

In Search of Information Literacy Programmes and Practices: Survey of Selected Institutions at Bangalore

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ABSTRACT

Libraries have long been involved in training their users in library use, its services and resources. Terms such as library instruction, library orientation, user education and bibliographic instruction have all been used at various times to indicate the process of helping users how to use the library, how to access information and teaching the various bibliographic tools. These methods are facility specific instruction, i.e., help users in knowing the physical location of different sections, staff, collections and services of library. In the digital age, fencing around "library resources" is a daunting task. Moreover, the instructional needs of users have changed dramatically as new methods for teaching and learning have emerged. Information literacy has become an important concept since the arrival of the information age. Research in this area in Asian countries such as India is still in its preliminary stages, as these countries have only recently become fully immersed in the information culture. The paper is a case study of selected library and information centres of higher learning and research at Bangalore City.

Keywords: Information literacy, information literacy initiatives, information literacy programmes.

1. INTRODUCTION

Libraries have long been involved in training their users in library use, its services and resources. Terms such as library instruction, library orientation, user education and bibliographic instruction have all been used at various times to indicate the process of helping users how to use the library, how to access information and teaching the various bibliographic tools. These methods are facility specific instruction, i.e., helping users in knowing the physical location of different sections, staff, collections and services of library¹. The earliest evidence of instruction is the librarian lecturing the undergraduates. An early attempt to explain need for user education was based mainly on the belief that to know how to use a library was

an essential part of the education for life process. The central idea of user education revolved on the many sources of information available and not on the mechanics of using the system. In addition to teaching how to find information, librarians now recognise the importance of teaching critical thinking skills to enable users to evaluate and select the best information for their needs.

The explosion of knowledge emphasise on the ability to continue to learn throughout life. The growth in the number of interdisciplinary courses is another factor for the development of user instruction. Academic libraries underwent rapid collection growth and acquired new techniques of organisation and retrieval. Specialisations in education also lead to

revived interest in library user education. Such courses, which cut across the traditional boundaries of subjects, have been a particular feature of the universities and are becoming increasingly important in all institutions of higher education. These courses brought with them greater problems in the location and organisation of material for study. The quantity of material to be searched because of the diverse discipline requires that effective instruction methods should be developed. It is not just the quantity of the material that makes help essential but also the diversity of the sources, and formats. In the digital age, fencing around library resources is a daunting task. Moreover, the instructional needs of users have changed dramatically as new methods for teaching and learning have emerged. While information sources and methods for finding information are still a useful component of library instruction, a broader construct of information literacy has emerged as a framework for effective information inquiry². Infact this practice is going to be an essential skill in new learning contexts. There are many possible ways to understand these new dimensions of learning and associated skills. One of these is the need for skills to exploit technology to use information effectively. Another aspect is the need for a conceptual understanding of information and knowledge processes.

2. SCOPE OF THE STUDY

Information literacy (IL) has become an important concept since the arrival of the information age. Research in this area in Asian countries such as India is still in its preliminary stages since these countries have only recently become fully immersed in the information culture. The scope of this study is limited to selected library and information centres of higher learning and research at Bangalore city only. The results will contribute in knowing the implementation status of IL programmes in the selected libraries. It will also provide some insight to the researchers who would like to do a comprehensive study on IL in the Indian context. The results might have implications for librarians to better organise their IL programmes and for users to better understand their own skill levels and their need to ask librarians for help. Faculty members and administrators may consider incorporating IL instruction in the regular curriculum after getting the picture of users' competency levels and prominent usage patterns.

The parameters of the study are:

- ✘ Data collection confined to library and information centres of higher learning and research and development organisations/institutions at Bangalore City only

- ✘ Data is collected using a questionnaire from the Heads of the libraries selected for survey
- ✘ The study is mainly qualitative, using a very small number of samples
- ✘ Data analysis and interpretation are entirely based on the feedback received from the respondents
- ✘ The collection details, technological infrastructure, services/facilities rendered and implementation of IL programmes were up-to-date at the time of collection but this is an ever-changing field, the probability of new developments should be taken into account when reading this study and appropriate adjustments made.

This is a small-scale qualitative study exploring the planning, designing and delivering of IL programmes along with the technological gadgets used, methods adopted and the end impact of such programmes in productive use of information. This is an exploratory study that could be used as an initial step in a subsequent large-scale survey. As will all research there are limitations in the sampling procedures, sample size, analysis undertaken and conclusions made. Whilst the originality of the research remains unequivocal and hence the limitations are not detrimental but rather aimed at comprehensively and accurately describing the scope of the research undertaken.

3. OBJECTIVES OF THE STUDY

Objectives of the study are to:

- ✘ Know the availability of ICT infrastructure in the libraries selected for study
- ✘ Understand the implementation status and developing trends in IL programmes
- ✘ Know how the IL programmes are planned, designed and delivered
- ✘ Know the influence of ICT in planning, designing and delivering the information literacy programmes
- ✘ Know the difficulties faced while planning, designing and delivering IL programmes
- ✘ Know the impact of IL programmes on the utilisation of library resources
- ✘ Know the impact of IL programmes in enhancing the intellectual output of the organisation.

4. METHODOLOGY

A questionnaire was used to collect the data from the selected library and information centres of higher learning and research at Bangalore. In all, questionnaire was circulated to 31 selected libraries

out of which 29 (93.55 per cent) responded. Among 29 respondents, 6 respondents have indicated that they do not provide any IL instruction or training to their users. Hence, these 6 libraries were excluded and only 23 libraries were considered for data analysis and interpretation.

5. DATA ANALYSIS

5.1 Information Literacy Programmes

All the 23 libraries selected for survey provide IL programmes for the purpose of optimum utilisation of library resources and services. IL training programmes are quite familiar in academic library environment. When it comes to R&D sector these programmes are not conducted at frequent interval (Table 1).

Table 1. Frequency of IL programmes

Frequency	Total
Regular interval	04 (17.40)
When requested	06 (26.10)
Annually	06 (26.10)
For new users	10 (43.48)

Note: Figures in parenthesis indicate percentage

Table 1 shows that 43.48 per cent of respondents conduct IL programmes only for the new users of the library followed by 26.10 per cent of respondents who conduct it when requested and annually, respectively. Only four (17.40 per cent) respondents conduct such programmes at a regular interval. Though the users of R&D libraries have a very specific information needs and requirements, IL programmes in such an environment should be conducted as frequently as possible. The technological, pedagogical and cultural changes occurring within the higher education and R&D sector now demand that librarians to be active educators also. This complex role demands more than sound pedagogical knowledge, advanced teaching skills and an ability to develop and deliver effective learning experiences. It also requires that the teaching librarians function as an educational professional, that is as one who can engage in educational debate and decision-making processes, influence policy, forge strategic alliance and demonstrate diplomatic sensitivity. Table 2 shows that the respondents have understood well their teaching roles. In majority (78.26 per cent) of libraries, it is the librarian who conducts IL programmes. Some of the libraries (13.04 per cent) conduct IL programmes by inviting guest professionals and with the library staff. Only

Table 2. Organisation of IL programmes

IL Programmes are Conducted by	Total
Librarian	18 (78.26)
Separate staff is available for IL programmes	-
Library staff and guest professional(s)	02 (13.04)
Publishers/Representatives/Agents	02 (8.70)

Note: Figures in parenthesis indicate percentage

8.70 per cent of respondents arrange demonstrations and presentations of the resources procured for the users from publishers, representatives and agents. With the increasing use of information technology in disseminating the library services, librarians have a lot to offer that can be tapped in the digital era. Librarians have been trained to establish user needs and to select and evaluate appropriate information. The extensive multiple-source electronic access today requires library professionals to be more technology literate and up-to-date with the latest advances in the field of technology.

Out of the 23 respondents, 15 (65.22 per cent) respondents revealed that they did not receive any technological training which is very essential as the technology is getting obsolete at a greater pace. But, it can be taken as a positive indication that majority of respondents were self learners and have good technological knowledge and skills. Among the eight respondents who received technological training, majority (87.50 per cent) were trained by the product vendors (Table 3) followed by only one (12.50 per cent) respondent who received training from outside trainer/consultants. Some of the respondents were keeping themselves technologically up-to-date by attending workshops, seminars, lectures and training programmes organised by the professional organisations. Table 4 shows that sizeable percentage, 15 (65.23 per cent) of respondents have developed

Table 3. Technological training received by the IL programme staff

Training provided by	Total
Product vendor	07 (87.50)
Programme staff	-
Outside trainer/consultant	01 (12.50)

Note: Figures in parenthesis indicate percentage

Table 4. Instructional materials for IL programmes

Instructional materials	Total
Instructional materials including tutorials or modules	10 (43.48)
Resource help sheets, guides, and manuals	15 (65.23)
Webpages and Intranet portals	14 (60.87)
Collaborating with other units of the organisation	06 (26.10)

Note: Figures in parenthesis indicate percentage

resource help sheets, guides and manuals for the products procured in the library for the proper understanding and utilisation of the resources. Also, 14 (60.87 per cent) of respondents revealed that they have developed webpages and Intranet portals for providing IL programmes. Ten (43.48 per cent) respondents indicated that they have developed instructional materials including tutorials or modules where as six (26.10 per cent) respondents are collaborated with other units of their Organisation to develop and deliver IL programmes apart from other methods mentioned. In terms of instructional design the medium of the Web seems ideally suited to the task of teaching information skills. Users of higher learning and R&D libraries are increasingly using Web for information requirements. Furthermore, Web is a powerful medium that has the potential to provide meaningful learning environment. Hence, developing instructional materials such as tutorials, resource help sheets, webpages and Intranet portals will also have greater impact on IL programmes. With the rapid advances in information technology, the proliferation of information resources and formats and the increasing complexities of access and evaluation, libraries recognise the necessity for dynamic IL programmes that will address the needs of all categories of users. A question was asked to know whether different IL programmes have been developed for different category of users. Only 10 (43.49 per cent) respondents have developed IL programmes for different category of users. Among them six (60.00 per cent) respondents have developed programmes suitable for the varied and specific information needs of scientists/engineers and students (Table 5). Other respondents, three (30.00 per cent) and two (20.00 per cent) have developed IL programmes that deal with information wants of faculty and administrative staff, respectively. It is to be noted here that human behaviour is a complicated phenomenon, the factors that affect its implicit objectives need to be studied thoroughly and carefully. In general, information

Table 5. IL programmes for different category of users

Category of users	Total
Scientists/Engineers	06 (60.00)
IT Staff	-
Faculty	03 (30.00)
Administrative staff	02 (20.00)
Student	05 (60.00)

Note: Figures in parenthesis indicate percentage

needs vary from subject to subject and its orientation. The subsequent use behaviour in selecting a particular information source by the individuals or user groups should be given due importance while planning IL programmes. The rapid development of Web-based resources requires that library professionals and others involved in information skills training migrate programmes centered on library-based resources to incorporate wider Internet-located sources such as e-journals, databases and even Internet searching. Internet searching is very different from information retrieval as traditionally practiced and researched in online databases, CD-ROMs and Online Public Access Catalogues (OPACs). As catalogues represent the mirror to the library collection, all the 23 (100.00 per cent) respondents offer guidance and training in using catalogues and 20 (86.95 per cent) respondents cover a range of topics such as introducing library websites, Internet search and databases (Table 6). Internet resources, in particular World Wide Web resources, continue to proliferate at an astonishing rate. A great deal of information is posted to the world everyday but unfortunately very little is of high quality. Unlike professional journals and commercial publishers, who employ a system of editorial review and external referees to ensure the quality of materials distributed, information can be spread over the Internet by anyone without regard to accuracy, validity or bias. It is observed from Table 6 that respondents are concentrating more on electronic information access. Large majority, 22 (95.65 per cent) respondents offer training in accessing e-journals followed by only 11 (47.83 per cent) respondents who cover the most important area of evaluation of information sources both print as well as electronic.

Since the advent of the Internet, the information highway phenomenon has given access to virtually anything and everything that has ever been written or expressed. Enormous information is now available that there is no wonder that searchers are having a field day citing from sources that otherwise would

Table 6. IL programmes for different category of users

Areas of IL training	Total
Catalogues	23 (100.00)
Library website	20 (86.95)
Internet search	20 (86.95)
E-journals	22 (95.65)
Databases	20 (86.95)
Evaluation of information sources	11 (47.83)

Note: Figures in parenthesis indicate percentage

not be available or easily tracked. It's becoming quite common for people to use Internet sources for information for writing papers, reports, theses, etc. and, therefore, it may be useful to know how to cite that information. Developing IL programmes that deal with citing e-mails, websites, citations and quotations in text, references for specific documents on a website and references for articles and abstracts obtained from electronic databases will be of great use to the library clientele. Searching databases and search engines is a tedious task. Also the Internet has affected IL in a number of ways. First of all it provides access to vast amount of information from many countries in a variety of languages. So searching for it requires specific search engines and/or subject guides. The level of information provided is not readily apparent through the title, and the user is left to decide if a given source is relevant to his/her needs. In addition, user has to evaluate the information obtained with respect to quality, accuracy, timeliness and so on. Hence developing IL programmes for citing electronic information searching different search engines and databases, and evaluating the online information sources is the need of the hour. In this context, the survey reveals that considerable respondents, 18 (78.26 per cent) have developed guidelines for searching effectively different search engines and databases, which is also clear from the fact that majority of the respondents are covering areas such as library website, Internet search, e-journals and databases (Table 7). Twelve (52.17 per cent) respondents have developed guides for citing electronic information sources. Only five (21.74 per cent) have prepared interactive tutorials to teach the users how to evaluate the quality of information on the Internet. Though 11 respondents revealed that they provide IL programmes for evaluating information sources, both print and electronic, but only five

Table 7. IL programmes followed in the libraries

IL Programmes	Total
Guides for citing electronic information	12 (52.17)
Guidelines for searching effectively different search engines and databases	18 (78.26)
Interactive tutorials to teach the users how to evaluate the quality of information on the Internet	05 (21.74)
Organising expert lectures on information literacy	06 (26.10)

Note: Figures in parenthesis indicate percentage

(21.74 per cent) respondents have prepared interactive tutorials to evaluate quality of information on the Internet. Very few six (26.10 per cent) respondents are organising expert lectures on IL for their clientele. The library supports the teaching and research needs of the organisation by developing the collection and providing access to it through catalogues, electronic databases and help desk services. The library professionals should also recognise that teaching of IL skills requires a campus wide partnership that combines the expertise of library staff, scientific and administrative staff, academic staff and other teaching and learning support services. Library professionals are uniquely qualified and positioned to assume an active role in the restructuring of the teaching-learning environment. Library professionals are experts in collecting, organising, evaluating and providing access to information in all formats.

Teaching knowledge and skills must take an essential rather than desirable place in the library professionals' portfolio which is clear from the Table 8 that quite a sizeable majority, 20 (86.95 per cent) respondents design, develop and update products in-house as part of their normal range of duties where as two (8.70 per cent) respondents have mixed team of library professionals, IT staff and administrative people for planning, designing and delivering IL programmes. Libraries today introduce many new services, either by converting existing services into e-services or by developing and implementing

Table 8. IL programmes followed in the libraries

IL programmes are developed by	Total
In-house by team of library professionals—as part of a range of duties	20 (86.95)
Mixed team of library professionals, IT staff and administrative people	02 (8.70)
External provider briefed by the IL programme development team	01 (4.35)

Note: Figures in parenthesis indicate percentage

entirely new services for search, delivery and use of information, e.g., online delivery, portals, personalised services, online teaching modules, online reference, and digitised collections or electronic publishing. In most cases, introducing new services require tremendous efforts and skills of the library staff along with proper funding and future planning. Hence, an attempt was made to know how the selected libraries are maintaining support for existing and new services (Table 9). The time available for library staff to perform the IL teaching is the major issue (Table 10). This is expressed by a large number of respondents, 16 (69.56 per cent). This problem can be tackled by appointing separate staff for planning, designing and delivering IL programmes. There is great opportunity to exploit other expertise available in the institution in developing and delivering IL products. Establishing mixed team of library professionals, educational developers, scientific and technological staff, etc. may serve to improve IL products and develop synergies between library and institution's developments. The decision to involve greater expertise in developments could be considered best practice. Teaching information skills to staff who are highly intelligent in an organisation oriented towards using and extending knowledge is a situation many trainers, quite correctly could envy. Whilst popular culture may have it that scientists or senior

users would find it difficult to admit they do not know something. The scientific and senior academic staff and even some of the senior research students are experts and so specialised in their field that most of them are able to recognise that others have specialised knowledge. There are fewer opportunities for IL training in these situations as often these staff especially those with significant administrative responsibilities find themselves too busy to spend time acquiring IL skills. This is evident from the fact that five (51.74 per cent) respondents indicated that user resistance (user apathy) is also a hurdle for effective delivery of IL programmes.

The role of library professional in the information age is to promote access to appropriate and accurate information to serve the needs of users. This has been the library professional's mission for generations. However, the information age has made this mission much more challenging and complex. It has also demanded that the library staff should develop new technical skills to promote information access and use. Effective delivery of IL programmes also calls for proper staff development strategy. It should provide opportunities for all staff to improve their own IL, their understanding of the IL education agenda and their ability to account for that agenda in their own contexts. In this context four (17.40 per cent) respondents revealed that staff expertise is one of the serious problems for effective delivery of IL. This is followed by four (17.40 per cent) respondents saying lack of quality products is other prominent problem for effective delivery of IL programmes.

Among the 23 respondents, 15 (65.22 per cent) felt that they have all the resources required for IL training programmes. Out of the remaining, 8 (62.50 per cent) indicated the requirement of additional staff, and a separate training room for conducting IL programmes (Table 11). Also, four (50 per cent) respondents pointed out that education for the staff (train the trainer) is very important for effective delivery of IL programmes. In the commercial sector, training, re-training and client education programmes are common place for those who work with computers, networking and software. Staff acquires new technology skills that enable them to compete effectively in the workforce and to enrich the work of their organisation. In library and information centres also, training the trainer programmes should be given due importance. Unless the trainer knows the new and emerging technologies and applications, it is very difficult to incorporate them into the instructional programmes. If the new technologies and applications are not used in the instructional programmes, soon they will become obsolete and value for nothing. As it

Table 9. Support for existing and new services

Support for existing and new services	Total
Existing staff provides updates and enhanced services	20 (86.95)
Existing staff develops new services	15 (65.22)
Additional staff has been appointed to support developments	01 (4.35)
Consultants are briefed by staff for updates and new developments	03 (13.04)

Note: Figures in parenthesis indicate percentage

Table 10. Problems for effective delivery of IL

Problems for effective delivery of IL programmes	Total
Lack of quality product(s)	04 (17.40)
User resistance	05 (21.74)
Staff time	16 (69.56)
Staff expertise	04 (17.40)

Note: Figures in parenthesis indicate percentage

Table 11. Resources required for IL training programmes

Resources required	Total
Additional staff to plan or conduct training	05 (62.50)
A separate training room, outside the library	05 (62.50)
Education for the staff in how to train (train the trainer)	04 (50.00)
Funding	01 (12.50)
Printed training manuals	02 (25.00)
Modern electronic gadgets	03 (37.50)

Note: Figures in parenthesis indicate percentage

is clear from previous discussion that majority of libraries are concentrating more on electronic information, three (37.50 per cent) respondents felt the need for modern electronic gadgets. Very few, two (25 per cent) respondents indicated the need of printed training manuals and only one (12.50 per cent) respondent revealed the lack of funds for IL training programmes. Additional staff, separate training room and education for library staff are the most important resources required by the respondents to plan, design and deliver IL training more effectively. The need for additional training skills is very important because the success of training largely rests on the expertise of the trainer to plan, design and deliver effective IL programmes that take into account learning styles, needs and appropriate methodologies.

5.2 Training Aids used for IL Programmes

Earlier interaction was referred to as face-to-face communication or lectures delivered in the classrooms. But the new technologies have changed the nature of interaction among people. The rapid development of computer and Internet technologies has dramatically increased the ways of teaching and learning. Tools such as e-mails, text-based two-way communications (e.g. discussion forums), webpages, audio and video clips, and voice-and-visual-based two-way communication (voice mail, instant messaging, video conferencing) have given new look to the way people interact and learn with each other. These technologies have also made their way in the library instruction programmes and have great potential in adding value to IL programmes. The emergence of technologies as training aids in libraries has given new direction to the IL programmes. Hence a question was asked in the questionnaire to know the techniques used in developing IL programmes

(Table 12). Large majority, 20 (86.95 per cent) of respondents revealed that interaction is the best technique in developing IL programmes. Ten (43.47 per cent) respondents use screen captures to replicate the real environment in their IL training products. Thirteen (56.52 per cent) respondents have used multimedia techniques into their IL programmes followed by seven (30.43 per cent) respondents who have incorporated video technique into their IL programmes. Very few, six (26.10 per cent) are using audio technique while developing information literacy programmes.

Educational techniques such as lectures demonstrations, face-to-face, point-of-contact, Intranet portals, seminars/workshops and online tutorials can be adapted for the range of traditional, electronic and virtual learning environments. In each environment, it is important to consider what array of approaches to instruction, such as formalised classes during the course time, voluntary attendance workshops, online assistance and one-on-one consultations, provide the most effective support for learners. Approaches for the development of effective library assignments, resources and tutorials in print and online deserves more concentrated research. It is observed from the survey (Table 13) that large majority 19 (82.61 per cent) of respondents have indicated face-to-face as the most favoured method of delivering IL instructions which is also evident from the fact that 20 (86.95 per cent) respondents are using interaction as major component while developing IL instruction programmes. Considerable majority 14 (60.87 per cent) of respondents are utilising the latest technology of Intranet portals for delivering IL programmes followed by 13 (56.52 per cent) respondents revealing just-in-time and lectures/demonstrations as other favoured alternatives for IL instruction. Ten (43.48 per cent) respondents have developed printed training manuals. In manuals it is important not only to list steps, every action must

Table 12. Techniques used in developing IL programmes

Techniques used	Total
Interaction as a major component	20 (86.95)
Screen capture	10 (43.47)
Audio	06 (26.10)
Video	07 (30.43)
Multimedia	13 (56.52)

Note: Figures in parenthesis indicate percentage

Table 13. Methods used for IL programmes

Methods used for IL programmes	Total
Just-in-time or point-of-contact	13 (56.52)
Face-to-face (One-to-one)	19 (82.61)
Printed training manuals	10 (43.48)
Intranet portal	14 (60.87)
Lectures/Demonstrations	13 (56.52)
Seminars/Workshops	05 (21.74)
Online tutorials	07 (30.43)

Note: Figures in parenthesis indicate percentage

be described in detail to make sure that a procedure can be executed correctly. Apart from this, it is important to describe what the results of any action should be, to enable the user to check whether he or she is still on the right course. Seven (30.43 per cent) respondents have also developed online tutorials for effective delivery of IL programmes. Very few, five (21.74 per cent) respondents are organising seminars/workshops apart from other methods of IL instruction. Librarians in higher learning will still have the opportunity to supply instructions that will take users to a general level of competence but much more of the instruction will become point-of-use or just-in-time as the users identify gaps in their knowledge and seek help either from context-sensitive help pages or from librarians.

There are many styles and techniques of learning. Each user has his/her preference. The best approach for an IL instructor to take is to address a variety of learning styles with their teaching plan. Some of the common learning styles are visual, audio and verbal. The verbal learning style involves both the written and spoken word. Using this style one can express easily both in writing and verbally. The visual learning style includes using images, pictures, colours and maps to organise information and communicate with others. Where as the audio learning style includes sound and music. Designing IL programmes that include these learning styles to make learning easy is a real challenge for the library staff. Almost, 20 (86.95 per cent) respondents revealed that they use verbal learning style for information literacy instruction (Table 14), which is also evident from the fact that 86.95 per cent of respondents use interaction as a major component while developing

IL programmes. Fourteen (60.87 per cent) favoured learning visual and 34.78 per cent favoured audio learning style, respectively. Integrating technology into teaching takes the integration of technology into the instructional programme one step further. Individual instructors must make decisions about which technologies can be used and how.

Internet has proved its potential in the education sector and the library instruction programmes are also designed using variety of services provided by Internet (Table 15). Internet is the electronic resource that is arguably now having the most significant impact on library services and operations and on the professional activities of library professionals. This strength of impact is due to its multi-faceted nature since it simultaneously fulfills three important roles in library services. First, it is a resource that can be consulted and used like any other reference tool. Second, it is more dynamic and far-reaching than any other resource used in library setting. Finally, it provides a medium of communication that has extended the potential of library professionals for interaction beyond the physical library (to users, colleagues and other professionals), beyond any previous capacity, and in a host of new ways. In order to know the use of Internet services while designing IL programmes, the survey reveals that large majority, 21 (91.30 per cent) of respondents indicated that Internet services are used while designing

Table 14. Modes used in IL programmes

Mode used in IL programmes	Total
Visual	14 (60.87)
Audio	08 (34.78)
Verbal	20 (86.95)

Note: Figures in parenthesis indicate percentage

Table 15. Use of Internet in designing IL programmes

Use of internet	Total
E-mail	18 (85.71)
Network instruction	10 (47.62)
Database searches	19 (90.48)
Online conferencing	03 (14.30)

Note: Figures in parenthesis indicate percentage

IL programmes. Majority, 19 (90.48 per cent) respondents use the Internet services for database searches followed by 18 (85.71 per cent) who use the Internet services for delivering IL programmes through e-mails. Ten (47.62 per cent) respondents use the Internet service for network instruction. Very negligible percentage (14.30 per cent) of respondents use Internet services for online conferencing. It is seen from the survey that considerable majority of respondents says that the access to Internet plays an important role while designing and delivering IL programmes.

Nine (47.37 per cent) respondents indicated that insufficient staff and training to the existing staff is the biggest barrier for encashing the potential of Internet services (Table 16) followed by low bandwidth for Internet access (36.84 per cent). Staff providing IL services need to develop and maintain knowledge of how people seek and process information and a skill in evaluating information resources. It is stated that there are many technical snags and lack of computer infrastructure are other prominent barriers to give increased access to the Internet.

5.3 Information Literacy Programme(s) Assessment

This section is designed to know the overall perception of information literacy concept among the selected sample (Table 17). It is designed in five-point scale format so as to get understanding level of information literacy concept among the respondents through some basic statements available in the literature. The analysis of this data is presented below:

- ✘ All (100 per cent) respondents agreed that to measure the effectiveness of the IL programmes relevant research, service reviews or assessments should be carried out.

Table 16. Access to Internet in designing IL programmes

Access to Internet	Total
Not enough computers for both computer application and Internet access	05 (26.31)
Computers are not located conveniently for Internet use	03 (15.79)
Internet access bandwidth too low	07 (36.84)
Too many technical difficulties with existing equipment	05 (26.31)
Insufficient staff development/training	09 (47.37)
Insufficient funds for Internet charges	02 (10.53)

Note: Figures in parenthesis indicate percentage

- ✘ 95.65 per cent respondents either agreed or strongly agreed that IL programmes should be evaluated to check use satisfaction.
- ✘ 91.30 per cent of respondents agreed that IL programmes helps in increased visits to the library by the users.
- ✘ 95.65 per cent of respondents agreed that IL programmes helps master complex resources and search skills within the areas of research interest with majority 52.17 per cent reporting they strongly agree with the statement.
- ✘ All (100 per cent) respondents agreed that IL programmes are necessary for effective utilisation of library materials with 52.17 per cent reporting they strongly agree with the statement.
- ✘ 95.65 per cent of respondents agreed that IL programmes help in increasing research output of the individual and the organisation as a whole with 61 per cent of respondents saying they agree with the statement.
- ✘ 91.30 per cent of respondents agreed that IL programmes helps in understanding economic, legal and social issues surrounding the use of information, and 8.70 per cent of respondents disagree with the statement.
- ✘ 78.26 per cent of respondents agreed to strongly agree that it is difficult to organise IL programmes to the senior users of the library who are highly learned in using knowledge for productive research. It is interesting note that 21.74 per cent of respondents disagree with the statement.
- ✘ All (100 per cent) respondents agreed that IL programmes should be evaluated from time to time in view of their relevance in the fast technological and subject developments.
- ✘ 95.65 per cent of respondents agreed that IL programmes are helpful today as much of the information is available in electronic formats.

To sum up, all the respondents have good understanding of the concept of IL and its importance in making user empowered in utilising the information for productive use in general and development of the organisation in particular.

6. CONCLUSION

IL is gaining momentum. It is found essential to make IL programme a regular activity in the higher learning and R&D institutions. Library professionals are slowly and steadily acquainting with the technological gadgets and showing interest in guiding the users in the information search and accessing the information through many means. It is advisable to collaborate

Table 17. IL programme(s)—Assessment

Statement	Strongly Disagree	Disagree	Agree	Strongly Agree	No opinion
To measure the effectiveness of the IL programmes, relevant research, service reviews or assessments should be carried out.	-	-	18	05	
IL programmes should be evaluated to check user satisfaction.	-	01	14	08	-
IL programmes helps in increased visits to the library by users.	01	-	15	06	01
IL programmes helps master complex resources and search skills within the areas of research interest.	01	-	10	12	-
IL programmes are necessary for effective utilisation of library materials.	-	-	11	12	-
IL programmes helps in increasing research output of the users and organisation.	-	01	14	08	-
IL programmes helps in understanding economic, legal and social issues surrounding the use of information.	-	02	14	07	-
It is difficult to organise IL programmes to the senior users of the library who are highly learned in using knowledge for productive research.	-	05	12	06	-
IL programmes should be evaluated from time to time in view of their relevance in the fast technological and subject developments.	-	-	15	08	-
IL programmes are helpful today, as much of the information is available in electronic format.	-	01	12	10	-

with other units and sections such as computer and administrative divisions including teaching.

The need of the hour is effective utilisation of information and communication technologies in planning, designing and delivering IL programmes. Instructions should be provided in locating, accessing, evaluating and effectively using electronic information available on the Internet. The copyright issues related to electronic information access and use should also form part of the IL programmes and accordingly interactive tutorials and expert lectures be organised. Library professionals can emerge as the leaders in motivating the users in the academic and research environment to become lifelong learners. This clearly demands that the professionals should master the critical demands and skills in imparting IL. The programmes can be successful ventures if they incorporate screen captures, audio, video and multimedia techniques and learning styles so as to make them more interesting and easy to learn and understand. Network technologies should be used to a maximum extent for effective delivery of IL programmes. To conclude, the mission of IL is never ending. To cope-up with the growth of

knowledge, users and information packages, there is always a need to master the technologies. Therefore, discussions, surveys and further intensive researches becomes inevitable to promote IL movement in any country. This is more required in a country like India to keep alive the democratic system by empowering the citizens with information. In this process the libraries and information centres become the active partners in the progress.

“Information literacy is an ongoing journey; it should not be considered a destination”

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