INFORMATION LITERACY PROGRAMMES FOR
UNDERGRADUATE STUDENTS

Dr. RANI SYAMALAMBA
Librarian,
Maris Stella College (Autonomous)
Vijayawada
Andhra Pradesh
E mail:sysista@gmail.com

ABSTRACT

In recent years Information Literacy has become a global issue and many Information Literacy initiatives have been documented throughout the world particularly in the field of Higher Education. Under graduate students often lack the skills necessary to succeed in this rapidly changing environment, and faculty need training and support to make use of new technologies for effective teaching and learning. This article discusses the concept of information literacy and the role of college librarians in developing information literacy skills in libraries.

Keywords: Information Literacy, undergraduate students, college librarians

INTRODUCTION

The information society is characterized by a constantly increasing volume of information, advancements in information and communication technologies. The traditional concepts of organization, bibliographic description and dissemination of information are to be fine-tuned to the new environment by the library and information professionals. So the LIS professionals working in the environment have to face challenges. Hence it becomes important for the patrons/clients also to develop skill in information literacy so that they can identify, evaluate and use the relevant information effectively .Information Literacy Program (ILP) is the need of the hour for maximum utilization of these resources in teaching, learning and research.

WHAT IS INFORMATION LITERACY?

The word 'Literacy' has been linked with cultural literacy, Information literacy, Library literacy and technological literacy and recently with digital literacy and multimedia literacy also. Information literacy is the ability to identify, evaluate organize and use the information judiciously.

According to American Library Association Information Literacy is a set of abilities requiring individuals to "recognize when information is in need and have the ability to locate,

evaluate and use effectively the needed information". ALA also states that "Information Literacy is a survival skill in the information age". Information literacy forms the basis for lifelong learning. It is common to all disciplines, to all learning environment, and to all levels of education.

NEED FOR INFORMATION LITERACY:

All the academic institutions are witnessing a rapid growth in computer networking and the use of computerized databases to access information in their libraries. In fact, most academic libraries today are "hybrid libraries", adding the new e-library features to their traditional library services. Information literacy is therefore essential for college students and faculties to cope with new online services and provide a competitive advantage to themselves and the wider society. Without the training it is difficult to use electronic information sources effectively. It is necessary for users to have the requisite skills to obtain relevant information quickly and effectively from electronic sources and become what is often referred to as 'Information literate'

INFORMATION LITERACY STANDARDS:

Information literacy was strongly emphasized as a main theme in higher education with the publication of "*Information Literacy Competency Standards for Higher Education"* by the Association of College and Research libraries (ACRL) in 1999. These standards are considered the most acceptable standards to measure information competencies in institutions of higher education worldwide. The standards were then approved by the American Association for Higher Education in 1999 and the Council of Independent Colleges in 2004.

Many first year degree students come straight from school where they are used to a relatively small library, which will be in one physical place, and may have less collection or electronic resources. So they should have proper training to make use of this new environment in colleges.

OBJECTIVES:

The project was taken keeping in view the following objectives

- Determine students' information literacy skills in order to provide more appropriate services;
- To acquaint the users with the academic power of Intranet and Internet;

- To acquaint the users with the use of various search techniques to retrieve relevant information;

- To recognize the need for information, and to evaluate, organize, interpret, and communicate information in all its formats;

- To establish a direct interaction between users and library professionals;

METHODOLOGY

- Assessing information literacy needs of users (Survey method,   Questionnaires)
- Sample size, Pre-Test and Modification of the Questionnaire
- Planning programming lessons
- Design and development of modules for imparting the information literacy programmes by using Information Technology.

Information specialists, librarians and library technicians have long observed that there are major gaps in students' information skills. They have the impression that some students know very little, or nothing at all, about basic library research. With no tangible proof, however, the observations of these specialists remain hypothetical. The goal of this study is to verify whether these impressions have validity and to determine whether students entering first-year degree have the ability to retrieve process and evaluate information. The questions and the analysis given below will give the details of the student's opinion on gathering information and usage of systems which in turn helps in developing information literacy programmes.

ANALYSIS OF THE DATA

Q1. What are the information sources you use mostly?

Table 1 Information Sources mostly used

Sources	Response distribution	Percentage
a) Books	42	52.50
b) Reference books	28	35.00
c) Magazines & Journals	3	3.75
d) News Papers	7	8.75

Table 1 shows that 52% of the students are using books as a main information sources and 35% of the students are using reference books. Nearly 4% and 9% i.e. option (c) and (d) of the students opted magazines and journals and news papers.

Q2. How would you find required information in your library?

Table 2 Finding Required Information

Sources	Response distribution	Percentage
a) Library catalogue	10	12.50
b) Consulting Librarian	32	40.00
c) Browsing library collection at racks	19	23.75
d) Interpersonal Communication (friends)	8	10.00
e) Guidance from faculty members	11	13.75
f) OPAC	0	0
Total	**80**	**100%**

The above table shows that 40% (i.e.32 students) answered that they are collecting the information by consulting the librarian and nearly 24% are collecting the information by browsing the library racks and 14% are by the guidance of the faculty members. No one is using technology like OPAC for gathering information.

Q3 In order to become familiar with a subject, about which you know very little, first you consult

Table 3 Sources to become familiar with the Subject

	Sources	Response distribution	Percentage
a)	A journal	8	10.00
b)	**An encyclopedia**	**6**	**7.50**
c)	A database	2	2.50
d)	A book	53	66.25
e)	Don't know	11	13.75
	Total	**80**	**100**

Table 3 shows that the percentage of respondents who chose option (b), 7.5%, indicates that very few students seem to recognize the usefulness of encyclopedias. Options (a) and (c), chosen by 10% of the students, while not incorrect, do not represent the "best" answer: a journal article, generally deals with a specific aspect of a topic and does not provide an overview; a database, is used to retrieve references to various types of documents, but does not include summaries. A book, selected by 66.25% of the respondents, may provide an introduction to a subject, but often contains much more detailed information than

an encyclopedia and cannot be used as a quick reference. Note that among the 13.75% who chose (e), "don't know", 11 of 80.

Q4. You have found a book that is right on your topic. Which section of the book will you consult to find other documents on the topic?

Table 4 To find related topics

Sources	Response distribution	Percentage
a) The Glossary	3	3.75
b) The Index	48	60.00
c) The Bibliography	**2**	**2.50**
d) The table of contents	14	17.50
e) Other (please specify)	-	0
f) Don't know	13	16.25
Total	**80**	**100**

Table 4 shows that only 2.5% of the respondents are familiar with the bibliography as a tool for finding other documents. However, majority of students (60%) said 'index' as they are not familiar with a bibliography. It should be noted however, that while this question rates students' understanding of the bibliography as a tool, it does not show to what extent they use it. 17.5% opted for table of contents and 16.25% said that they don't know the answer.

Q5. To find the most recent information about drug abuse, you consult

Table 5 to find most recent Information

Sources	Response distribution	Percentage
a) A Book	30	37.50
b) The Journal	**21**	**26.25**
c) An encyclopedia	**10**	**12.50**
d) A dictionary	5	6.25
e) Other (please specify)	-	0
f) Don't know	14	17.50
Total	**80**	**100**

Table 5 shows that 26.25% selected the right answer (b). The most popular answer was "book", given by 37.5% of students, as they are not familiar that books are the secondary sources of information. 6.25% opted dictionary and 17.5% said that they don't know.

Q6. When searching a specialized database for documents on my subject, it is recommended to use the terminology specific to the database. To identify these terms I would consult

Table 6 to identify the terminology related

Sources	Response distribution	Percentage
a) A dictionary	38	47.50
b) A thesaurus	**4**	**5.00**
c) An internet search engine	21	26.25
d) Other (please specify)	4	5.00
e) Don't know	13	16.25
Total	**80**	**100**

Table 6 shows that only 5% of the respondents had the right answer (b). Option (a), a dictionary, selected by 47.5% of the students, is not completely incorrect; however, as dictionaries are not associated with any specific search tools, they cannot indicate which terms to use in a given tool. Furthermore, dictionaries do not situate terms in their linguistic environment by providing generic, specific and related terms for each descriptor. Many catalogues and databases use controlled vocabulary to describe the documents they identify. Students may be less familiar with this concept since they often use Internet search engines that do not have thesauri. 16.25% said that they don't know the answer.

Q7. Are you familiar with the usage of computers?

Table 7 Usage of computers

	Response distribution	Percentage
Yes	66	82.5
No	14	17.5

Table 7 shows that 82.5%, that is 66 students are using computers to gather information. Other students are in the way of learning.

Q8. What sources mostly you use to acquire information

Table 8 Sources mostly use to acquire information

	Response distribution	Percentage
a) Print media	18	22.5
b) Electronic media	14	17.5
c) Both	48	60.0
Total	**80**	**100**

Table 8 shows that 22.5% of students are using print media that is books, journals so on. 17.5% of students are using electronic media that is computers and CDs and remaining 60% are using both print and electronic media

Q9. What type of media you will use to copy the files from the system?

Table 9 Usage of media for copying files

	Response distribution	Percentage
a) CDs	44	55
b) Pen drives	28	35
c) Hard copies/print outs	8	10
Total	**80**	**100**

Table 9 shows that 55% of the students are using CDs, 35% are using pen drives and the remaining 10% of the students are using hard copies and taking printouts from the system.

Q10. Using a search engine such as Google or Yahoo, I would not find:

Table 10 Usage of search engines

Sources	Response distribution	Percentage
a) The books available in the library	**21**	**26.25**
b) Biographical information about famous people	12	15.00
c) Information about computers	10	12.50
d) Other (Please specify)	7	8.75
e) Don't know	30	37.50
Total	**80**	**100**

Table 10 shows that 26.25% of the respondents recognized that "library books" (a) cannot be found using search engines. Although it is possible to find the library catalogue using a search engine such as Google, search engines do not enable one to directly access titles within the catalogue. Although search engines represent many students' first recourse to find information, the response rate for Question shows that they are aware that search engines have certain limitations.

Q11. You have used the words "*report writing*" in a library catalogue search. No document is found by the computer. What do you conclude?

Table 11 Usage of library catalogue

Sources	Response distribution	Percentage
a) The library does not have any documents on this topic	9	11.25
b) I have not used the correct words	**11**	**13.75**
c) All documents on this topic are already on loan	16	20.00
d) the system is down	9	11.25
e) Other (Please specify)	0	0
f) Don't know	35	43.75
Total	**80**	**100**

Table 11 shows that a vast majority (43.75%) chose the answer, (f). This result does not support library staff's general impression of students' abilities in this regard. They have often observed that students have difficulty identifying the cause of the problem when they obtain few or no results, and that they are unable to identify preferred search terms in a particular context.

Q12. You must make an oral presentation on the topic "Measures currently used across the country to decrease the damage to the natural environment". Among the following choices, which one describes best the ideas contained in your subject?

Table 12 Clarification regarding topic

Sources	Response distribution	Percentage
a) Damage to the natural environment, India	4	5.00
b) Measures currently used, India	15	18.75
c) Damage, Environment, measures currently used	16	20.00
d) Protective measures, environment, India	**31**	**38.75**
e) Other (Please specify)	14	17.50
f) Don't know	0	0
Total	**80**	**100**

Table 12 results show that 38.75% of the respondents selected (d), retaining all the important concepts. Nearly 16 (20%) chose an answer in which one of the important

concepts was missing, that is "country" which is an important concept, it needed to be translated into a more significant word for the search strategy.

Q13. Some of the items that can be found in the library catalogue include:

a) All the titles of the books available in the library

b) All the titles of the books available on the market

c) All the titles of articles found in the journals available in the library

d) All the titles of journals available in the library

e) None of the above

f) Don't know

Table 13 Awareness about library catalogue

						Response distribution	Percentage
a	b					2	2.50
a	b	c	d			4	5.00
a						28	35.00
					f	11	13.75
c			d			2	2.5
				e		4	5.00
		c				7	8.75
			d			1	1.25
a			**d**			**7**	**8.75**
	b		d			1	1.25
a		c				9	11.25
a	c	d				4	5
Total						**80**	**100**

In table 13 the respondents could circle more than one answer for this question. The only valid choices were (a) and (d), as the books and journals available in the library are indeed indexed in the catalogue. Just 8.75% of the respondents selected only these two options. 35% i.e.28 students selected option 'a'

Among the other respondents, some demonstrated a partial knowledge of what a catalogue contains: 45.5% selected (a) and (d) but also added (c), "All the titles of articles found in the journals available in the library". The fact that 13.75% circled (f), "Don't know", is also noteworthy.

Q14. Which of the following best describe(s) articles published in a scholarly journal?

a) The information is written for the layperson

b) It includes a list of references

c) The research method used is described

d) It has been evaluated by an editorial board before publication

e) None of the above

f) Don't know

Table 14 Usage of scholarly journals

					Response distribution	Percentage
a	b				1	1.25
a					2	2.5
				f	45	56.25
c		d			2	2.5
			e		1	1.25
	c				7	8.75
		d			5	6.25
	b	d			12	15
a	c				3	3.75
	b	**c**	**d**		**2**	**2.5**
					80	**100**

In Table 14 only 2.5% of the respondents selected the three answers that characterize the scholarly journal: (b), (c) and (d). In selecting only one or two of the three valid criteria (b, c, d), alone or with an invalid answer, (a) or (e), most of the students demonstrated a partial understanding of the characteristics of the scholarly journal. Majority of the students 56.25 opted 'don't know'.

CONCLUSION AND RECOMMENDATIONS

The objective of this study was to compile data on the information skills of undergraduate students entering undergraduate colleges. This project was also intended to verify librarians' impressions of gaps in students' knowledge about the information literacy

skills. Many students appear to misunderstand or be totally unaware of the basic elements of library search. The objective of the study was to see whether undergraduate students entering college have the abilities to retrieve process and evaluate information.

REASONS OF POOR INFORMATION RESEARCH SKILLS

Although the Information Research Process, briefly discussed, may appear complex in both its conceptualization and its application, a lack of awareness of this process often has a negative impact on students' abilities to search and retrieve the information needed to complete their coursework. Among the most important factors impacting the quality of students' work are the following:

- few or no relevant documents are found;
- time is wasted due to inefficient search strategies;
- too many documents are found;
- Too few documents are found.

RECOMMENDATIONS

Based on the analysis and interpretation, this project recommends:

- regular evaluation of the information literacy of first-year undergraduate students upon entrance to college;
- participation of a library representative in the various program, committees;
- successful completion of a test to measure information literacy competencies during the student's first year of studies;
- Incorporation of information literacy instruction into academic programs at the undergraduate and graduate levels.

Librarians are educated in collecting, evaluating, organizing and providing access to information thus they possess appropriate knowledge and skills. This means that librarians are potentially equipped with all the abilities and skills necessary not only to be information literate but to teach information literacy to other persons. Library instruction programs have long offered library tours to introduce users to the physical organization of the library. It is difficult to cover the full range of possibilities to get information in this present age in the limited time.

DEVELOPMENT OF IL PROGRAMMES:

Now a day's many free software's are available on the Internet which are user friendly and the academic librarians can develop small tutorials for the users describing how to use a particular source, or explain the steps in retrieving the information from e-journals. This software's will also help to keep the programmes online. We can post these programmes in our college websites. Some of the software's which are available free are given below.

Author STREAM (http://www.authorstream.com/)

Author STREAM is an online slide sharing platform, which provides multiple options for sharing PowerPoint presentations both online and offline. Author STREAM makes it easier to share PPT slideshows through blogs, websites, on YouTube and even via iPods. It is all about and shares PowerPoint presentations on the Web as a unique link (URL) to send via e-mail, or embed them in your blogs or websites. We can download our presentations as video, and share them on YouTube or via iPods, or watch them on DVD player. **The links given under modules are developed by author STREAM software.**

JING: (http://www.jingproject.com/)

It is free software to capture images and videos and it works on Macintosh and windows. We can upload the images or videos to our Jing folder on screencast.com. Once the video or image is uploaded to screencast.com we get a link to it. We can paste this link to online conversation or in library website. Students can use this links to know the library sources and services.(ex. Library tour, opac, access to e-journals so on.) Using this software the below tutorials are designed and are published on the library website for library users. (http://www.marisstella.ac.in/library.htm)

Tutorials on n-list programme   Link: http://www.screencast.com/t/MTFjODE1ND

Tutorials on j-gate portal   Link : http://www.screencast.com/t/YjU2YjZm

Tutorials on NPTEL programme   Link :http://www.screencast.com/t/JNleY1ej

CONCLUSION:

The ultimate goal of any library service is to ensure that the students and staff are able to access the information for purposes for which they require it. This raises the need to teach information literacy to users with the goal of assisting clients to identify and select relevant information using appropriate search strategies and being able to evaluate, organise and synthesize that information into a meaningful presentation. The library professionals should take initiative in conducting various information literacy programmes in the college environment and update their skills by attending various seminars and workshops conducted by various organizations. All above modules help the library user in locating the information and become information literate.

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