Original Article
ISSN (Online): 2582-7472

ShodhKosh: Journal of Visual and Performing Arts
January-June 2024 5(1), 157–164

CHALLENGES AND OPPORTUNITIES IN LIBRARY AND INFORMATION SCIENCE EDUCATION IN WEST BENGAL

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DOI
10.29121/shodhkosh.v5.i1.2024.3341

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ABSTRACT

The information society's demands, the state of technology, and the changing information environment have all contributed to profound shifts in the way library and information science (LIS) programs in West Bengal are structured and taught. Many issues arise in library and information science (LIS) education as a result of the dynamic character of the field and the many cultural, social, and economic settings in which LIS programs operate. Focusing on LIS students and faculty in West Bengal, this research analyses the state of LIS education there and the possibilities and threats it faces. Using purposive sampling to guarantee a varied sample, 225 participants, including LIS students and professionals, were polled. t-test was applied. In order to strengthen library and information science education in the region, the results highlight the necessity of updating curricula, investing more in faculty development, and fostering better partnerships with business.

Keywords: Library and Information Science Education, Challenges, Knowledge Management, Information Ecosystem , Digital Library

1. INTRODUCTION

Libraries and Information centers all over the globe owe a great debt to the field of library and information science (LIS) education. Library and information science (LIS) is an interdisciplinary discipline that aims to comprehend the creation, organization, and access to information by combining aspects of library administration with information technology, communication, and knowledge management. Training students to effectively manage information resources, provide services, and make good use of technology that facilitate the flow of information in a variety of contexts is the bedrock of library and information science (LIS) education.

Although libraries have been there since the beginning of time, the field of Library and Information Science as an academic subject did not fully materialize until the latter half of the nineteenth and early twentieth century. The need for formally training persons entrusted with maintaining the rising collections and allowing the effective transmission of knowledge was motivated by the creation of modern libraries and the explosion of information during the Industrial Revolution. Technological developments, like the printing press that expanded access to books and other printed materials and the subsequent rise of information & communication technology like computers and the internet, also had a role in propelling this growth. As time has progressed, LIS has expanded to include not just physical collections but also information resources accessible through the internet, multimedia, and digital formats.

Students can now get a well-rounded education in information science and management through LIS programs at the Undergraduate, Post-Graduate, and Doctorate levels. Knowledge management, information policy, reference services, cataloging, and library operations are some of the advanced topics that are covered in graduate-level library and information science programs. Also, information retrieval systems, cataloging, classification, and the integration of information technologies are taught in graduate-level LIS programs. Students those who have completed Master degree in Library & Information Science and have interest in research work, pursue PhD in Library & Information Science based on their preferred area.

Learning the fundamentals of information management and organization is a central focus of library and information science curricula. The Dewey decimal system and the Library of Congress categorization are two examples of the standards that students learn to use to organize and label materials so that they may be more efficiently retrieved and accessed. To make sure that information resources are well-described and searchable, cataloging and metadata management are also important fields of research. Librarians with expertise in handling complicated digital and multimedia materials are in high demand, as libraries transition from print-centric to technology-driven, multimedia-rich models.

The preparation of information retrieval and access specialists to meet the increasing demands of the digital era is another important component of library and information science curricula. Skills in digital information management are heavily emphasised in LIS curricula due to the growing importance of the internet in information delivery. Students gain knowledge of information retrieval systems, electronic databases, and digital libraries that facilitate the discovery of information from many sources and formats. To prepare students for careers in today's information settings, LIS programs include coursework in web technologies, database administration, and cloud computing.

2. CHALLENGES AND OPPORTUNITIES IN LIBRARY AND INFORMATION SCIENCE EDUCATION

Education in the field of library and information science (LIS) is vital in producing individuals who will oversee the organization, management, and dissemination of information and knowledge. While there are many chances to adapt LIS curricula to the information age's changing needs, there are also many obstacles

1) Challenges in Library and Information Science Education

- Outdated Curriculum and Content

The fact that many schools continue to use antiquated curricula is a major problem for library and information science programs. Information management, digital libraries, and new technologies like artificial intelligence (AI) and machine learning are evolving at a faster rate than the traditional library and information science (LIS) curriculum, which is based on print media and manual cataloging. Consequently, modern concerns like data science, information retrieval, and big data management may not be appropriately addressed by students. To fill these gaps and equip students to thrive in today's information-based workplaces, it is crucial to overhaul the curriculum.

2) Lack of Infrastructure and Technological Resources

When it comes to technology and digital resources, many library and information science schools lack the necessary infrastructure. The learning experience can be greatly hindered by outdated library management systems, inaccessibility to crucial digital tools, and limited exposure to new library automation technologies. Graduates who have not had practical experience with modern technology are unprepared to administer digital libraries, deliver services in a digital setting, or satisfy the increasing need for workers with expertise in information technology.

3) Inadequate Faculty Training and Professional Development

In every field, the quality of instruction is directly correlated to the caliber of the faculty. When it comes to professional development and keeping up with the newest trends in the area, however, many LIS instructors have difficulties. Data analytics, digital preservation, and knowledge management systems are rapidly becoming essential components of contemporary library operations, yet many instructors lack adequate training in these areas. Students aren't getting the most out of their education when it comes to modern methods and resources that may help them get jobs after they graduate because of this knowledge gap among teachers.

4) Low Student Enrollment and Awareness

Many libraries and information science (LIS) programs have trouble filling their classes, even though the need for their services is on the rise. A lack of understanding of the breadth and depth of library and information science jobs is

largely to blame. Libraries, archives, information centers, and data management/IT-related businesses provide a wide variety of professional paths that many would-be students don't know about. Further discouraging students from pursuing LIS as a career option is the notion of it as a specialist or conventional area.

5) Limited Research Opportunities

Underfunding of LIS research frequently impedes the creation of novel approaches to the problems plaguing information management today. Especially at the master's and doctorate levels, many library and information science programs fail to give students enough chances to conduct research. Consequently, there isn't enough scholarly work in the area to serve as a road map for the future of the profession and the creation of innovative tools and approaches.

2.1. OPPORTUNITIES IN LIBRARY AND INFORMATION SCIENCE EDUCATION

Integration of Digital and Online Learning

Digital technologies and online learning platforms present a huge opportunity for library and information science education. A chance to provide adaptable, globally accessible LIS courses and credentials is opening up as e-learning technology develop. For students in rural locations or working professionals who wish to further their careers without leaving their employment, this can help make LIS education more accessible. On top of that, students may augment their conventional education with digital resources like virtual laboratories, webinars, and MOOCs (Massive Open Online Courses) to stay up-to-date on industry news and trends.

Curriculum Modernization and Industry Relevance

The updating of library and information science programs to include state-of-the-art subjects like data analytics, digital preservation, knowledge management, and cloud computing presents yet another chance for advancement. To better prepare their students for the difficulties posed by the ever-changing information ecosystem, LIS instructors should work to link academic programs with industry demands. The abilities that students need to succeed in today's information settings can be better taught if schools work together with businesses like digital libraries, data analytics organizations, and software corporations to inform curriculum modifications.

1) Industry Partnerships and Internships

Librarianship and information science students may greatly benefit from internships, mentorship programs, and joint research projects if libraries, corporations, and IT companies work together to strengthen their relationships. Students can gain a better grasp of industry norms and procedures and apply their academic knowledge to real-world circumstances through partnerships with information-centric firms. As students learn about real-world workplaces and hone abilities that employers value, these opportunities can boost their employability.

2) Government Support and Grants

To overcome many of the obstacles encountered by LIS education, government involvement and financing might be crucial. Library and information science (LIS) programs can benefit from financial backing in the form of grants for research, infrastructure, and faculty training. Furthermore, LIS programs might become increasingly relevant as a result of government initiatives that promote digital literacy and increase access to information resources, which in turn increases the need for qualified information workers.

3) Promoting Continuing Education and Lifelong Learning

There is a rising need for continuing education programs for working professionals in the LIS industry due to the rapid rate of technological progress. Professionals may keep up with the current developments by offering certifications, short courses, and seminars on emerging technologies such as data governance, artificial intelligence, and machine learning. Alternatively, these programs might be delivered online, giving working professionals the option to improve their abilities without having to commit to a full-time academic degree.

4) Globalization of LIS Education

The chance to include global curricula, research, and industry trends into LIS courses is growing as the globe grows more linked. As a result of LIS programs being worldwide, students may now participate in international conferences, work with classmates from all over the world, and have access to information

from all over the world. This has the potential to increase the variety of job options available to LIS graduates worldwide and foster creativity in finding answers to information management challenges.

3. REVIEW OF LITERATURE

Singh, Avinash & Singh, Varsha. (2022) In order for society to progress, higher education is crucial. In doing so, it affords them equal opportunity to grow and bring about the improvements they seek in their lives. Library and information science education in India has developed from a foundational course to a doctoral level program. India is home to a number of prestigious educational institutions that provide library and information science degrees. The current and historical state of library and information science education in India is the focus of this research. It delves into the many Library and Information Science course formats and levels provided by India's many educational institutions. The results showed expansion on a global and Indian scale. Nearly ninety-five educational institutions in India currently provide Library and Information Science degrees. The state of Tamil Nadu is the best in India when it comes to library and information science education, thanks to its twelve schools. There are a total of 10 educational institutes in Uttar Pradesh, seven in Rajasthan, nine in Karnataka, and nine in Maharashtra.

Trishanjit Kaur (2015) Library and information science (LIS) programs in India face a number of obstacles, some of which are discussed in this article. The article starts with a quick review of higher education in India generally before diving into the origins of LIS education to set the scene for these difficulties. For more background, it gives a short overview of library and information science programs in South Asia. Curriculum, accreditation, online learning, and library and information science research are some of the important topics covered in this article. The study continues by discussing the difficulties encountered by library and information science teachers in India. At the conclusion, it offers some ideas on how to tackle these difficulties, such as putting the National Knowledge Commission's recommendations into action. Also covered is the requirement of a Model Curriculum for LIS in meeting both user demands and the skill levels of library workers.

Lihitkar, Shalini. (2013) The current research set out to better understand online education and the types of online courses offered on a global and national scale. In this paper, we will try to address such points. In this investigation, we used a survey approach. This study looked at 23 different universities that offer 89 different LIS courses online. Results - A total of 23 educational institutions are now offering LISc degree, certificate, and bachelor's degree programs through online learning platforms. The majority of educational institutions use Moodle to conduct LIS education through short-term online courses. When it comes to sharing and receiving information, all 23 of these schools are utilizing Web 2.0 tools. Constraints and consequences of the study - Students and teachers in the field of library and information science can use this research as a foundation for creating an e-learning strategy in their classrooms. Students will get an idea of the kinds of online courses offered by different schools and how they compare in terms of technology, course materials, and other resources. After reading this article, schools who have not yet implemented an e-learning program will have a better grasp of how LIS online courses work. This is the first study of its kind.

Halder, Sambhu. (2012) Using the open and distance learning context as an example, this article describes the contemporary state of LIS education in India. Given that LIS education in India is celebrating its centennial this year, a review of the current system is warranted. Use the SWOT (Strengths, Weaknesses, Opportunities, and Threats) framework to assess the pros and cons of remote Indigenous library and information science education. The practices and views at the national level inform the analysis. Modern open and distance learning centers in India can benefit from the few strategies that emerge from SWOT analysis. This inquiry shows out that the curriculum of LIS education in India surely needs to be centered on the conventional library practices as well as new trends for library functioning and services by adopting the information and communication technology application. Without regard to the formal or informal manner of education, it is extremely vital to ensure uniformity and quality in LIS education. At the end of the day, everyone involved has to know that the LIS profession is adapting to meet the problems of the modern day. Taken as a whole, this paper covers the pros, cons, opportunities, and risks of distant learning library and information science (LIS) programs for both students and institutions.

Panigrahi, Pijushkanti. (2010) Due to information explosion library and information centers have vital function to perform in the information society. This scenario can only be handled by personnel who have received proper training. Library professionals need to be systematically educated in order to meet the demand for workforce development. This article examines library and information science programmes in eight northeastern Indian states as well as Orissa and

West Bengal. This area's history of library and information science (LIS) programs can be traced back to West Bengal and its subsequent bordering states. This lovely past is brought up here. The paper notes that many colleges offered undergraduate courses, but that many of them have since ceased operations for various reasons; however, a small number of these programs continue. At present, there are numerous levels of courses, viz., CLIS, BLIS, MLIS, MLIS in DL, PGDLAN, MPhil, PhD, DLit, etc. of varying durations. Courses in this area must be standardized. Questionnaires, interviews, and the websites of the relevant institutions were used to gather data pertaining to entrance requirements, course content, and delivery methods of course materials. Anyone can see where LIS programs are at in this region right now from the numbers.

4. RESEARCH METHODOLOGY

Survey Design

In order to get a better picture of LIS education as a whole, the survey was designed to gather quantitative data.

Participants

In all, 225 people, including both students and working LIS professionals, filled out the survey. In order to ensure that the participants are representative of LIS educators and practitioners in West Bengal, a purposive sample approach was used to choose them.

Data Analysis

The survey data was analyzed using a t-test, which compared the means of the students' and professionals' replies.

5. DATA ANALYSIS AND INTERPRETATION

Table 1 Challenges in LIS Education

Challenges	Percentage
Curriculum Mismatch	35%
Lack of Skilled Faculty	30%
Inadequate Infrastructure	25%
Limited Industry-Academic Tie	40%
Outdated Teaching Methods	20%

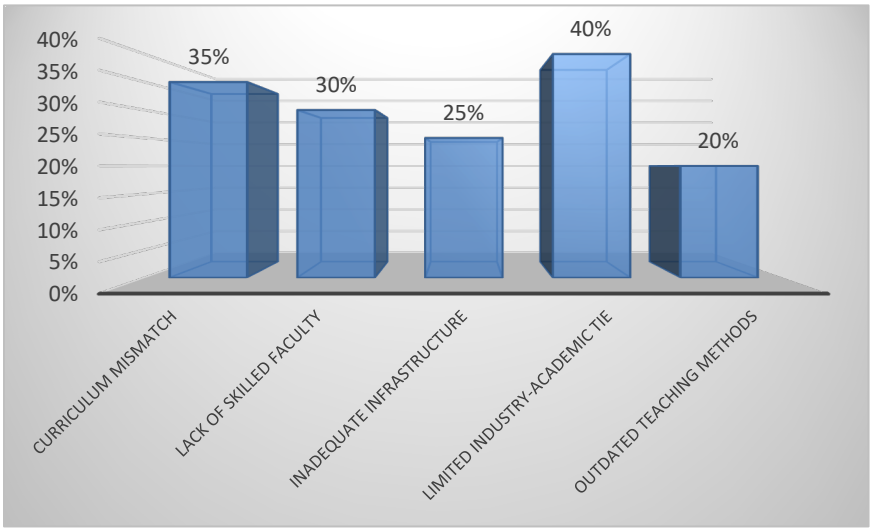

Figure 1 Challenges in LIS Education

According to Table 1, the Limited Industry-Academic Tie is the biggest obstacle. Forty percent of respondents saw it as a problem, which means that universities and businesses aren't working together. Concerns over the availability of competent teachers and the degree to which course materials correspond to real-world business demands are also shown by the statistics on curriculum mismatch (35%) and lack of skilled faculty (30%). If current educational expectations in LIS are to be met, it may be necessary to update both teaching methods and resources due to inadequate infrastructure (25%).

Table 2 Opportunities in LIS Education

Opportunity	Percentage
Integration of Emerging Technologies	55%
Government Support and Funding	50%
Online and Distance Education	45%
Increasing Demand for Professionals	60%
Interdisciplinary Collaboration	38%

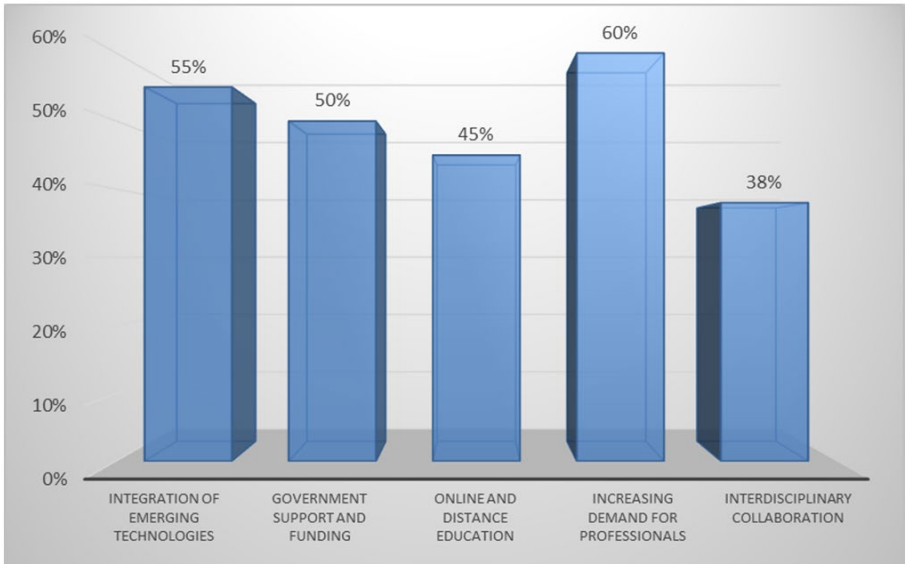

Figure 2 Opportunities in LIS Education

A rising awareness of the need for competent LIS experts is reflected in the highest-rated opportunity, the Increasing Demand for experts, which received 60% of the total votes in Table 2. Another noteworthy factor is the integration of emerging technologies, which accounts for 55% of the total. This suggests that many view the use of new technologies as a great chance to improve LIS teaching and practice. Furthermore, funding and support from the government (50%) implies that LIS programs might benefit from additional funding from outside sources. Another possibility is online and distance education, which accounts for 45% of the market and suggests ways that LIS degrees might be more widely available through more adaptable educational pathways. Last but not least, interdisciplinary collaboration (38% of the total) emphasizes how LIS programs may be enhanced by integrating other disciplines to provide a more well-rounded education.

Table 3 Perceptions between students and professionals regarding both the challenges and opportunities in LIS education

Category	t-Value	p-Value	Significance

Challenges (Students vs. Professionals)	2.14	0.04	Significant
Opportunities (Students vs. Professionals)	1.89	0.07	Not Significant

The results indicate that students and professionals view obstacles differently, with professionals seeing more issues linked to faculty knowledge and infrastructure (p-value = 0.04). Even while there is a difference in perceived prospects, the p-value is just 0.07, so it seems like most people agree that LIS education has a lot of good things going for it.

6. CONCLUSION

Similar to other areas, in west Bengal, Library and Information Science (LIS) education system has a lot of problems, such as out-of-date curriculum, inadequate facilities, and little chance for professors to advance their careers. But these difficulties also provide opportunities for development and progress. To prepare students in a better way for the changing needs of the information ecosystem, LIS programs should update their curricula to incorporate modern subjects like data analytics, digital libraries, and artificial intelligence, and they should improve their infrastructure to facilitate digital learning. Opportunities for LIS education to continue making a difference include working with businesses, receiving more funding from the government, and putting an emphasis on ongoing training and education. In order to be ready to handle and offer access to information in a world that is becoming more digital and data-driven, LIS professionals in West Bengal must address these issues while also taking advantage of these possibilities. This way, library and information science programs can keep producing graduates who are up to the challenge of today's information management systems.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

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