Daryle W (1970) [3] has been used to draw the sample size. The study population is 1300 out of which 297 were the sample size rounded to 300 and 300 filled questionnaires

were received and same has been recorded in MS Excel for data analysis.

Analysis and Interpretation of Data

Demographic Details of the Respondents

300 postgraduate students were took part in the

present study, among them 48.3% of male and 51.7% of female students. Among them 74% of the students are from rural background and 26% of students are from urban background. All the students are belongs to the age group of 21-25.

Students' Skills and Competency in the Locating of Information

The questionnaire sought to establish what

Table 1: Demographic details of the respondents

Demographic Information		Responses	percentage
Gender	Male	145	48.3%
	Female	155	51.7%
Social Background	Urban	78	26%
	Rural	222	74%
Age group	21-25	300	100%

Table 2: Students skills in locating needed information

Criteria	Preferred Information Sources	Responses	percentage
To find the meaning of a word	Dictionaries	116	38.7
	Text books	140	46.7
	Encyclopedias	58	19.3
	Internet	111	37
	Consult teachers	66	20
	Consult library staff	31	10.3
To get information for day-to-day life or general information	Newspaper	125	41.7
	Internet	137	45.7
	By watching TV	83	27.7
	Friends	114	38
	Journals	72	24
	By listening Radio	41	13.7
To get recent information on their interested topic	Journals	106	35.3
	Books	150	50
	Encyclopedias	43	14.3
	Newspaper	127	42.3
	Dictionaries	60	20
	Consult teacher	34	11.3
Part of a research article preferred to know the relevance of interested topic	Abstract	113	37.7
	Introduction	153	51.0
	Methodology	80	26.7
	Findings/Results	81	27.0
	references	91	30.3

information sources the students use in the meeting of their day-to-day (general) information needs to specific information needs. Data presented in the Table 2.

The findings revealed that, 41.7% of students preferred newspaper, 45.7% of students were preferred internet, 27.7% of students were preferred watching TV, 38% of students preferred friends, 24% of students preferred journals and 13.7% of students preferred listening radio as source to get general information or information for day-to-day life. The

findings further revealed that, to find the meaning of a word 38.7 per cent of students preferred dictionaries, 46.7% of students were preferred textbooks, 19.3% of students were preferred encyclopedia, 37% of students preferred internet, 20% of students were agreed that they will consult teachers and 10.3% of students will consult library staff. To get recent information on information technology 35.5% of the students were preferred journals, 50% of the students were preferred books, 14.3% of students were preferred encyclopedia, 42.3% of students preferred newspaper 20% of students were preferred dictionaries and 11.3% of

students preferred to consult teacher as source of information.

The findings also revealed about the part of a research article preferred by the students to know the relevance of their interested topic, 37.7% of the students were preferred abstract, 51% of the students were preferred introduction, 26.7% of students were preferred methodology, 27% of students were preferred finding or results and references were

preferred by 30.3% of the students. . The majority of the students were preferred introduction part of a research article to know the relevance of their topic. This shows the lack of awareness and lack of skills in the locating of needed information.

Information Searching Techniques used by the Students

The present trend influence the learners to obtain skills needed to search needed information in in the

Table 3: Information searching techniques and search approaches preferred by the students

Preferred Information Search techniques and Search Approaches	Responses	Percentage	
Search techniques	Phrase Search	235	78.3
	Wildcard search	83	27.7
	Boolean search	126	42
	Advanced search	164	54.7
Search approaches	Author Approach	249	83
	Title Approach	187	62.3
	Keyword Approach	123	41
	Subject Approach	159	53
	Publisher Approach	76	25.3
	Standard Number Approach	81	27

abundance of print and electronic information resources. At attempt has been made to study the search techniques and search approaches preferred by the postgraduate students of Tumkur University. Data presented in the Table 3.

The study results revealed that, 78.3% of students were used phrase search, 27.7% of students were preferred wildcard search, 42% of students were preferred Boolean search technique (AND, OR, NOT) and 54.7% of students preferred advanced search techniques to search information in networked environment. Concerning the search approaches preferred by the students to search needed information in the networked environment findings of the study revealed that, 83% of students were preferred author approach, 62% students were

preferred title approach, 53% of students were preferred subject approach, 41% of the students were preferred keyword approach, an average of 26% of students were preferred publisher and standard number approaches to search a book or information in a library catalogue/OPAC/WebOPAC /WWW. This shows that the postgraduate students of Tumkur University are using different search strategies and different search approaches to search and retrieve information in networked environment.

Evaluation of Information

An information literate person must know to evaluate the information before he/she use. The

Table 4: Students skills and competency in the evaluation of information resources

Evaluation Criteria preferred by the students to evaluate print and electronic information resources	Responses	Percentage	
For Print information sources	The timeliness of the information	175	58.3
	The credentials of the author/s	177	59
	The length of the information	227	75.7
	The accuracy of the information	140	46.7
For Electronic information sources	The Date of publication is provided	117	39
	The author/ authority	141	47
	Attractiveness/ colors	184	61.3
	The site which is easy accessible	184	61.3
	Domain name (.org/.com/.edu/)	207	69
	Flashing of information / more picture	95	31.7
Responsibility for the site is clearly indicated	73	24.3	

present study has been made an attempt to study the evaluation criteria preferred by the postgraduate student of Tumkur University in the evaluation of information available in print and electronic format. Data presented in the Table 4.

75.7% of students were chosen the length of information source, 59% of the students were chosen the credentials of the authors, 58.3% of the students were chosen the timeliness of the information, and 46.7% of students chosen the accuracy of information as an evaluation criterion to evaluate the print sources of information. Concerning with the evaluation of electronic information resources the findings revealed that, 39% of students are considering the date of publication, 47% of students considering the author/

authority as an evaluation criteria, 61.3% of students are considering the website easily accessible and attractive and colorfulness of website as an evaluation criteria, 69% of students are considering the domain of websites such as .edu, .org and .com etc., 31.7% of students considering the websites which contains flashing of information or contain more pictures and 24.3% of the students are considering the clear indication of the responsibility for the site as evaluation criteria to evaluate the electronic information sources. This shows the poor competency level among the postgraduate students in the evaluation of information resources.

Table 5: Student’s awareness in the ethical use of information

Postgraduate student’s skills and competency in the ethical use of information	Responses	Percentage	
Do you know about the Citation?	Yes	210	70
	No	90	30
Do you know about the referencing standard/ style manual?	Yes	237	79
	No	63	21
Style manuals used by postgraduate students	APA	171	57
	CHICAGO	46	15.3
	MLA	88	29.3
Postgraduate student’s awareness on Plagiarism?	Extremely Aware	30	10
	Very Aware	59	19.7
	Moderately Aware	98	32.7
	Slightly Aware	31	10.3
	I don’t know	32	27.3

Ethical Use of Information

Use of information ethically is one of the characteristics of information literate person. The present study has been made an attempt to study the postgraduate student’s awareness in the ethical use of information. Data presented in the Table 5.

The findings of the study revealed that, 70% of the students know about the citation. 79% of the students are known about the referencing standard or style manual. 57% of students are using APA style manual, 15.3% of students are using Chicago manual and 29.3% of students are using MLA Style Manual and 10% of the postgraduate students are extremely aware, 19.7% of students are very aware, 32.7% of the students are moderately aware, 10.3% of students are slightly aware and 27.3% of the students are doesn’t know about the plagiarism. This shows the poor competency in the ethical use of information among the postgraduate students.

Information Literacy Program at Tumkur University

The study has been made an attempt to know the

existence of information literacy program. Hence students were asked about the same. 50.3% (151) students were said yes and 49.7% (149) students were said no for the question ‘Is your University library is conducting any IL Program?’ For the question ‘Do you expect information literacy program to use information ethically and effectively?’ 76.3% (229) of students are said yes and 23.7% (71) students were said no for the same.

Findings and Discussion

- The majority of the students are from rural background
- The Majority of the students are preferred textbooks, dictionaries and search internet to find the meaning of the word, though dictionaries are the preferred source to know the meaning of a word students preferred different sources.
- The Majority of students preferred internet as sources to get information from day to day life

and radio is least preferred sources. Though the newspapers and TV are best in providing information for day to day life, students were preferred different sources to gather information about day to day life.

- ◉ Though the journals are the primary platform to communicate the updates and recent trends in a particular subject or professional trend, only 35.3% of students are given preferences to journals as a source to get recent information on Nano Technology. The Majority of students preferred books and newspapers as sources to get recent information on Nano technology. It evidences lack of awareness about information sources among the students.
- ◉ The majority of the students were chosen the introduction part, an average of 28% of students were chosen the methodology, finding/results and references of an article to understand the relevance of the article on their interested topic.

The above findings of the study reveal that, very less number of students are having an awareness of different kinds of information sources and the majority of the students are very poor in locating the needed information.

- Majority of the students are preferred phrase search technique and advanced search techniques to retrieve information in online and author and title approaches are preferred search approaches to search information in a library catalogue/OPAC/WebOPAC/WWW.
- The Majority of the students were chosen the length of information as an evaluation criteria and the accuracy of information considered as an evaluation criteria by the least number of students to evaluate the print information sources.
- The Majority of students considered the domain of websites, the website which is easily accessible and attractiveness of websites as an evaluation criterion to evaluate the e resources and less No. of students were considered the authority/author and responsibility of the website as an evaluation criterion to evaluate the online information sources.

It clearly indicates that the students' skills and competency level is poor in the evaluation of print as well as electronic information sources.

- Majority of the students were does not know about the citation. APA style manual is popularly used by the postgraduate students and the majority of the postgraduate students don't know

about the plagiarism.

- Information literacy is exists as said by the majority of the respondents and 76.3% of respondents are opined as they need information literacy program for ethical and effective use of information.

Suggestions and Conclusion

- Information literacy skills should be taught in Tumkur University.
- There is a need to create awareness on different types of information sources and their purpose. (primary, secondary and tertiary)
- Student's skills in the evaluation of information sources are poor. There is need to create awareness among the postgraduate students to evaluate the information available in print as well as electronic format.
- Students' skill in the ethical use of information is poor. To protect oneself against the charges of plagiarism there is a need to create awareness on plagiarism and also there is a need for training programs to educate the postgraduate students about referencing, use of style manuals, citation and software aspects related these areas.

Conclusion

Information literacy skills are of prime importance in order to achieve everyone's academic goals. Information literacy is essential for students in order to succeed academically and in their future professional opportunities. Educating our younger generation with the information literacy skills, leads towards the development of information literate society. The practicing LIS professionals are recognized as information managers, they need to take step towards imparting the information literacy skills among the younger generation to contribute their efforts in the building of information literate society. It is suggested to Tumkur University library to conduct information literacy programs to strengthen its users for the optimum utilization of information sources.

References

1. American Library Association. *Framework for Information Literacy for Higher Education*. <http://>

- www.ala.org/acrl/standards/ilframework(visited on October 14, 2016).
2. American Library Association. *Information Literacy Competency Standards for Higher education*. <http://www.ala.org/acrl/standards/informationliteracycompetency> (Visited on October 11, 2016).
 3. Krejcie, Robert V and Morgan, Daryle W. Determining sample size for research activities. *Educational and psychological measurement*, 1970; 30: 607-610.
 4. Lwehabura (Mugyabuso J F). An assessment of information literacy skills among first-year postgraduate students at Sokoine University of Agriculture Tanzania. *Journal of Librarianship and Information Science*. 2016, September.
 5. Saeid (Baroutiana) and Barbara(Kensington-Millerb). Information Literacy: The impact of a hands-on workshop for international postgraduate students. *Education for Chemical Engineers*. 2016 Jan;14:16-23.
 6. UNESCO. *Alexandria Proclamations 2005*. http://portal.unesco.org/ci/en/ev.php-URL_ID=27055&URL_DO=DO_TOPIC&URL_SECTION=201.html (visited on October 14, 2016).
-