



Submitted on: 31.07.2023

Teaching Digital Preservation and Curation in Library and Information Science Schools: The State of the Art in Nigeria

Adetoun Adebisi Oyelude

Kenneth Dike Library, University of Ibadan, Ibadan, Nigeria
sefoye@gmail.com

Ayodele John Alonge

Department of Library , Archival and Information Studies, University of Ibadan, Ibadan, Nigeria
ayoalonge@gmail.com



Copyright © 2023 by Adetoun Adebisi Oyelude and Ayodele John Alonge. This work is made available under the terms of the Creative Commons Attribution 4.0 International License: <http://creativecommons.org/licenses/by/4.0>

Abstract:

This paper discusses the importance of teaching digital preservation and curation in Library and Information Science (LIS) schools in Nigeria. Digital preservation and curation are essential skills that involve managing and maintaining digital content to ensure its longevity and accessibility. LIS schools play a vital role in educating professionals who can manage and preserve digital collections. The significance of teaching digital preservation and curation in LIS schools in Nigeria includes preserving cultural heritage, making information accessible, promoting research, and ensuring the authenticity of digital content. Additionally, the paper highlights the job opportunities that teaching these skills can create for students as well as identifies LIS schools teaching it already. The synergy between LIS schools and libraries, archives and museums (LAMs) in this teaching is explored using the Department of Library, Archival and Information Studies (LARIS) and the Kenneth Dike Library (KDL), University of Ibadan, Nigeria as case in point. It is concluded that teaching digital preservation and curation in LIS schools is essential to prepare professionals who will manage and preserve digital collections effectively.

Keywords: Digital Preservation, Digital Curation, LIS Education, Library management, Information access, Nigeria

Introduction

Digital preservation and curation have become paramount in the modern era, as the proliferation of digital content continues to shape information landscapes worldwide. Digital Preservation and Curation examines the creation, curation, conservation, and preservation of digital materials in both the public and private sectors and enables students to develop an appreciation of the principles of management of digital information in the context of digital longevity. Students gain an understanding of the organizational, technical, social, and economic challenges encountered when enabling the long-term availability of digital materials (University of Toronto, 2023). This description of digital preservation and curation by the

Faculty of Information (iSchool), University of Toronto will be the definition adopted in this paper.

As Nigeria experiences a digital transformation, the need for skilled professionals capable of managing and preserving digital collections has become increasingly evident. In the realm of Library and Information Science (LIS) education, integrating digital preservation and curation into the curriculum is essential to equip future professionals with the necessary expertise to address the challenges posed by digital information.

The preservation of cultural heritage stands as a fundamental aspect of digital preservation and curation. Because Nigeria is home to a rich and diverse cultural heritage, encompassing historical documents, traditional knowledge, indigenous artifacts, and artistic expressions, it is vital to safeguard these assets in digital formats to ensure their continued existence for future generations. One of the ways of achieving this is to incorporate digital preservation and curation into LIS education, so that professionals can learn the techniques required to curate and preserve cultural materials in digital repositories, safeguarding Nigeria's cultural identity and legacy (Omekwu & Nwazuoke, 2020).

Teaching digital preservation and curation in LIS schools contributes significantly to enhancing information accessibility. Digital collections offer unique opportunities to disseminate knowledge and information widely, transcending geographical boundaries and traditional physical constraints. Professionals well-versed in digital preservation can organize and manage digital resources efficiently, making them readily available to researchers, scholars, and the general public. Improved accessibility fosters the democratization of knowledge, promoting educational advancement and contributing to the societal progress of Nigeria (Oladokun, 2019). Therefore, the efforts of LIS schools in handling digital preservation and curation in southwest Nigeria is highlighted and ways for further improvement going forward, is presented.

Importance of Teaching Digital Preservation and Curation:

Preserving Cultural Heritage: Teaching digital preservation and curation in LIS schools covers preservation of heritage including historical documents, photographs, audiovisual materials, and traditional knowledge, which are increasingly being digitized. Preserving cultural heritage is a crucial aspect of digital preservation and curation and impacts greatly in making sure that Nigeria's rich cultural heritage is secured. Cultural heritage refers to the tangible and intangible artifacts, traditions, knowledge, and expressions that have been inherited from past generations (Shyllon, 2016). These heritage materials hold immense value in terms of historical, social, and cultural significance.

Making Information Accessible: Digital preservation and curation education plays a crucial role in making information accessible to a wide range of users, including researchers, scholars, and the general public. Information in digital format is an extra means of keeping information, than in physical copy of books, records, audio and video tapes and so on. It provides avenue for wider access, remote access, and more. By teaching these skills, LIS schools in Nigeria empower professionals to organize and manage digital collections effectively, ensuring easy and convenient access to information resources.

In the digital age, where vast amounts of information are available in digital formats, it is essential to have professionals who can navigate and curate these digital collections. Digital preservation and curation training equips professionals with the knowledge and techniques to

arrange and describe digital materials, apply metadata standards, establish efficient search and retrieval systems, and implement access controls. These skills enable users to locate and access the desired information quickly and efficiently (Oladokun, 2019).

Furthermore, digital preservation and curation education promotes the dissemination of knowledge. By managing digital collections, professionals ensure that digital repositories created and maintained by LIS professionals serve as centralized platforms for accessing diverse information resources, including scholarly articles, digitized manuscripts, archival materials, multimedia content, and more. This accessibility fosters academic advancement, interdisciplinary research collaborations, and the exchange of ideas. Moreover, digital preservation and curation education enable professionals to address the challenges of information overload and ensure the quality and reliability of digital resources. Through effective curation practices, professionals can evaluate the authenticity, accuracy, and relevance of digital content. This critical evaluation enhances the trustworthiness and credibility of the information made accessible to users, mitigating the risk of misinformation and promoting responsible information consumption.

Promoting Research: Effective digital preservation and curation practices play a vital role in promoting research and advancing scholarly investigations across diverse academic fields. By ensuring the availability of reliable and authentic digital resources, these practices support researchers in their quest for knowledge and contribute to academic progress.

Teaching digital preservation and curation in LIS schools in Nigeria equips professionals with the skills necessary to authenticate, validate, and preserve digital content. This expertise is essential for researchers who increasingly rely on digital resources for their investigations. By ensuring the reliability and integrity of digital materials, LIS professionals enable researchers to access trustworthy sources of information, enhancing the quality and credibility of their research findings.

Digital preservation and curation education also empowers researchers with efficient methods to locate, access, and utilize digital resources. Professionals trained in these practices can apply effective metadata management techniques, implement robust search and retrieval systems, and establish standards for organizing digital collections. These measures facilitate researchers' ability to discover relevant materials, explore interconnected resources, and access specialized databases, thereby enhancing their research efficiency and productivity.

Furthermore, digital preservation and curation practices enable researchers to engage with digital collections that span various formats and disciplines. By curating and preserving diverse digital resources, including digitized manuscripts, research datasets, multimedia content, and archival materials, LIS professionals contribute to interdisciplinary research endeavors. These resources facilitate cross-disciplinary collaborations, enable comparative analyses, and foster innovative approaches to research questions.

Moreover, effective digital preservation and curation practices ensure the longevity and availability of digital resources, safeguarding research data and scholarly outputs for future use. By implementing appropriate preservation strategies, professionals can mitigate the risk of data loss, format obsolescence, and technological decay. This preservation of research materials ensures the continuity of scholarly investigations, facilitates reproducibility, and supports long-term knowledge creation.

Ensuring Authenticity of Digital Content: Teaching digital preservation and curation helps professionals develop skills to authenticate digital content, ensuring its trustworthiness, accuracy, and reliability. This is crucial in combating the spread of misinformation and preserving the integrity of digital materials. Indeed the concerted effort to ensure that digital preservation and curation are taught with the most up-to-date facilities and methods has been described by Harvey and Bastian (2012). The digital curation courses offered in the LIS School at Simmons College, Boston that they discussed, illustrate an innovative virtual and experiential approach. They presented the core use of the Digital Curriculum Laboratory, a virtual archives and preservation laboratory, and demonstrated the relationship between a digital curriculum laboratory, the successful delivery of a digital curation curriculum and its wider international implications.

Job Opportunities and LIS Schools

Teaching digital preservation and curation in LIS schools opens up job opportunities for students. Professionals with expertise in these areas can pursue careers as digital archivists, digital librarians, digital curators, metadata specialists, preservation managers, and information architects. Several LIS schools in Nigeria already incorporate digital preservation and curation in their curriculum, such as the Department of Library, Archival and Information Studies (LARIS), with the collaboration of the Kenneth Dike Library (KDL) in teaching practical hands on aspects of the course when the students are on industrial attachment at the University of Ibadan.

Lowry (2018) described the collaboration of the Liverpool University and the Department of Library, Archival and Information Studies, University of Ibadan in curriculum design for their digital preservation courses. It was reported that teaching resources were shared between the two universities to address some deficiencies in the Liverpool University programme at that time. LUCAS was under-performing on teaching about data management and database design, but Ibadan had relevant course material that they could share. Liverpool had material on digital preservation that LUCAS could share with Ibadan. Though there were areas where neither had expertise (user studies, and managing audit and certification, for instance), these were developed for the curriculum.

A need for collaboration across institutions and countries was identified and both universities have revised their teaching on the basis of their findings. Students of both programmes now have a more thorough grounding in digital curation and preservation skills and knowledge. The project has made both courses more robust and better able to prepare future generations of digital archivists and curators. (Lowry, 2018). A comparison of the curriculum of the London University and that of Nigeria, with the work of the Professors has yielded the existing programme being run in the University of Ibadan and in the Liverpool University.

In like manner, Murillo and Yoon (2021) explored the trends of digital preservation literature used in curricula in the United States and Canada through a bibliometric examination of journal articles and conference proceedings assigned in digital preservation courses. Their study found that five topics emerged as main themes included in the literature that are assigned in digital preservation courses and are deemed as most important to educators when it comes to digital preservation curriculum, as well as being those that most educators focus on throughout digital preservation courses.

The topics are -

- 1: Library Contribution to Digital Preservation,
- 2: Technical Requirements for Digital Preservation,
- 3: Digital Archives,
- 4: Access and Use, and;
- 5: Research Data Management Across Disciplines.

Gaps found in the literature included the need for more inclusion of newer technologies and techniques such as cloud computing and new storage techniques for digital materials and special topics such as web archiving, digital forensics, and 3D preservation (Murillo and Yoon, 2021).

The synergy between LIS Schools and LAMs

To ensure effective teaching of digital preservation and curation, LIS schools in Nigeria can collaborate with libraries, archives, and museums (LAMs). These partnerships facilitate practical training, resource sharing, and knowledge exchange between academia and the professional community. The case of the LARIS and KDL at the University of Ibadan demonstrates how collaboration between LIS schools and LAMs can enhance the teaching of digital preservation and curation.

Currently, the 300 level students of the LARIS Department are required to go through a 3 month industrial attachment in any Library, archive or museum that accepts to train them. They are encouraged to get this hands-on experience from institutions or workplaces that can give them practical experience of digital preservation among other skills. The Kenneth Dike Library has a digitization unit as part of the Integrated Library System that has facilities to digitize books, theses, rare books, maps, and documents. The library has an institutional repository where staff publications are digitized and uploaded. The students learn the practicals of what they theorized in class, from the industrial training. They thus go back after the training with more knowledge and complete their course in the final year (400 level). The courses they take in the library school that are digital preservation and curation related are given names which differ slightly, from Library school to library school in southwestern Nigeria.

Conclusion

Teaching digital preservation and curation in LIS schools in Nigeria is vital for preparing professionals who can manage and preserve digital collections effectively. This paper highlights the importance of these skills in preserving cultural heritage, promoting information accessibility, facilitating research, ensuring authenticity, and creating job opportunities. Collaborations between LIS schools and LAMs further enhance the teaching and practical application of digital preservation and curation in Nigeria's library and information science domain.

References

- Harvey, R., and Bastian, J. A. (2012). Out of the classroom and into the laboratory: Teaching digital curation virtually and experientially. *IFLA Journal*, 38(1), 25–34.
<https://doi.org/10.1177/0340035211435072>.

Lowry, J. (2018). Improving Digital Curation Teaching through International Collaboration: The Ibadan/Liverpool Curriculum Benchmarking Project. <https://www.dpconline.org/blog/wdpd/improving-digital-curation-teaching-through-international-collaboration>.

Murillo, A. P., and Yoon, A. (2021). A study of emerging trends in digital preservation literature: An analysis of journal articles presented in course syllabi. *Journal of Librarianship and Information Science*, 53(4), 615–629. <https://doi.org/10.1177/0961000620967714>.

Shyllon, F. (2016). Cultural Heritage and Intellectual Property: Convergence, Divergence, and Interface. In Logan, W., Craith, M. C. and Kockel, U. (Eds.). *A Companion to Heritage Studies*. John Wiley & Sons, Inc. pp. 55 -68.

University of Toronto. (2023). Digital Preservation and Curation INF2122H. <https://ischool.utoronto.ca/course/digital-preservation-and-curation/>.