Journal of Library and Information Sciences
December 2022, Volume 10, Number 1, pp. 5-14
ISSN 2374-2372 (Print) 2374-2364 (Online)
Copyright © The Author(s). All Rights Reserved.
Published by American Research Institute for Policy Development
DOI: 10.15640/jlis.v10n1a2
URL: https://doi.org/10.15640/jlis.v10n1a2

An Outline of User Education in The Indian Academic Milieu: A Literature Review

H Nayana¹ & Dr. T. A. Mohan²

Abstract

A literature review allows us to get a complete view and evaluation of all accessible material on a specific subject. Because they allow single part of the research to be viewed in the context of others, literature reviews are often more valuable to all researchers than individual pieces of study. This article explains how and why reviews of literature are such an important tool for researchers. The benefits of conducting a literature review are also discussed. The review of literature of library materials, services, user education, and information seeking behaviour in the context of the ICT environment has been prioritised. Professionals in the fields of library, information science, and behavioural science will benefit from this literature review article. Academic libraries have seen substantial changes as a result of Information and communication technology is rapidly evolving the internet, in particular, and the growing emergence of user education methodologies and strategies, such as modern information literacy efforts, are two examples. As a result of these significant developments, Indian academic librarians should deal with instructional practices more effectively and efficiently. The fundamental goal of this study is towards comprehend the idea of "user education" in the framework of the local environment, as well as current practices in college libraries. Furthermore, the goal of this research is to better understand the issues, obstacles, and possible new opportunities for user education in Indian college libraries

Keywords: User education, library services, library facilities, information literacy, academic libraries.

INTRODUCTION

User Education Progresses Gradually In today's information culture, user education in academic libraries is far more complex than it is in libraries of various types. The user education literature is found in academic libraries, although different people have interpreted the notion differently. Yet, in the past, many types of user education existed, such as library instruction, library orientation, information skills courses, bibliographic instruction, course-related instruction and on-line instruction as well as a variety of teaching methods and media such as a audio-visual materials and library tour provide evidence that the aforementioned methods of user education have such a longstanding experience and also that information literacy originated from them. Though library instruction has evolved over the previous 150 years, only information literacy has been around for around 25 years, according to Seaman (2001). The vast majority of countries have not carried out historical and chronological investigations on user education.. This means that only a few developed countries have conducted such research. This is due to the fact that these countries have evolved in order to further the systematic progress of the subject of Information Science and Library Science as well as the advancement of the library career. Other nations classified as developing or underdeveloped have not engaged significant steps to document or examine the history of user education. Despite this, current information literacy instruction practices are more complicated than earlier methods of training. Although traditional approaches of instruction like bibliographic instruction, library orientation and library instruction are among examples. In librarians' everyday activities, true information literacy is a considerable broader theory that cannot be achieved instantaneously from a short session or workshop due to its multifaceted nature. It examines several aspects of higher education learning objectives. As a result, information literacy in higher education emphases on the growth of successful critical thinking, research activities, communication skills, library skills, technology abilities, and, ultimately, students' lifelong learning.

¹ Library and Information Centre, Vidyavardhaka College of Engineering,, Mysore, India, librarian@vvce.ac.in

² Library and Information Centre, Siddaganga Institute of Technology, Tumakuru, India, mohan@sit.ac.in

According to Breivik (1999), library and bibliographic instruction entails teaching facts to people directly, Information literacy, on the other hand, entails the development of students' self-learning, self-determining, and self-directed research capacities as well as life-long learning with the purpose of making a good contribution to society. It is a subject which students must study through hands-on experiences guided by lecturers and librarians.

The evolution of information literacy has been affected by the advances in information and communication technologies through traditional user education. Communication and information technology development has resulted in an extraordinary alteration of academic libraries and their activities. Because of these advances, most academic libraries nowadays are amalgam libraries. The rapid advancement of communication and information technologies has also altered the function of libraries in advanced education. It encouraged libraries to develop new accrediting requirements, underlined the need to examine and change courses, and encouraged the use of cohesive learning and learner-centered education. In fact, the advancement of communication and information technology having impacted every aspect of information literacy and has produced a more multifaceted user education environment. Furthermore, the huge rise of information and communication skill has modified and enlarged the instructional undertakings and performances of academic librarians. As a result, today's academic librarians must be skilled in pedagogy, curriculum, and the digital world, and communication and information technologies in order to construct an efficient and effective learning environment for information literacy in universities environment. Academic libraries, particularly college libraries, have been influenced by the new possibilities that have opened up in user education as a result of the foregoing advancements. As a result of the creation, growth, and spread of information literacy training efforts and communications technology, the traditional function of the academic librarian as instructor has also changed dramatically The relatively new developments in university education, innovative learning and teaching methodologies in academia, new studentcentered structures, and societal, political, financial, and managerial challenges have given academic librarians new duties and responsibilities. Furthermore, as a result of these great changes and rapid advances, academic librarians' skills enhancement activities have increased and changed considerably, affecting their instructional effectiveness directly. According to a few, the majority of librarians are gradually transitioning from traditional user education approaches to information literacy, while some are still using traditional approaches despite understanding the urgent need to instrument information mastery initiatives in their institutions. However, the lack of significant earlier publications, particularly research reports, makes this effort difficult and the reviewing process inconvenient. However, it is critical to examine the existing library instruction activities carried out by college librarians at Indian universities. This review will aid in identifying the expanding role and responsibilities of library professionals as educators.

The major goal of this study is to determine the extent and type of instruction delivered, as well as the problems, obstacles, and potential opportunities that may affect user education, and to assess in what way librarians should approach giving instruction. The article reviews various prior researches to provide an overview of awareness and training or library educational programmes at college libraries. This indicates that the study excludes all other sorts of libraries in the nation. This review is highly valuable for academic librarians to comprehend their existing position as trainers and reevaluate their role in library education, which would immediately allow them to enhance their instructing abilities, despite the limits imposed by this selection. Despite the fact that this evaluation is largely focused on academic libraries in India, it takes use of material both from established and emerging nations due to a lack of relevant literature in India. Online Media for User Education Libraries used multiple materials such as video tapes, audio cassettes, multimedia projectors, overhead projectors, pathfinders, subject guides, and more to give bibliographic instruction, library orientation, library teaching, and more a few decades ago, even before the creation of the internet. These resources were used in both head-on and self-directed learning situations. Most of these strategies were superseded by online library education as communication and information technology advanced and the internet was invented. Most of the time, online or web-based instruction is regarded as a remote learning approach in education and therefore is designed to be used at anytime, anywhere, and by anybody.

COMPONENTS OF USER EDUCATION

"User education" should ideally be a constant process in which the two aspects, orientation and instruction, are merged as needed to meet the user's demands. Orientation is predominantly concerned with techniques of familiarizing a user to the basic principles of library custom and available services, as well as the organisation, blueprint, and amenities of a specific library: Orientation is linked to both cognitive (i.e., comprehension) and emotional (i.e., feelings) goals (i.e., attitudes and feeling). It is critical to try to create the correct kind of environment for good communication between users and library personnel during orientation, as well as to show the library as a comfortable, friendly institution where aid may be acquired.

The user should remain assured that the library personnel is knowledgeable and always willing to assist him as a result of orientation. Instruction, the next aspect of user education, is focused with learning how to use the information resources accessible in a certain library. This element, sometimes known as bibliographic training, is concerned with information retrieval issues and approaches for getting the most out of information sources. Depending on the degree of the users, bibliographic training can be delivered in two stages: an introductory course and an advanced course.

On a practical level, 'user education' refers to the timing, timetabling, determining the size of the group, determining the best period for the course, and so on, and the environment of the course itself. In addition to the abundance of jargon, which not only reinforces the riddles of librarianship but also does little to generate a positive image of the librarian, the basic lack of assistance in libraries has been highlighted as a practical difficulty: It is not enough for the librarian to just encourage the student to use the library. His instructors must present him with opportunities to convince him that accessing the library is an important and enjoyable component of his education. To put it another way, in order to effectively address this challenge, the user awareness campaign must be incorporated with academic teaching programmes, requiring tighter collaboration between librarians and teaching professors. Appropriate constructivist approach can be included into user educational programmes as a result of such collaboration.

METHODS OF USER EDUCATION

In Sharing Resources and practical scenarios, there are four key aspects that influence learning. Motivation, activity, comprehension, and feedback are the four elements. These issues could also be explored in the context of a library user education programme. The learning/teaching scenario, the topic material, the students, and the teachers all influence the instructional methods and media used. No single strategy will be appropriate in all circumstances. However, teaching methods can be divided into three categories: those appropriate for group learning, those appropriate for individual instruction, and those appropriate for both.

The use of various approaches and medium for library user awareness and training is briefly explored in the following sections.

Lecture Method

The most popular mode of instruction is lectures. They are commonly used to instruct huge groups of students. Both aural and visual sensory inputs (through chalkboard or projector projector) are used in the lecture technique of instruction. The lecture as a mode of communication in teaching has been heavily criticised: a major shortcoming of this technique is that the recipient has no control over the speed with which information is delivered, and repetition is impossible without the use of printed handouts. Lectures, on the other hand, therefore provide opportunity for self-connection and some response from the students. The lecture style may be more beneficial to a more experienced audience than to beginners.

Tutorials, Seminars and Demonstrations

These are limited to small groups of consumers or students. Seminars, tutorials, and demos, as opposed to lectures, allow users to actively participate in the learning process through frequent interactions between both the teaching students and faculty. The environment at seminars is a little less rigid and more conducive to interaction between both the teachers and students. Practical activities can be used to motivate students and ensure that they are actively participating. Students receive comments on their progress during the practical sessions.

Demonstrations could be an effective approach to teach students to engage how to use various information retrieval technologies. They may be given the option of actively seeking for material on a topic of interest to the students or users.

Guided Tour

This is among the more typical methods for introducing newcomers to the library. When students have hardly any motivation to use the library, this form of introduction is frequently given. A self-paced published or auditory tour supported by appropriate exercises is a good system for short library orientation. This strategy puts library customers into the physical facility, where they do a number of practical tasks such as material retrieval, photocopying, catalogue searching, and other procedures. Many libraries have had success with self-guided tours.

Audio- Visual

In past few years, there's been a growing interest in use of the audio-visual media in the teaching learning activities in general, and in the education of library users in particular. They provide helpful knowledge in this area. It is claimed that moving visuals are only required in a few areas of library teaching. As a result, the data can be presented in a number of components, such as slides, overhead transparencies, or printed graphics. This implies that the tape/slide media, or the use of audiotape in conjunction with printed materials, would be appropriate for library user education. The benefits of tape/slide productions include flexibility, constant availability, presentation speed, and exposition clarity, in addition to being simple to update.

Instructional Programs

The designed training can be delivered using a variety of media, including printed books, automatic slide projection, or computer-assisted instruction (CAI). For library teaching, programmed instruction has numerous advantages. Students and users, for example they are able to work with their own speed. They can take an active participation in the learning experience and receive immediate feedback on their progress. A track of the student's development can also be obtained by the instructional staff. 'Of course, there is the downside of the student's solitude.

Informational graphics and signs

One of the most fundamental strategies for offering orientation on how to utilise the library is to employ informational images and sign systems. Signs must be properly developed in terms of position, content, and presentation if they are to be beneficial for user orientation. Well-designed signs are costly, but they are a smart investment because they will last a long time and assist in overcoming the library's physical barriers.

Online Instructions

With web-based user education, users will benefit from a considerable level of interaction and freedom. Web guides and teaching resources can be located all over the Internet since they are easily updated, searchable, and printed on demand. Electronic resources, virtual reference, and other resources that are accessible beyond the library are becoming more common in libraries, including ours. We should carefully explore establishing a web-based interactive program that can supplement and expand current offerings rather than completely replacing traditional methodologies. It needs to be customised to diverse learning styles and the new opportunities provided by the Internet, particularly Library 2.0. Web guides and teaching resources can be available all over the Web since they are easily updated, searchable, and printed on demand. Color illustrations and images may be used. The top ones collect librarian-selected Online connections, subscriptions, and library resources in well-organized pages. Expecting an one library or person to provide the best resource instructions for every resource is unreasonable. Link backs to other people's good work are becoming increasingly prevalent. A tiny number of libraries have created training and web tutorials courses. If done correctly, they can reach the level of multimedia authoring tools.

USER EDUCATION IN INDIA

To be visible and respected, libraries need a variety of things, including good service, competent, courteous, and professional staff, and up-to-date and necessary information resources, but we also need to express our knowledge and values. Our practical experiences show that user training is vital in creating the library/librarian-user relationship, communicating library information and/or expertise to users, and enhancing the library's image, and we believe that this is an impactful marketing technique. As you may have guessed, marketing plan can be used to analyse library user training. Users drive marketing and shape services, so we librarians must keep their needs and wishes in mind while developing training services and programmes that combine information literacy, virtual learning, and social technologies.

Information literacy and user education courses are critical, especially in today's climate, where library professionals' interventions in users' quest for data in the digital context are limited. Postgraduate students in India can already take a one-credit course at the libraries of Indian universities. Except at a few universities, where it would be offered as an elective, these courses are almost always required. The course covers library skills as well as technical writing expertise. This article emphasises the lack of consistency in course content; universities are state-run institutions, hence they follow their own curriculum. While some colleges place a greater emphasis on library abilities, others place a greater emphasis on research and report writing skills.

Academic institutions have always been the center of user education programmes, with the American activities focusing on undergrads and the British programmes focusing on post-grads and research students. User education programmes in less developed nations were needed to be targeted toward developmental processes. UNESCO intended to launch user educational programmes in the less developed nations under the UNISIST Program. In 1975, UNISIST issued its UNESCO Basic Information Programme (PGI).

The goals of the UNISIST Information Governance policy emphasise user education. In 1976, the Rome and Bangkok Seminars (UNISIST) recognised user education to be an important component of any country's national information policy. The Rome Seminar advised that a National Policy on User Education be developed as a component of national policy and in tandem with national education policy. The inception of user education was predominantly concentrated in English-speaking countries, namely the United Kingdom, the United States, Australia, and Canada. Later, user education programmes were designed and implemented in European countries, Japan, and China in Asia.

In India, there has been a lot of effort in the subject of user education development. Both INSDOC (now NISCAIR) in New Delhi as well as the DRTC in Bangalore, for example, held lectures and workshops to promote user education. In 1981, the IASLIC in Calcutta hosted national conference on user education in Waltair (Andhra Pradesh) and published a compilation of papers on the subject called 10 Info Use and User Studies. IARI (New Delhi) also made a special effort to organise a course on "library usage, reference collection, scientific paper writing, and proof correction." This course does not follow any established rules, such as the UNISIST guidelines. Except for certain irregular voluntary efforts, no regular effort has been undertaken to institutionalise user education in India.

Information literacy programmes are now in place in India, in the form of user education, bibliographic teaching, library instruction, library research, so on and so forth, at different libraries and information centres. Many proponents of information literacy in India have recommended integrating information literacy programmes into the academic curricula of India's educational systems, from elementary school through higher education, professional training, research degrees and vocational education. According to a report on India's information literacy programme, considerable measures have been conducted at the school level.

User education, library teaching, and bibliographic training programmes are offered at Indian higher education institutions. A course on research methods is included in university research degree programmes, along with library research techniques. Some research institutions and universities have individual or consortium subscriptions to electronic resources. Users are trained in the use of electronic resources by the multiple suppliers of those resources. Universities often hold periodic orientation programmes for their academics on how to use electronic resources. Information literacy is a necessary skill for researchers and experts in business organisations and corporate R&D centres. Researchers and experts are trained about the most up-to-date discipline-specific information resources available both within and outside of companies (Gosh & Das, 2006). Agricultural Universities and Colleges libraries are ahead of the curve with their user education programmes that educate students IL skills. Lands granting schools of American universities of Agricultural sciences were the forerunners of user education in Indian agricultural universities.

In addition, the Indian government has taken a number of steps to promote IL, including the establishment of the National Knowledge Commission (NKC). The goal is to turn India together into Knowledge - based society in the twenty-first century. The importance of public and academic libraries in the information dissemination and knowledge has been recognised by the government. The government and other groups have taken certain information literacy programmes like

Rastriya computer literacy drive

This programme enables individuals and businesses across the country to achieve higher goal of providing knowledge, skills, solutions, and assistance through pioneering efforts and the application of appropriate technology at a low cost. The fees collected will benefit both the economically backward and organised sectors of the urban and rural areas.

National Knowledge Network (NKN)

The NICNET was upgraded at 15 locations in December 2008 to support gigabit speeds. Chandigarh, Delhi, gandhinagar, Jaipur, Mumbai, Bhuwaneshwar, Guwahati, Chennai, Bangalore, Lucknow and Tiruvananthapuram are among the destinations. The basic infrastructure required to connect 40 universities to the NKN has been finished.

National Digital Library (Indian government initiative)

The library landscape is rapidly changing as a result of advances in digital technology and web connectivity. In the Digital Library, data that is now in physical reality can be kept digitally. Digital libraries are used in this concept to improve accessibility. They also cross time and space barriers. The National Digital Library of India Club (NDLI Club) helps students, job seekers, researchers, and learners advance in their careers.

NDLI Clubs are established in institutions and nodal agencies, and these Clubs hold activities to help students gain knowledge, skills, and traits that are necessary for their professional advancement beyond the standard curriculum. Physical or virtual events are possible. Virtual events are done via the NDLI Club site and are web-based. The events are held at the institute level, as well as at the city/district/state/regional and all-India levels. Through it's own National Program on Education via Information and Communication Skill, the Ministry of Education (MOE) of the Government of India has launched NDLI and NDLI Club (NMEICT). These are nationwide mission projects that are part of the country's Digital India Mission. NDLI offers information for all academic levels, including lifelong learners, across all disciplines, and in the majority of commonly spoken Indian languages, allowing learners to know and prepare using best practises from around the world.

LITERATURE REVIEW

The examination and exploration of scholarly information such as books, papers, journals, and analysis reports on a specific topic is known as a review of literature. It is a detailed review of previous research on a particular issue that provides basic knowledge of past and present research. A review of the literature is a secondary source that highlights the approaches, methods, and terms used in prior literature. S. K. Patil and Pranita Pradhan(2013)study the promotion activities and publicizing of library services. Main goal of library promotion is to increase customer happiness, make sure the existence of their particular organizations, and increase the apparent value of their facilities. Libraries can encourage the use of amenities and products, but they cannot have revenue from it since they are a social organization. According to Sweta Sharma, Deepmala and Ashok Kumar Upadhyay(2021) India has become an information technology powerhouse, and information literacy is essential for individuals to become empowered. E-government projects, for example, play a significant part in information literacy, as well as social, economic, and cultural value. The study would also assist libraries in understanding the relevance of information literacy, as well as ensuring that the country does not lose any vital academic or other important knowledge.

According to Aditi Das (2021) findings, research support systems are now an integral feature of any academic library where active research programmes take place. Research and application of the most likely solution in various scenarios led to the development of new strategies for assisting researchers in their work. Because our primary goal is to analyze the research support and services supplied by libraries, we rely on the researcher's information needs in any organisation. Before beginning any assistance program within a library, it is critical to understand the researcher's concerns. Information literacy programmes help students enhance their search and retrieval skills. The researchers prioritised current awareness, reference, and reprographic services in order of choice. The only conclusion is that working without the comfort and expansibility that libraries provide is now inconceivable for the researcher community.

Patel Adam Burhansab, Dr. M.Sadik Batcha and Dr. M.Sadik Batcha (2020) investigates the awareness and usage of electronic resources in Solapur University. The survey found that library patrons are well familiar with and use e-resources. E-resources are an important aspect of discovering trustworthy, timely, and relevant information since library users rely heavily on them to search, retrieve, and communicate research. Their research output had also improved as a result of their usage of electronic resources. E-databases, e-research reports, and ejournals were the most commonly accessed electronic resources. Finally, to keep up with new information communication technology, computer knowledge and data gathering abilities must be updated on a regular basis. Dr Indira B (2020) explains that it can be deduced that e resource awareness and management do not follow a uniform pattern. As a result, libraries should focus more on these two areas. The majority of studies are concentrated on university libraries, possibly because universities have access to e-resources consortiums and a diverse user base, including students, faculty, and research scientists. More research focusing on particular subject areas is needed. For the time being, studies focusing on the installation of electronics resource management in libraries and the types of ERMS suitable for certain types of libraries are critical.

Sumaira Jan and Shabir Ahmad Ganiae (2019) study the tendencies in collection & collection expansion practices in university libraries through a precise reference to India and other developing nations. The literature clearly shows that academic libraries are working to adapt to changes in order to serve the user base of their parent organization professionally, thereby meeting their information demands in every way possible. In this regard, it is clear that the widely held academia libraries, particularly in developing nation state such as India, continue to use old-style collection development strategies. Regardless of the fact that certain studies contradict these results by validating the practices monitored by university libraries, demonstrating that academic libraries are gradually implementing reforms in order to better meet the ever-changing data requirements of the user community.

Ms Poonam Virmani (2017) has attempted to examine the literature on Information Literacy Program available in books, journals, proceedings, and the internet with a set of objectives in mind, namely to know the status of application and trends considered in research in Information Literacy Program, as well as to discover the impact of Information Digital Technology (ICT) in making plans, designing, and implementing the Information Literacy Program.

Chalukya B.V. (2015) analyse user education in college libraries. The focus of the discussion is on the design, organisation, and execution of these programmes, as well as the necessity for user education in college libraries and information technology, including web-based user education. User training is vital in creating the library/librarian-user relationship, communicating library information and/or knowledge to users, and strengthening the library's image, which we believe is an effective marketing strategy. As you may have guessed, marketing plan can be used to analyse library user training. The mix continues to give a useful foundation for considering how to execute and build a marketing concept for a user training service. The underlying marketing idea is that library patrons know what is best for them. The customer is the one who leads promotional strategies and shapes the service, thus librarians must keep users' requirements and wants in mind when designing training programmes.

According to M. Saravan and S. Mohammed Esmail (2014) Finding efficient ways to manage increasingly massive volumes of electronic resources has turn out to be a crucial challenge for libraries. Maximum libraries now have a huge number of digital journals, citations databases, and full-text accumulations. Managing these electronic resources entails giving library patrons' easy ways to discover and utilise them, along with giving library staffs options to retain check of them. NPTEL is now an Indian portal devoted to and providing technical econtent to address the issue of rising e-resource demand on one hand and a shortage of trained professors on the other. The influence of NPTEL on students and teachers in engineering colleges in the Thiruvallur area of Tamil Nadu is investigated in this research. It focuses on the differences in user perceptions and preferences when they use NPTEL. The majority of respondents said they used NPTEL for teaching and learning purposes. NPTEL is very valuable for teaching and research, according to the majority of responders.

Jayadev Kadli (2013) proposes that literature reviews remain significant since they aim to review the available literature on a particular issue. They establish a line of literature and give critical exploration of the various collected works such that the researcher may not have to go through every separate study report in the review. This remains significant as there is an expanding volume of literature on library materials, services, knowledge seeking behaviour, and the impact of the ICT environment available to any researcher. However, librarians cannot be asked to read and absorb all of the knowledge on any given topic. Anyone who ever serves has a professional responsibility to stay current on new advances and ideas.

B. U. Kannappanavar and H.M. Chidananda Swamy (2012) researches User Instruction in Agricultural Science Universities Libraries in India, with a focus on South India. The agriculture university libraries is able to achieve its goals and objectives in terms of refined learning and research through spreading library amenities to the user community. Outspreading active library facilities to the user community by university libraries is a critical component of quality delivery in university library facilities. The university library's primary duty is to gather and preserve information before making part of it available to consumers. Users require some user education in order to make efficient use of existing resources and services. It is quite difficult to reach our users to their full potential unless we educate them, so we must run user deputation programmes on a regular basis. In terms of the current study, customers are pleased with the user education programmes offered by their individual agricultural university libraries. Despite this, university library authorities must take the appropriate efforts to strengthen user education programmes so that users are more satisfied with their ability to obtain the information they seek in their particular libraries.

Prof. C. Sasikala and Prof. C. Sasikala (2011) assess Andhra University Science Students' Information Literacy Skills. In today's electronic environment, the need of disseminating information literacy programs that improve information literacy abilities among pupils cannot be overstated. The majority of students have acknowledged and accepted this. The majority of participants recommended integrating IL instruction into normal courses among the various approaches of giving IL instruction. A significant percentage of them also believed that printed materials onsite and through college website may help enhance IL skills. Students mentioned a variety of areas and topics for which they require guidance, instruction, and help, including Internet training, computer training, traditional and digital sources, and databases. Seema Lalotra and Sangita Gupta (2010) explain selected agricultural colleges in Northern India on information expectations and needs in the digital era. Users' information needs are continually changing due to rapid technological improvements.

In this digital age, they prefer all print and computer information offerings. The method data is stored and accessible has changed dramatically because to the digital world. User studies must be conducted on a regular basis to determine the users' information demands. To meet the demands of a technology-driven culture and to provide good service to clients, library personnel need intensive training and suitable system support to learn new skills such as analysing, evaluating, and disseminating material to users based on their needs.

Intekhab Alam and Amjad Ali (2009) research is based on a survey of eleven college libraries on the Azam Campus in Pune, which looked into how students used knowledge resources, their satisfaction with them, and the help they received. The study was done using a questionnaire-based survey that was complemented by observations and unstructured interviews with the sample, which was determined using an online calculator. The questions was based on a variety of forms of knowledge resources and services, as well as an evaluation of Internet-based services, including their purpose, difficulties, user satisfaction, and assistance in using the Internet/OPAL, and staff satisfaction with the facilities and library collection. The majority of users seem satisfied with the service quality and facilities, along with an overall evaluation of the resource base and their utilisation.

Vinita Jain (2006) discuss LIS professionals as teachers and trainers for long term learning and user education. Continuous improvement and knowledge sharing are prerequisites for nations' socioeconomic progress and individual self-actualization. They need considerable training for the new emerging technology, goods, and services in order to deliver great service. Library professionals must manage library resources in accordance with the needs of their patrons. Changing information technology also supplied the library with a variety of strategies. Professional librarians must have good planning and forecasting skills. The capacity to make the individuals he leads behave freely in the manner ordered by him is more vital than the power to command. That goal includes providing opportunities for professional growth for library staff and trustees, as well as promoting ongoing, lifelong learning for all persons. To stay up with the speed of change, librarians must constantly enhance their knowledge.

M. Christina Vasanthi (2005) emphasis on end –user training and design strategies for Indian Libraries. The expanding world of print-based publishing and digital documents, as well as the shrinking universe of library finances, can be safely handled by implementing certain tactics, such as improving critical thinking abilities and encouraging information literacy in general. Users must expect monitoring programmes that give access to high-quality information in the near future. This material must be accurate, timely, thorough, and interesting. This can be accomplished by adding end-user training and education components, as well as providing continuous professional training and educational for library and information specialists and end-users.

INVESTIGATIVE SUMMARY

A study of user education procedures at engineering colleges in Karnataka is intended as the goal of this literature review. In all types of institutions, the learning process has taken on new dimensions as a result of the enormous increase in publication volume, the way that literature is organised and distributed, and swift changes in teaching techniques that have led to a wider use of multimedia. This has led to user education, to instruct consumers on how to conduct independent, effective, and efficient information searches. This has forced the Scholar to conduct research in order to develop an efficient manner of utilising library resources.

The following is what the additional research is intended to look into:

- To examine the infrastructure resources offered by Karnataka's engineering colleges.
- To research how Karnataka's engineering colleges use their resources and services.
- To determine the needs of the users in the mentioned engineering colleges.
- Determine and suggest ways to make the most of the information resources at these engineering colleges.
- To solve the issue of under-utilised resources to their full potential.

CONCLUSION

Major limits, competences, flaws, challenges, and strong point of current user education inventiveness in academic libraries in India were found in this literature review. This assessment can be used as a resource by university administrators, librarians, and policymakers as they transition from customary user education to information literateness programmes or design innovative information literacy programmes in academia libraries. Furthermore, as per this study points out, aforementioned specialists might take the necessary steps for reevaluate the services organisation arrangement by focusing on library training and information literacy. Furthermore, academic libraries administrations should initiate standard evaluation mechanisms for user education programmes while boosting library training / ict skills as a basic library service in their own organisations to break down barriers linked with improvement of user training approaches in the higher education sector.

Additionally, all partners in higher education must work together to plan, design, and implement user education procedures, which will ensure an impact on effective teaching programmes. Collaboration between teachers and librarians, in particular, is critical in putting such theories into reality. To improve academic librarians' instructional performance, finances, announcement time, preparation, and professional improvement programmes are required. The other most essential aspects that have an consequence on the success of library training programmes include encouraging and inspiring college librarians to engage in more pedagogical improvement programs and recognising academic librarians' instruction for annual assessments and promotion assessments. Positive approaches, comprehensive understanding, and vigorous participation of instructors, organizational staff, and librarians in information learning, as well as the introduction of mandatory/optional information learning options for students' learning, are all vital factors in refining user instruction in academic libraries in India.

References

- Ahmad, M. (2020). Investigating Awareness and usage of Electronic Resources by the Library Users of Selected Colleges of Solapur University. Library Philosophy and Practice (E-Journal). https://www.academia.edu/44948034/Investigating_Awareness_and_usage_of_Electronic_Resources_by_the_Library_Users
- Alam, I., & Ali, A. (n.d.). Use of Knowledge Resources in the Azam Campus (Pune): A Study. Retrieved May 23, 2022, from http://lis.uok.edu.in/Files/9ebfb2f2-5003-47a4-9dfe-d3cdcc6a2020/Journal/83ebb172-5d08-4152-b728-b06ea9def549.pdf
- B, D. Indira. (2020). Research On E- Resources: A Literature Analysis. Library Philosophy and Practice (E-Journal). https://digitalcommons.unl.edu/libphilprac/4547/
- Chalukya, B. (2015). Academic Libraries And User Education. 10.13140/RG.2.1.3134.0646.
- Chopra, H. (2001). Code Number: 103-126-E Division Number: VII Professional Group: User Education Joint Meeting with: Meeting Number: 126 Simultaneous Interpretation: No User education: training the librarians to use new technologies in the developing countries. https://archive.ifla.org/IV/ifla67/papers/103-126e.pdf
- Das, A., & Banerjee, S. (2021). Optimising Research Support Services Through Libraries: A Review Of Practices. Library Philosophy and Practice (E-Journal). https://digitalcommons.unl.edu/libphilprac/5515/
- Das, S. S. (2022). Behavioral Pattern Of Information Seeking Users Of National Library, Kolkata. Library Philosophy and Practice, 1–11. https://pesquisa.bvsalud.org/global-literature-on-novel-coronavirus-2019-ncov/resource/pt/covidwho-1651857
- Ghosh, S., & Sevukan, R. (2006). Lifelong Learning for LIS Teachers and Educators through Open and Distance Learning: A Case Study of India Meeting: 107 Off-site: Education and Training. https://originarchive.ifla.org/IV/ifla72/papers/107-Ghosh_Sevukan-en.pdf
- Jan, S., & Ganiae, S. (2019). Trends in Collection & Collection Development Practices in University libraries with a particular reference to India and other developing countries: A review of literature. Library Philosophy and Practice (E-Journal). https://digitalcommons.unl.edu/libphilprac/2510/
- Jotwani, D. (2013). Library resources and services in Indian Institutes of Technology. ALIS Vol.60(3) [September 2013]. http://nopr.niscair.res.in/handle/123456789/22894
- Kabiraj, N., & Bilas, S. (2013). User Study of College Libraries under University of North Bengal, West Bengal International Research: Journal of Library & Information Science, 3(2), 340.
- Kadli, J. H., & Kumbar, P. C. B. D. (2013). Library Resources, Services And Information Seeking Behaviour In Changing Ict Environment: A Literature Review. Undefined. https://www.semanticscholar.org/paper/LIBRARY-RESOURCES%2C-SERVICES-AND-INFORMATION-SEEKING-Kadli-Kumbar/64a9bb76eb87629119573eab8b03486d89c296a3
- Kannappanavar, B., & Swamy, H. M. C. (2012). User Education in Agricultural Science University Libraries in India with Special reference to South India. Library Philosophy and Practice (E-Journal). https://digitalcommons.unl.edu/libphilprac/720/
- Kumar, S., Scholar, R., & Kumar, J. (n.d.). Awareness and Information Seeking Behavior of Undergraduate Students of University in Digital environment-A Systematic Review. Retrieved May 23, 2022, from https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=10326&context=libphilprac
- Nithyanandam, K., Kanniyappan, E., Arul, M., & Rajasekar, D. (2006). USER EDUCATION PROGRAMMES AND ACADEMIC LIBRARIES. In 4 th International Convention CALIBER. http://ir.inflibnet.ac.in:8080/ir/bitstream/1944/1331/1/50.pdf

- Patil, S. K., & Pradhan, P. (2014). Library Promotion Practices and Marketing of Library Services: A Role of Library Professionals. Procedia Social and Behavioral Sciences, 133, 249–254. https://doi.org/10.1016/j.sbspro.2014.04.191.
- Ram, S., & Paliwal, N. (2013). Design and Development of Multimedia Based User Education Program: The Advantages of YouTube. Repository.arizona.edu. https://repository.arizona.edu/handle/10150/283594
- Relationship of OPAC users' satisfaction with ProQuest. (n.d.). Www.proquest.com. Retrieved May 23, 2022, from
 - https://www.proquest.com/docview/1493260767?parentSessionId=iQ%2B2b7GGvZtkgi%2BxjcWQtxfYnDSrJQWHJMVjYMFsN3Q%3D
- Saravan, M., & Esmail, S. (2014). Availability and Impact of NPTEL in Selected Engineering Colleges Around Thiruvallur District Tamil Nadu: A Case Study. 1(1). https://archive.nptel.ac.in/content/media_images/NPTEL%20in%20Selected%20Engineering.pdf
- Sasikala, C., & Dhanraju, V. (2010). Assessment of Information Literacy skills among the Science students of Andhra University: A survey. Library Philosophy and Practice (E-Journal). https://digitalcommons.unl.edu/libphilprac/518/
- Sharma, S., Deepmala, & Upadhyay, A. K. (2021). Information Literacy: An Overview. Elementary Education Online, 20(1), 4227–4227. https://doi.org/10.17051/ilkonline.2021.01.465
- Singh, N. (2014). Educating for Information Literacy: Assessing Indian Agricultural Sciences graduate's knowledge and Information skills. Library Philosophy and Practice (E-Journal). https://digitalcommons.unl.edu/libphilprac/1102/
- Singh, N., & Librarian, A. (2002). LIS User Education Courses In Agriculture Universities: An Into Objectives And Reality. Annals of Library and Information Studies, 49, 37–44. http://nopr.niscair.res.in/bitstream/123456789/7471/1/ALIS%2049%282%29%2037-44.pdf
- Susan Mathew, K. (2012, June 25). Issues and Challenges. Dyuthi.cusat.ac.in. http://events.cusat.ac.in/xmlui/handle/purl/3987
- Vasanthi, M. (2005). The Changing Environment of Academic Libraries: End-User Education and Planning Strategies for Libraries in India. https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1055&context=libphilprac