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Curriculum development in library and information science in Nigeria in the era of technology advancement: challenges and expectations

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Abstract

The paper examined the training of library and information science (LIS) professionals for technological advancement. The library and information science profession has been drastically transformed and continues to evolve due to technological advancement in the field of LIS. The emerging technology has drastically transformed all the operations in the field of library and information science, which in turn has impacted on the LIS professionals in this technological era. The paper examined the historical development of LIS training and education. It further discussed the expectations of LIS professionals, the redesign of LIS curriculum, current skills for professionals, challenges confronting LIS training in Nigeria and way forward. The paper concluded that advancement in technology has brought changes in diverse aspect of librarianship. Hence, LIS professionals must acquire training to fit in to this new technological advancement.

Keywords: Curriculum Development, Library and Information Science, Technological Advancement, Challenges, Expectations

Introduction

The rapid advancement of technology has significantly transformed various setters globally, including education and information management. In Nigeria, these technological shifts present both challenges and opportunities for Library and Information Science (LIS) education. Developing a curriculum that aligns with contemporary technological trends is crucial for producing professionals equipped to meet the demands of the digital age. Historically, LIS education in Nigeria has faced several challenges, such as inadequate infrastructure, outdated curricula, and limited resources. These issues have hindered the effective integration of emerging information technologies into library services, teaching, and learning processes.

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Abdulrazaq and Ladi (2017) noted that despite global changes, LIS education in Nigeria has not evolved significantly, primarily due to constraints in utilizing emerging information technologies for library service delivery and educational processes. The necessity for curriculum restructuring to address these challenges has been emphasized in recent studies. A review of LIS curricula in Nigerian universities revealed that many programs lack essential Information and Communication Technology (ICT) components, rendering graduates less effective in an ICT-dominated society. The study suggests that heads of library schools should identify gaps in the curricula and take pragmatic measures to restructure LIS education to produce professionals capable of thriving in a technologically advanced environment.

Incorporating ICT into LIS curricula is not merely an enhancement but a necessity for survival in the 21st century. The impact of technology is so heavy that, it is not the matter of choice anymore for the LIS professionals to opt for current technology in LIS but nowadays, it's mandatory for the survival owing to the increasing pressure in the changing times (Kujur & Modak, 2019). This integration requires a comprehensive approach, including updating course content, investing in infrastructure, and continuous professional development for educators.

Rapidly evolving ICTs have dramatically transformed library and information science field which in turn has impacted on the technological knowledge, skills and competence requirements of professionals practicing in the information environment (Raju, 2021). Ochalla and Ochalla (2020), confers that the response to emerging technologies cannot occur without sufficient conceptualization and contextualization. Hence, LIS curriculum needs to refocus to respond appropriately to the knowledge and skill gap brought about by this changing technological landscape.

Statement of the Problem

The rapid advancement of technology has significantly transformed the field of Library and Information Science (LIS) globally. In Nigeria, however, the LIS curriculum has struggled to keep pace with these changes, leading to a gap between theoretical knowledge and practical skills required in the digital era. Many LIS programs in Nigerian institutions still rely on outdated curricula that do not adequately incorporate emerging technologies such as artificial intelligence, digital libraries, cloud computing, and big data analytics. Despite the increasing demand for technologically proficient LIS professionals, many graduates lack the necessary digital competencies to effectively manage modern library services. This challenge is further exacerbated by inadequate infrastructure, limited access to digital resources, and insufficient training for LIS educators.

Studies, such as those by Abubakar (2011) and Okiy (2015), have highlighted the urgent need for curriculum reform to address these deficiencies and align LIS education with current technological trends. The persistent gap between curriculum content and industry expectations raises concerns about the employability and relevance of LIS graduates in today's digital information environment. If left unaddressed, this challenge may hinder the effective management of library and information services in Nigeria, ultimately affecting the quality of research, learning, and information dissemination. Therefore, this study seeks to

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examine the challenges confronting LIS curriculum development in Nigeria in the era of technological advancement and explore possible strategies for aligning LIS education with the demands of the digital age.

Redesign of LIS Curriculum in era of Technological Advancement in Nigeria

The mode of training given in the LIS schools is should be practical oriented and training should be given with appropriate technology. A complete review is required of the current state of the curriculum. The context of new technological application need to be reviewed in LIS schools. Lots of outdated components need to be deleted and new components largely connected to technology need to be incorporated in to the curriculum. The study of and the practical application of technology must be emphasized in the current LIS curriculum (Deshmukh, 2012).

In an attempt to address squarely and decisively the curricular issues in Nigerian LIS training and education, the Librarians' Registration Council of Nigeria (LRCN) has made a good effort by organizing a summit on library school curriculum review and development of benchmarks which was held at Lokoja, Kogi State from 14th - 18th June, 2015 with the main aim of enriching the curriculum of library schools in Nigeria in line with the recent global best practices (Abubakar, 2021).

Expectation of LIS Professionals in the Technological Era

For the training of LIS professionals in Nigeria and beyond to join the modern day trend of globalization of LIS education for technological advancement, LIS schools must apply necessary proactive measures aimed at dealing with the challenges in the technological age and be in line with global dictates. According to Abubakar, (2021), this new information and technological environment requires new skills, seeking, processing and using information which requires the LIS curriculum to respond accordingly. Acquisition of digital skills by LIS profession has become necessary as training in LIS should be technologically compliant if LIS professionals are to fit in to the digitally changing environment. Hence, the following aspect should be given priority.

Incorporating new areas such as ICT skills into Library and Information Science (LIS) courses is crucial for preparing LIS professionals for the technological age. An investigation by Tella, Akande, and Bamidele (2018) highlights that essential ICT skills for LIS professionals include email and internet skills, PowerPoint presentations, social media proficiency, mobile technology skills, and web design. Narasappa and Kumar (2016) categorize the skills required for LIS professionals into four major areas: professional competencies, personal competencies, soft skills, and ICT and networking skills. Considering the significance of ICT skills in modern librarianship, LIS schools in Nigeria should integrate these skills into their curriculum to ensure that LIS graduates are adequately trained to meet the expectations of employers in the digital age, who require professionals to be conversant with emerging technologies.

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LIS professionals should also acquire management skills to effectively manage libraries and other related information agencies. Basic knowledge of management is essential in LIS training to ensure the efficient operation of information organizations in this technological era. Yadav and Gohaun (2016) emphasize that management training should be included in LIS curricula to equip professionals with the necessary skills for successful information management. By integrating management skills into LIS education, professionals will be better prepared to take on leadership roles and handle administrative responsibilities in various library and information settings.

Entrepreneurial skills have also become increasingly important for LIS professionals as the profession has evolved beyond the traditional roles of acquiring, organizing, and disseminating information. The shift toward an ICT-based profession has created a demand for entrepreneurial knowledge, as LIS professionals are no longer restricted to working solely in libraries. According to Agim (2020), incorporating courses in information brokering, strategic planning, contingency skills, creative skills, and business management into LIS education will enable professionals to be more enterprising and self-reliant when necessary. This approach will expand employment opportunities for LIS graduates, allowing them to venture into various entrepreneurial endeavors in the information industry.

The inclusion of courses with a digital library background is vital for equipping LIS professionals with essential technical skills. New-generation LIS professionals should possess foundational knowledge of database development and management systems, Functional Requirements for Bibliographic Records (FRBR), and Resource Description Framework (RDF), along with related technologies to operate effectively in digital library environments. Okeji and Mayowa-Adebara (2020) emphasize the urgent need to incorporate digital library education into LIS training programs in developing countries. Such an initiative will ensure that LIS graduates acquire the necessary competencies to develop and manage digital libraries efficiently, thereby enhancing their ability to function effectively in the evolving digital landscape.

Challenges of Curriculum Development

Library and Information Science (LIS) training and education are expected to align with global best practices to ensure quality and relevance. However, LIS education in Nigeria faces several challenges that negatively impact its effectiveness. Abubakar (2019), Saka, Garba, and Zarmai (2018), Abubakar and Farouk (2018), and Abubakar and Harande (2016) have identified key issues affecting LIS education in Nigeria. One major challenge is the poor ICT literacy among LIS lecturers and educators, which hinders the effective delivery of modern LIS training.

The improper development, implementation, and review of LIS curricula, along with the non-involvement of LIS professional bodies in accrediting LIS programs, have contributed to inconsistencies in training quality. Another significant issue is the shortage of qualified LIS lecturers, particularly those with PhDs. Newly established LIS schools often rely heavily on

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institutional librarians or visiting and part-time lecturers, leading to inconsistencies in teaching quality.

Inadequate funding for education and LIS programs has further exacerbated these challenges. The lack of sufficient financial support has resulted in the deterioration of physical facilities, a poor learning environment, and a general decline in educational standards. Paulley (2019) highlights that Nigeria has failed to meet the 26% annual education funding benchmark recommended by UNESCO for developing countries, thereby weakening LIS education in Nigerian universities and tertiary institutions.

Furthermore, insufficient infrastructure and quality learning resources have emerged as a direct consequence of prolonged underfunding. The shortage of information technology facilities in LIS schools has also been a persistent issue, making the adoption of modern technological resources more of an illusion than a reality. Additionally, there is a lack of collaboration among LIS schools, particularly in the areas of exchange programs and linkages with local and international institutions, which limits exposure to global best practices.

Another challenge in LIS education in Nigeria is the inconsistency in the nomenclature and organizational placement of LIS departments. Some LIS schools are housed under faculties of education, others in social sciences, while a few fall under faculties of information and communication. This variation has caused confusion regarding the nature of LIS programs in Nigerian universities, leading to ongoing debates about their exact academic status. The uncontrolled proliferation of LIS schools without adequate regulatory oversight has also contributed to concerns about the quality of LIS education.

Ochogwu and Nwokocha (2014) warn that the unchecked establishment of LIS schools without adherence to curriculum development and resource allocation standards is detrimental to the profession. Furthermore, there is minimal participation of key stakeholders in LIS education and training, as critical players are often excluded from curriculum development processes, leading to gaps in training relevance and industry expectations. Addressing these issues requires a concerted effort by stakeholders, regulatory bodies, and LIS institutions to ensure that LIS education in Nigeria meets global standards and adequately prepares professionals for the evolving information landscape.

Conclusion

The rapid advancement of technology has significantly transformed the field of Library and Information Science (LIS), requiring professionals to acquire new skills to remain relevant in the digital era. Traditional library practices are no longer sufficient, as modern libraries are evolving into digital and data-driven institutions. This shift has created the need for LIS professionals to develop expertise in digital literacy, data management, artificial intelligence, cyber-security, content creation, and research data management. These skills are essential for improving information retrieval, enhancing user experience, and ensuring the effective management of digital resources. Despite the opportunities presented by technological

advancements, several challenges still hinder the effective integration of technology into LIS education and practice in Nigeria.

Outdated curricula, inadequate infrastructure, and a shortage of qualified educators continue to limit the ability of LIS graduates to meet the demands of the modern information environment. To address these issues, LIS institutions must revise their curricula to incorporate emerging technologies, invest in modern infrastructure, and provide continuous professional development opportunities for librarians. Furthermore, LIS professionals must embrace lifelong learning to keep pace with the rapidly changing digital landscape. By developing competencies in artificial intelligence applications, cybersecurity, open-access management, and user experience design, they can effectively meet the evolving needs of library users. Additionally, collaboration with technology experts, policymakers, and educators is crucial in driving innovation and ensuring the sustainability of LIS practices in Nigeria. In conclusion, the future of LIS in Nigeria depends on the ability of professionals and institutions to adapt to technological changes and embrace digital transformation. By acquiring the necessary skills and addressing existing challenges, LIS professionals can enhance their role as information managers, digital curators, and research facilitators in an increasingly technology-driven world. This transformation will not only improve library services but also contribute to the overall advancement of knowledge and education in Nigeria.

Recommendations

1. Nigerian Library Association should encouraged creativity among LIS professionals by conducting seminars and workshops that are technologically oriented.

2. LIS professionals should be willing to take risk as they experiment with new technologies.

3. LIS professionals should be proactive enough to take courses outside the confines of traditional librarianship as this would enable them deal with the multi-disciplinary nature of their profession in this technological era.

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