

Information Literacy Training and Empowerment of Users in Engineering College Libraries: A Study

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Abstract: The exponential growth of information resources and new services in libraries leads many new initiatives in the field of Information Literacy research. The Information Literacy has become a common challenge for all library information science professionals. It has been recognised all over the world in the area of Higher Education especially in technical education. The students of under graduate in technical education needs necessary skills to succeed in this rapidly changing information environment. They need effective training and support to make use of new technologies and resources for active learning. This paper examined the information literacy (IL) programme content coverage, methods of IL delivery and assessment among the engineering college libraries of Bangalore region under the affiliation of Visvesvaraya Technological University, Belagavi. The author analysis the mode and methods of information literacy delivery and assessments methods.

Keywords: Information literacy, information literacy training, Information literacy assessment, Visvesvaraya Technological University, Engineering Colleges.

1. Introduction

The Librarians community have long been involved in Information Literacy activities in the form of Library orientation, library tour, Library instruction, library visits and many more to help their users learn about and how to use information tools and materials in their own libraries. It's indeed, users able to apply and transfer this knowledge to a new environment and to search tools that were new to them. Information literacy expands this effort beyond libraries and librarians and focuses on the learner, then the teacher. According to Murkowski (1974), Information literate people are those who know how to apply information resources to their work. Information literacy incorporates the abilities to recognize when information is needed and then to start searched strategies designed to find the needed information. It includes evaluating, synthesizing, and using information appropriately, ethically, and legally.

In the current scenario, there is need of empowering the users for selective information access, evaluation, find and acquire needed information for academic and research in hybrid library environment. The information literacy content which is covered the resources and service provided by the particular library, and the methods of information literacy delivery in different form to research the user community is playing a very significant role to train users to make them information literate to face the current challenges in the information age.

2. Review of literature

The primary goal of libraries is to provide information literacy education, and different methods for training of online databases, website-based lectures and information literacy courses. ACRL (2003), Hernandez and Urena (2003) added the importance of libraries in the teaching of information literacy – the concept corresponding to many research studies that describe libraries as the venues for information literacy activities, such as orientation, teaching researching on the one-on-one basis at the reference section, seminar, integration in curricular subjects, teaching through websites, and teaching it as a curricular course.

Stewart (2007) find the major functions of academic libraries in supporting educators about information literacy programs: a) information literacy courses should be revised based on technological demand; b) technology such as online course programs and databases are given as assignments should be amalgamated, and c) there should be harmony among IL course outcomes. Maitaouthong et al (2012) explained the need to launch information literacy courses in libraries and emphasized those librarians should take part in teaching and develop a strong understanding of library users.

Saunders (2012) suggested that librarians have to develop and teach IL courses and organize activities to promote IL knowledge and awareness among library users and educators. Librarians would work with library users and provide them with information-related platforms through online lectures and information sources on the libraries' websites that link to IL course contents. Kitchens and Barker (2016) express Twenty-first-century students need consideration, ideas, and face-to-face work to enable their success in acquiring new

information. Twenty-first-century skills are generally described as core competencies such as collaboration, digital literacy, critical thinking, and problem-solving.

3. Objectives of the study

The main objective of the study is to

- 1) Study the current pattern of information literacy programmes
- 2) Identify the most commonly used information literacy methods
- 3) Find out upcoming methods of information delivery among all engineering colleges
- 4) know the information literacy content among the engineering college libraries
- 5) Identify the ICT as content of the information literacy in the study.
- 6) Examine the evaluation and assessment methods under the study.

4. Research methodology

The methodology is adapted this study is the survey method. The data has been gathered through the structured Questionnaire deployed to the librarians of engineering colleges in Bangalore regions' which is affiliated to Visvesvaraya Technological University (VTU), Belagavi. Presently, the VTU has four regions namely Belagavi, Bengaluru, Gulbarga, and Mysore and covers total 219 engineering colleges in Karnataka. The study got some limitations and covered only 102 engineering colleges under Bangalore region except the colleges of Architecture, MBA & MCA. The total 87 (85.29%) colleges have responded to the survey.

5. Data analysis and interpretation

It deals with the analysis and interpretation of the data collected from the librarians in the engineering colleges Visvesvaraya Technological University, Belagavi under Bangalore region. The data collection tool used for the study is questionnaire method. The Collected data has been analysed and presented in the form of tables and graphs with necessary explanation.

5.1.1 Education Qualification of the Librarians

The Academic qualification of the librarian is thought as a road to success in the profession to reach the user community by enabling them new skills and competencies in the electronic environment. The additional academic qualification expands and widens the knowledge in a specific field. The Continuing Professional Development is an essential part of the modern library information professional's successful career planning & prospects. Table-1 exhibits the educational Qualification of the librarian of the engineering colleges. Truly, it is inspiring to know that all the colleges have a trained professional who is heading the library. Rightly, the some librarians 26 (29.88 %) have taken for the higher education i.e. M. Phil and 8 (9.19 %) of the librarians have accomplished their Ph.D.

Table1: Education Qualification of the respondents

Qualification	No. of Responses (N=87)	Percentage (N=87)
M. L. I. Sc	87	100 %
M. Phil	26	29.88 %
Ph.D.	8	9.19%

5.2 Organising of Information Literacy Programmes

The study critically observed that out of 87 libraries, 82 are conducting information literacy programmes on the basis available resources and services and methods which are suitable for the users based on the facility in the organisation. Figure-1 presents data with respects to the organizing of Information Literacy Programmes at various engineering college libraries. A majority of the libraries i.e. 82 (94.25%) have specified that they deliver Information Literacy Programmes for their users. There are only 5 (5.75%) libraries which do not conduct IL programmes. lack of skilled manpower to support the librarian, lack of adequate facilities etc., are the foremost reasons for not conducting IL programmes in the five libraries.

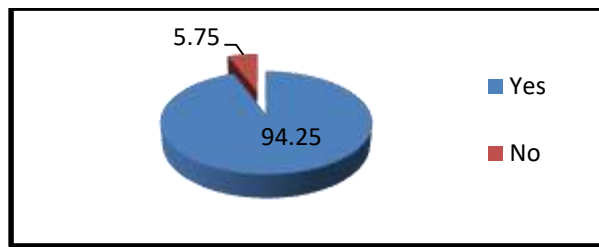


Figure-1 College conducting information literacy

5.3 Methods of the Information Literacy Programme

The differences in students' information competencies represent a significant challenge in information literacy pedagogy. The Delivery methods of information literacy instruction that acknowledge students' widely varying abilities will improve librarians' instruction and students' learning. The information overflow and adaptability of ICT tools in effective information literacy programme, the coverage of the content and delivery methods are playing a very significant role in the success of information literacy programme. To know and find the more active methods of delivery of Information Literacy programmes used in the engineering college libraries. The librarians were requested to provide the details. The Table-2 shows that all the librarians 82(100.%) said that they were providing a *brief introduction of library* and *library tour and orientation* at the commencement of the respective academic year for new students. And also the most of the libraries i.e. 75 (91.46 %) libraries are using *personal guidance*, followed by 72 (87.8 %) libraries using *Small Group interactions* method when the students come to the library for seeking information for their project or to complete their special academic assignments.

The more than 50% of the libraries have practice of to develop information literacy skills from web-based instructions 52 (63.41 %) and search exercises 43(52.44 %) for their users and also 35 (42.68 %) libraries and 25 (30.49 %) libraries are making use of *Special Promotional activities viz., Book Exhibitions, books redisplay, new arrivals display* and *Lectures / Demonstration* methods respectively. Only 22 (26.83%) libraries are working *Scheduled workshops & expert lectures* for competitive examinations related resource promotion and using *Printed Training Manuals methods* along with regularly used methods for their information literacy activities of the libraries.

Now a days the new practice such as *Audio/Video Lectures* and *Hands-on instruction in Laboratory* and *Online tutorials* are used by very few libraries. At current, the Web is an influential medium that has the potential to deliver meaningful learning environments. Hence, developing instructional materials such as online tutorials, Web-based instructions have greater influence in delivering the information literacy programmes.

Table 2: Methods of the Information Literacy Programme

Sl. No	Delivery Methods	No of Libraries (N=82)	Percentage (N=82)
1	Introductory briefing in the IL Programme	82	100
2	Library tour and orientation	82	100
3	One to one guidance	75	91.46
4	Small group Interactions	72	87.8
5	Web-based instructions	52	63.41
6	Search Exercises	43	52.44
7	Special promotional activities	35	42.68
8	Lecturers /Demonstration	25	30.49
9	Printed training manuals	22	26.83
10	Scheduled workshops & expert lecturers	22	26.83
11	Hands-on Instruction	12	14.63
12	Audio/Video Lecturers	10	12.19
13	Online tutorials	4	4.88
14	Book talk	4	4.88

5.4 Contents coverage of the Information Literacy Programme

In the 21st century, libraries have to perform pivotal roles in disseminating and sharing the culture of knowledge. In this age, libraries are the repositories of all of the knowledge and information accumulated by humankind. They have stored all kinds and forms of information material to disseminate beyond the geographical boundaries and develop effective information services to the user community. There is a need for effective information literacy methods and wide coverage information literacy content to fulfill the

current information literacy skills. The content of information literacy Programme is dependent on the availability and use of resources of a specific library. Hence, in this respect, the librarians have requested the question on the contents of IL Programme provided in their libraries.

The results of the study depicted in the Table-3 all the 82(100%) libraries have covered in there information literacy content *General introduction about the library facilities and services, Reference sources & their access, Methods & tools for print & online info. search & retrieval* as contents of their IL programme, use of e-Journals and online databases and it is very surprising to know that all library has included in the information literacy content the remote access of their e-resources and awareness of library website access.

The major 52 (63.41 %) libraries have comprised *Use of OPAC* and 41 (50.00%) libraries have integrated *Bibliographic Instruction* as the content of ILP. It shows that more than 60 % of Libraries fully automated their library housekeeping activities. The 39 (47.46%) libraries comprised *Evaluation of Information resources* and 46(56.09 %) *Open archives* as the content of ILP. About 32(39.02 %) libraries have comprised *Use of information ethically & legally*, 25 (30.49%) *Institutional Repositories/Digital Library*. A limited number of libraries i.e. 21 (25.61%) have incorporated *Understanding Citations* and Documenting research work & formulation of information search queries & Techniques by 18 (21.95 %) libraries. Nearly 07 (8.54%) libraries have assimilated *Use of CD-ROM Database* as their content of the ILP.

Table 3: Contents of the Information Literacy Programme

Sl. No	Content	No. of Libraries (N=82)	Percentage (N=82)
1	General Introduction to Library facilities & services	82	100%
2	Reference sources and their access	82	100%
3	Use e-Journals and online database	82	100%
4	Remote access facility	82	100%
5	Library website	82	100%
6	Methods & tools for print & online information Search & Retrieval	82	100%
7	Use of OPAC /WEB OPAC	52	63.41%
8	Open Archives	46	56.09%
9	Bibliographic Instructions	41	50.00%
10	Evaluation of Information resources	39	47.56%
11	Understanding citations	21	25.61%
12	Use of information ethically & legally	32	39.02%
13	Institutional repositories	25	30.49%
14	Documenting research work	18	21.95%
15	Formulation of Information search queries & Techniques	18	21.95%

5.5 Evaluations of information literacy programmes in engineering college libraries

Academic librarians who engage in information literacy instruction have a very real impact on the teaching and learning missions of the institutions they serve. To quantify the efficiency of any system feedback is important, which in turn helps to analyze, evaluate and review the existing contents of that system. Most of the librarians who are providing IL P are assessing and improving their method of IL programme and to emphasize the improvements made to teaching, learning, and future assessments.

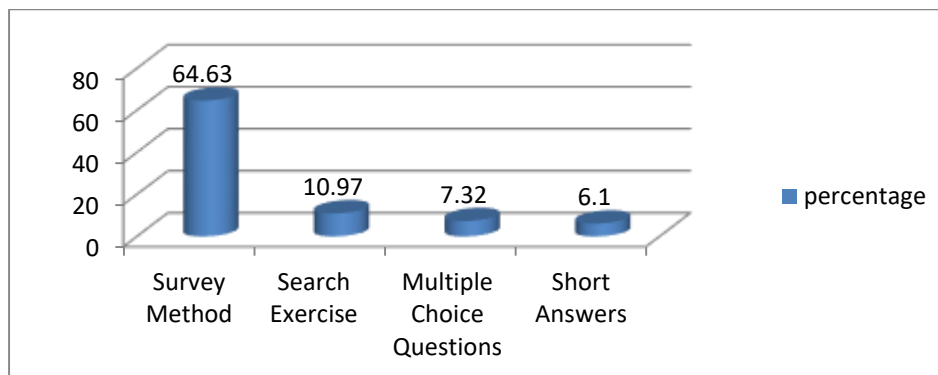


Figure-2 Methods of Library Assessment

Figure-2 reveals that, out of 82 libraries; only 56 (68.29 %) libraries are conducting the assessment after delivering I L programme through different methods. Out of 56 libraries, 53 (64.63%) libraries are conducting an assessment of IL programmes through survey method followed by search exercise by only 9 (10.97 %) library, although, *Multiple Choice Questions* by 6 (7.32%) libraries and short Answers only 5(6.10 %). The some of the libraries are assessing I L programmes using all two and three methods.

6. Findings

- All the librarians are providing a brief introduction of library resources and collections.
- The 72 (87.8 %) of librarians are using small group interaction and 75(91.46%) of librarians are training with personal guidance when the students comes to library for their project and other services
- The web-based instructions 52 (63.41 %) and search exercises 43(52.44 %) for their users
- The 35 (42.68 %) and 25 (30.49 %) librarians are making use of Special Promotional activities viz., Book Exhibitions, books redisplay, new arrivals display and Lectures / Demonstration methods respectively to promote their library resources and services.
- The only 22 (26.83%) libraries are working Scheduled workshops & expert lectures for competitive examinations related resource promotion and using Printed Training Manuals methods along with regularly used methods for their information literacy activities of the libraries.
- All librarians are include General introduction about the library facilities and services, Reference sources & their access, Methods & tools for print & online information Search & retrieval as contents of their IL programme, use of e-Journals and remote access of their e-resources and awareness of library website access.
- The 52 (63.41 %) libraries Use of OPAC and 41 (50.00%) libraries have included Bibliographic Instruction as the content of Information Literacy programme
- The 39 (47.46%) libraries are using Evaluation of Information resources, and 32(39.02 %) libraries Use of information ethically & legally as content of information literacy programme. 21 (25.61%) have incorporated Understanding Citations and Documenting research work & formulation of information search queries & Techniques by 18 (21.95 %) libraries.
- The 25 (30.49%) librarians use the Institutional Repositories/Digital Library and 46(56.09 %) Open archives as a content of information literacy in their libraries.
- The 56 (68.29 %) libraries are conducting the assessment after delivering I L programme through different methods. From survey 53 (64.63%) libraries are conducting an assessment of IL programmes through survey method.
- Only 9 (10.97 %) libraries are search exercise, although, Multiple Choice Questions by 6 (7.32%) libraries and short Answers only 5(6.10 %). The some of the libraries are assessing I L programmes using all two and three methods.

7. Suggestions

- The information literacy training is to make compulsory for all students in engineering colleges. The library professionals will be responsible for proper revision of the content and promotion on the library resource and services.
- All Libraries have to implement proper mechanism or evaluation for information literacy of students to know the status of the IL.
- The active library professional should involve in the library information literacy programme:
- The university has to make information literacy guidelines and policies at university level and monitor information literacy programs in educational institutions for effective implementation.
- The library has to organise Conferences, Seminars related to promote information literacy and devoted Information literacy portals may be developed to train their library resources and services.
- The Student's Assessment on information literacy will be done on regular basis in every semester:
- The librarians should be properly trained for upcoming technology to deliver effective information literacy program
- The Student's feedback will be taken on regularly to improve the content and delivery methods of information literacy:
- The university has to make separate committee for monitor information literacy moment in under the university.

8. Conclusion

Teaching information literacy (IL) is not a new role for the working library professionals in India. The librarians have been doing so in a very general way by orientation or user instruction at the beginning of the academic session. Although the concept of information literacy has roots from these user-oriented programs. It has gained much attention from the working LIS professionals in engineering institutes. In current situation, students must be information literate if they are to survive and succeed in their academic and research. Librarians in academic environment must teach information literacy skills through strategies. They should train their students to make them information literate to the development of their personal and professional skills. The students need to be empowered and librarian has to train students for applications of ICT in their library services.

The engineering user community normally are good at information technology application and integration in their study. The information delivery methods like hands on instruction, audio /video lecturers, online tutorials and book talk are less in use among the engineering college libraries. These methods are very useful methods of delivery to enhance the IL skills. The content of information literacy like evaluation information resources, understanding citations, use of information ethically & legally, institutional repositories, documenting research work are not popular among the Information literacy of engineering college librarians . These are the very key points for the students in the area of research; the librarian has to cover more in this area as content of information literacy.

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