

IMPACT OF LIS CURRICULUM ON EMPLOYMENT: A REVIEW

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ABSTRACT

This study analyses the relationship between Library and Information Science (LIS) curricula and job outcomes in a rapidly changing digital transformation. It highlights skills gaps of graduates that hinder employability. The review suggests that competency and technology based curricula will fill up the gap between academia and industry. The review also emphasizes that curriculum reform should be context-specific, reflecting regional socio-economic and labour market needs. Enhancing graduate employability calls for strengthening curriculum relevance and effective navigation of digital ecosystems and diverse information environments.

KEYWORDS: LIS Curriculum, Employability, Skills Gap, Technological Competencies,

1. INTRODUCTION

We are experiencing a rapid change in the global information ecosystem in this 21st century. This development has fundamentally changed the way how information is spread. At the same time, the role of the information has also gone significant transformation from management of traditional library collections to digital and e-based information management. As such, the Library and Information Science (LIS) institutions have become very important in educating professional graduates to increase their core competencies so that it helps in getting ready for career readiness, job performance, and long-term professional adaptability in the changing job markets and other employment sectors.

The link between curriculum and employment is not simple. Professional skills must be compatible with the demand of industry, which go beyond traditional role of management of library and information system. Therefore many LIS schools have developed relevant LIS curriculum to impart the enduring principles of the

field as well as technical and cognitive skills. If not so, the LIS graduates will not become invaluable and capable assets and face difficulties in finding employment. As such, LIS graduates must have proper theoretical knowledge along with hands-on experience with latest disruptive technologies and soft skills.

In this context, this review analyses the relationship between LIS curricula and employability based on the literature published between 2000 and 2021. The study also explores the global perspectives of the different LIS curriculum programmes across the regions. It also highlights the gap between theory and practice due to the slow adoption of modern digital innovations in the LIS programmes.

2. OBJECTIVES OF THE STUDY

The objectives of the study are:

- i) To address the gaps between LIS curriculum and the skill requirements in job markets.
- ii) To analyse the impact of curriculum components on employment.
- iii) To assess and compare different LIS curriculum models from different geographical regions.
- iv) To examine the effects of LIS curriculum on the LIS graduates' employability in job market.
- v) To provide recommendations and suggestions for improving LIS education.

3. SCOPE OF THE STUDY

The scope of the study has been limited to the following aspects:

- It reviews literature published between 2000 and 2021.
- The review covers North America, Europe, Asia, and Africa, to highlight world perspectives.
- It analyses the relationship between LIS curriculum and employability.
- The study also adopts narrative literature review by analysing published articles, proceedings, books, and reports.

4. RESEARCH METHODOLOGY

This review adopts narrative literature review to examine the relationship between LIS curriculum and employability. The review covers the literatures published during 2000 and 2021 extracting from LISA, Scopus, Web of Science and Google Scholar. The study use peer-reviewed journal articles, conference proceedings, books, dissertations, or professional association reports to examine this relationship. Relevant studies have been analysed under eight different themes as described in the following sections.

5. CHANGING EMPLOYMENT LANDSCAPE FOR LIS GRADUATES

Job opportunities for LIS graduates have changed over the past two decades, as a result of rapid change in digital technology and its adoption. The traditional management of library like taking care of printed books and mere maintenance of library becomes obsolete. The major shift in society and institutions due to exponential change in information and digital world requires LIS professionals to adapt themselves in align with this ever changing messy digital world.

As Todd (2021) points out, today's LIS professionals work in hybrid environments, which describes the changed situation they're part of. This hybridity manifests in several ways. It combines the real world with the online world, so experts have to manage old print materials while also creating and maintaining a detailed digital system. This work combines old and new skills, where knowing how to organise information is important, as is being able to use metadata standards such as Dublin Core or PREMIS. Also, knowing how to talk to people about their information needs should go hand in hand with being good at presenting data visually and analysing it.

The main jobs in libraries, once mostly held by public, academic, and school libraries, are no longer as common as they once were. This has led to a growing number of new and different roles in the library field. The Special Libraries Association (2010) was one of the first groups to officially document this change, noting the rise of new job titles such as knowledge manager, data curator, digital asset manager, and competitive intelligence analyst. This expansion has continued to accelerate. These days, many LIS graduates are getting jobs as User Experience (UX) Librarians or Researchers, Research Data Management (RDM) Specialists, Digital Archivists, Taxonomists and Ontologists, Information Architects, and Open Science Officers.

In a study, Ahmad and Yew (2017) highlighted that employers often judged LIS graduates with other related graduates based on their technological, analytical and communication skills. This competition might create problems for traditional LIS education if the curriculum is not strategically reformed. Therefore, LIS professionals should provide technical and entrepreneurial knowledge as well as the adaptability of new skills to achieve sustainable and better careers.

6. CURRICULUM-EMPLOYMENT ALIGNMENT

The link between LIS curriculum and job results is important as it shows how what is taught in school connects to real work in the field. The following review throws us different lights on that:

6.1 Theory-Practice Divide

The gap between theoretical based teaching and practical oriented teaching in LIS education is a well noted problem. Kumar and O'Connor (2009) found that courses are predominantly focused on theoretical based teaching and less on practical based activities, struggling LIS graduates to comprehend real and complex situations. This skill deficit and lack of experience hinder finding employment (Maita et al. 2013). The theory-practice gap is also compounded by the 'hidden curriculum' of the working culture, as described by Partridge et al., (2014). New graduates sometimes have trouble with organizational politics, interdepartmental working, and informal power dynamics that are also important to information work.

6.2 Technology Integration Challenges

The rapid development of IT is drastically influenced LIS curriculum development. Cox and Corral (2013) reported problems with keeping LIS programmes in align with new technologies, such as new digital tools, data analytics and AI. Singh and Shahid (2015) also found that, most of the LIS programmes incorporated basic courses in technology such as AI integration, data visualization, and Information Systems management in the cloud. Study by Marcella et al. (2016) also have found that employers were discontent with graduates who have limited practical proficiency of digital technologies and information.

The technology gap is not just one of specific software competencies but of computational thinking as Ahmad and Yew (2017) determined that a working knowledge of database architecture, the ability to communicate with IT personnel and the ability to solve problems are important when it came to attracting candidates to an organization for a technological role.

6.3 Soft Skills Deficit

One of the most unexpected and lasting issues is the lack of development in soft skills. Many studies have shown that employers value communication, teamwork, and problem-solving skills highly in information professionals. Partridge et al. (2014) have found that employers are more focused on soft skills than on technical abilities when evaluating entry-level job applicants, especially when it came to explaining complex ideas to people who aren't experts in the subject.

Fourie (2019) highlighted the importance of emotional intelligence, adaptability, and a focus on client service—skills that are not often formally assessed in library and information science programmes. It showed that professionals with strong emotional intelligence were better at handling workplace changes, building strong relationships with stakeholders, and delivering services that met users' needs. Aharony (2020) also noted that information professionals needed stronger communication and empathy skills to support users during the shift to remote services.

6.4 Emerging Bridges

In their study, Larsen et al. (2018) found that properly linking with LIS courses with established competency standards enable graduate finding jobs faster with high confidence. In another study Julien and Genuis (2011) found that graduates with internship experience got jobs faster than those without internship experience. Such graduates have better information accesses to deal with real clients and better manage client relationships (Hensley, 2014). One of the best method is through co-op programmes where students' academic programmes go hand in hand with paid work terms (Maggio 2020). Interdisciplinary approaches can also help getting well paid jobs and helping having a unique careers (Sugimoto et al., 2015; Wong et al., 2018). Such programmes need to be encouraged in LIS programmes (Todd, 2021).

7. DESIGNING NEW CURRICULUM MODELS

The curriculum-job gap debate resulted many LIS programmes globally to develop pioneering strategies that could provide graduates quick jobs, by designing curriculum incorporating small changes courses design,

teaching methods, and school management.

7.1 Competency-Based Design

Competency-based education design is far better than credit based education design. LIS curriculum is also not an exception to this. Larsen et al. (2018) highlighted that competency-based education, especially the ALA Core Competences, provide better jobs. ASIS&T (2019) also showed that graduates from comprehensive digital badging systems programmes were easily hired by the employers.

7.2 Experiential Learning

Julien and Genuis (2011) found that graduates with meaningful internships got faster jobs than those without internships. Hensley (2014) showed that inclusion of client-need-based projects in the LIS programme also gives the same results. The best way to fully experience learning through real-world activities is through co-op education programmes. In a study, Maggio (2020) found that most of those who completed the programme found a job related to their field within 3 months of graduating. These long work experiences help students gain real-world skills and give them opportunities to connect with professionals and build references in their field.

7.3 Interdisciplinary and Dual-Degree Programmes

Modern information work needs skills from different areas thereby new programmes have been created that combine knowledge from multiple fields. Sugimoto et al. (2015) have found that graduates with knowledge in both library and information science and computer science earned higher starting salaries and were more satisfied with their jobs. Their research showed that these hybrid professionals performed well in jobs that required bridging the gap between technical and user-centred perspectives, such as building digital libraries and designing user experiences. The way these programmes, organised by subject, are set up can vary widely (Wong et al. 2018).

7.4 Technology-Infused Curriculum

Since technology is rapidly developed, many programmes need to co-opt with teaching and learning these new technologies. Cox and Corral (2013) highlighted that the most successful curriculum framework will be those model that integrate technology learning across the curriculum. It has been found that students who graduated from programmes that included studio components showed much greater confidence in learning and using new technologies. They were also more likely to try out new tools and technologies in their work environments. Another new idea is to work with tech companies to give students access to the latest tools and hands-on training. These partnerships include software licensing deals and deeper collaboration. The most advanced of these partnerships, as reported by ASIS&T (2019), include working together to design parts of the curriculum so that they match what industries need.

7.5 Global and Cultural Competence Models

As the world becomes more connected, many programmes have created new ways to help people understand different cultures and develop a global perspective. These models include study abroad programmes that focus on

comparing information systems, as well as virtual exchange projects that bring students from different countries together to collaborate. Fourie (2019) showed that programmes that purposefully include global perspectives help students become better prepared for jobs in companies that operate across many countries and diverse communities. Kajberg (2006) found that graduates with international experience had high chances to get jobs and leadership positions.

8. GEOGRAPHICAL VARIATIONS

Geographical variations leads to differences in economic conditions, teaching methods, access to technology, and cultural values. The following review describes some valuable dynamics in this regard.

8.1 North American Models

In North America, especially in the United States and Canada, LIS education links with market needs based on flexibility and adaptability with the changing job market. The American Library Association (ALA) provide a curriculum framework that balances new requirements with important professional values by creating specialised pathways in new technological fields (Mezick and Koenig, 2008). The North American model has placed graduates well connected with industry through advisory groups, internship programmes, and ongoing education partnerships narrowing the gap between industry needs and curriculum programme (Partridge et al., 2014).

8.2 European Approaches

Bologna Process determined LIS education in Europe. This standardised higher education systems are compatible with one another across Europe through the three-cycle degree system, namely bachelor degree, master degree, and doctorate degree (Kajberg, 2006). This standardisation helps graduates to get jobs across countries in the European Union. However, Cox and Corral (2013) noted that European programmes also found difficult to adapt their curriculum with rapid technological change as curriculum approval takes time.

8.3 Asian Contexts

The LIS education in Asia presents a mix outcomes. Singapore, Hong Kong, and South Korea are found to adopt new technologies friendly LIS programmes with global standards by focusing on improving English language skills (Chu and Wang, 2017). Developing Asian countries, face challenges of limited resources in providing a well-tuned education with global standards. Singh and Shahid (2015) found that India and Bangladesh adopted outdated curriculum due to lack of technological support and could not meet the diverse needs and expectations of industry. Whereas, in China, LIS programmes have grown rapidly with close aligned with information policies and development goals of China.

8.4 African Perspectives

LIS in Africa also face limited resources and urgent improvement to meet local and global standards. Fourie (2020) highlighted that LIS in Africa requires a balance between global standards and local needs, particularly in information literacy and community information services. Graduates' chances of finding jobs often depend on their ability to solve local problems while staying connected to global information resources. There is a gap

between digital technology skills and the LIS education curriculum in Africa. It also suggested that Africa needs to develop effective programmes that leverage the right technologies, build a strong digital footprint, and creating learning opportunities across different places.

8.5 Latin American Models

LIS education in Latin America emphasised on politics, society and community development. Brazil, Mexico, and Argentina are found to adopt critical theory, information science, and community engagement in LIS curricula (Lau and Cortés 2006) and such effective LIS programmes provide job opportunities easily and encourage them start businesses.

8.6 Middle Eastern Contexts

LIS education in the Middle East seeks to modernize its curriculum while preserving regional cultural values. The United Arab Emirates, Qatar, and Saudi Arabia invested heavily in educational buildings and foreign collaborations. They adopted modern technology and recruited foreign teachers to improve LIS education so that LIS graduates become globally competitive and more easy find jobs (Rehman and Al-Ansari, 2018).

9. FINDINGS, DISCUSSION AND CONCLUSION

Innovative and new LIS curriculum has both advantages and disadvantages. These disadvantages should be overcome over time. There call for need for developing resources, Hands-on learning activities and faculty development programme to improve pedagogical and latest technological knowledge. Beyond grade-based learning, skills and real-world abilities should also be imparted. The evidence from these successful curriculum models shows that the best approaches have some common traits. They are integrated rather than added together. They focus on skills that can be clearly shown. Also, they link to real-life situations and keep up with new developments in how information is handled. The different approaches adopted by LIS curricula and the creation of employment opportunities across different regions of the world show the need for LIS education to be adjusted to local conditions and the job market needs. The most effective programmes will be balancing global standards with local needs to improve LIS graduates' standards globally and locally.

The link between LIS curriculum and employment opportunities relies on the quality and flexibility of the curriculum framework. This review highlights persistent challenges that hinder graduate employability, emerging pedagogical innovations that enhance job-readiness, and significant regional variations in curriculum–labour-market alignment. The challenge of LIS education reform is that it requires to adapt its curriculum to meet evolving global information and technological landscape. There is a skill gap between LIS curriculum and market needs that adversely affects graduate employability. Therefore, there is a need for an interdisciplinary, flexible, and continuously evolving LIS curriculum that balances technical expertise with professional and transferable skills. Such a future-oriented, competency-based curriculum is essential for enhancing graduate employability, supporting career advancement, and preparing LIS professionals to lead in an increasingly digital and knowledge-driven society by excucising their skills and competencies.

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