Library and Information Science (LIS) Education in Nigeria: Emerging Trends, Challenges and Expectations in the Digital Age

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ABSTRACT

In Nigeria, formal university-based Library and Information Science (LIS) educational programme began in 1959 at the Institute of Librarianship, University College, Ibadan (as it was then called) now University of Ibadan Library School. Since then, LIS education in Nigeria has passed through certain developmental trends in its chequered history and has seen steady progression, notably in terms of expansion. Considering the recent transformations in all sectors which have resulted in globalization that is accompanied with massive radical changes in all spheres of human endeavor, LIS educational programmes globally are expected to be amenable to such radical changes. Therefore, changes in curriculum, teaching and learning methods as well as assessment systems are inevitable and desirable. This paper, based on relevant literature, examines LIS education in Nigeria, its emerging trends, challenges and expectations in the digital age. It provides a historical antecedent of LIS education in the country. The paper also discusses contemporary global trends and developments in LIS education and the responses of LIS education towards these changes. It examines the present Nigerian perspective in LIS education and stresses that total reformation is desirable through ensuring that curricula and teaching facilities are always up to date for meaningful training. The paper further explores the major challenges/constraints confronting LIS education in Nigeria that include among others; perennial failure of the government to fund education properly, and LIS education in particular, paucity of infrastructure and learning resources as well as the general deficit of faculty members especially those with PhD degrees. It then explores the expectations of LIS education in the digital age, and as well offers suggestions on how to mitigate the identified challenges, notably through developing impact-oriented operational strategies by the LIS schools and galvanizing support to attract more funds. The paper concludes by emphasizing that LIS education in Nigeria can be more significant in this digital age if curricula and relevant teaching aids/infrastructure are in line with the current emerging global trends and perspectives.

Keywords: Library and information science education, Emerging trends, Challenges, Expectations, Digital age, Nigeria.

I.   Introduction

It is no longer debatable that advancements in our society, technological or otherwise, have brought about significant and tremendous changes to the Library and Information Science (LIS) education globally. In other words, the LIS education has been experiencing a radical change especially in the last couple of decades which results to fundamental changes in all its structures. Such changes are pervasive, global and profound in nature. Additionally, with the recent trend in globalization and its seeping impact on LIS education, the LIS field is now seen as an interdisciplinary field of study that has integrated many new and related areas of such as information science, computer science, information system, knowledge management, information architecture, digitization, content management and archives related areas. This fundamental revolution has implications for the profession and has led to the offering of diverse/joint degrees by LIS schools, especially in the advanced countries, employment of new faculty, new curricular offerings, mode of delivery as well as changes in the market place for LIS graduates who now require new skills and competencies.

According to Assefa and Wang (2018), the LIS field is increasingly becoming inter-disciplinary and diverse with many new areas being offered. Similarly, curricular

offerings such as data science, research data management, digital humanities, to mention just a few are being offered to expand the frontiers of educational programs in LIS (Assefa & Wang, (2018). Moreover, it is critical to note that advancements in Information and Communication Technologies (ICTs) have been the driven force for all these developments. ICTs have transformed LIS education and libraries in general, and its introduction to the LIS field demands that LIS education must be technologically-based and market driven at the same time.

The above state of affairs requires LIS programmes to develop and overhaul their curricular in order to meet the requirements of the new information age which circles around technology. Furthermore, the changing needs of employers have led to many changes in the LIS profession. Consequently, the names of LIS education programmes, LIS education awards and LIS education courses have all changed (Okello-Obura and Kigongo-Bukenya, 2011).

For that reason, it is important to state that amendments and expansion of LIS programmes to suit the new changing environment, especially in the area of ICTs, has become unavoidable. This, therefore, calls for an in-depth and structured education programmes for the LIS professionals (Lawal, 2009). However, it is worth stating that the pattern of change in respect of the LIS education in both the developed and developing countries has been varied. For instance, it has been on comparative terms very slow in the developing nations where LIS schools still largely remain traditional in both their curricula and pedagogical approach, which could largely be due to their low level of infrastructural development as well as inappropriate manpower compared to what is happening in the developed countries (Abubakar & Farouk, 2018).

Lately, one of the major challenges facing LIS education revolves around the need to have appropriate, robust and vibrant curriculum that will meet the requirements of the changing setting, even though, changing or modifying the curriculum of LIS education particularly in the area of ICTs, is not an easy task. This is because curriculum development requires proper participation of all critical key actors. Karisiddappa (2004) noted that this has been a consistent concern of LIS schools the world over.

In view of the foregoing, the purpose of this paper is to examine the emerging trends in LIS education in Nigeria with particular reference to LIS education and training in Nigerian universities. It also explores the current global best practices in LIS education. The paper finally examines the historical root, the present status and the challenges bedeviling LIS education in the country and globally within the realm of the current global best practices with a view to highlighting their implications to LIS education in Nigeria. The article will be useful to LIS educators, LIS schools' administrators and LIS professionals in Nigeria as well as in other developing countries.

II. Development of Lis Education in Nigeria

In Nigeria, the history of LIS education dates back to the 1953 UNESCO-organized seminar on the "Development of Public Libraries in Africa" held at the University of Ibadan in Nigeria. The seminar recommended that a limited number of high caliber library schools be established in Africa to provide full-scale professional training at the leadership level (Lawal, 2000). Before that time, education in librarianship was only offered abroad mainly in the U.K and U.S. and the certificates acquired were mostly non-graduate type like the British ALA Examinations. Moreover, most of the librarians working in libraries in the country during that period were expatriates.

The commencement of genuine education for LIS in Nigeria started with the establishment of the first Library School in 1959 at the University College Ibadan, (as it was then known). The LIS School was established with the financial assistance of the Carnegie Corporation of New York who took interest in the development of the profession, and accordingly sent Harold Lancour in 1957 to survey the library situation and give advice on how the Corporation can assist in the area of library development. Following his two months survey, Lancour recommended that a postgraduate-level type LIS education be founded, which was eventually established at the Institute of Librarianship (now known as the Department of Library, Archival and Information Studies). The school began with a Diploma in librarianship which was solely meant for graduate students.

The next school of librarianship in Nigeria was opened at the Ahmadu Bello University, Zaria which commenced with an undergraduate programme. According to Abubakar (2015), the 1963 F.A. Sharr's report on library needs in Northern Nigeria led to the establishment of the second LIS School in Nigeria in 1965 with the aim of educating and training librarians at the undergraduate level against that of Ibadan's postgraduate Diploma programme.

Over a period of time, other LIS schools were subsequently established at different universities. Presently, there are 37 LIS schools in Nigerian universities comprising federal, state and private (Nigerian Association of Library and Information Science Educators (NALISE), 2020). Besides, a number of federal and state polytechnics as well as colleges are now offering LIS programmes at different levels. With this brief overview of LIS education in Nigeria, it is crucial to examine certain recent global trends in LIS education.

III. Contemporary Global Trends in Lis Education

Nowadays, there is a total and widespread radical change in LIS education. In other words, the rapid development in ICT and social networks that have been taking place swiftly from the 1990s onwards has changed not only the way information is used but also the pattern of library services and LIS education in general. Indeed, researchers have argued that we are now in a global

village. Globalization has also brought to the forefront the advancement in digital technology, collaborative efforts among countries, institutions, organizations which results in massive increase in virtual and online information resources and retrieval systems. Besides, evolution in LIS education is also another encouraging trend which clearly manifests itself in the establishment of LIS courses globally.

Based on the aforementioned, one can say that LIS education universally has taken a new dimension as a result of the important changes and advances brought about by globalization. Therefore, in the contemporary era, the LIS environment is being confronted with a number of challenges that emerge from the changing nature of the discipline. LIS education, being an important segment of the profession is radically and unavoidably affected by this important development. The challenges presented by those forces demand that LIS schools worldwide should review and change the contents of their curricula with the aim of equipping their graduates with the knowledge and skills that would enable them succeed in the ever changing LIS marketplace. Thus, available literature indicates that LIS education has been primarily and frequently changing in many countries.

Furthermore, a ground-breaking study carried out by KALIPER (2000) has identified six key areas that have advanced new trends in the LIS education. The six trends show that LIS schools were gradually:

1. Addressing broad array of information environments and information problems, even though the library settings remain the heart of many LIS programmes;
2. Witnessing the emergence of user-centered courses and has also continued to incorporate different perspectives from other fields of study i.e. multidisciplinary issues;
3. Increasing the infusion of IT into the LIS curricula i.e. information technology has underlined all aspects of the curriculum. As such, it was expected that the LIS programmes would bear the responsibility of keeping their students on the cutting edge of the existing and new technologies as they become available;
4. Experimenting with flexible programming to provide specialization within the curriculum;
5. Offering instruction in diverse formats (e.g. course length, day and time of course offering, and on-or off-campus meetings, as well as distance education via the World Wide Web) to provide students with more flexibility; and
6. Expanding their curricula by means of offering related degrees at the undergraduate, master's and doctorate levels.

Another key trend in the United States and indeed the rest of the world is the 'Information Schools' (iSchools) movement. According to Chakrabarti and Mandal (2017), the iSchools organization strives mainly to advance the field of information in the 21st century. According to them, the functions of the iSchools revolve around three areas i.e. education, research and professional development.

According to Weech (2019), the iSchools membership directory lists 101 institutions worldwide. Moreover, some members of iSchools changed their names to simply "Information School" (iSchool), while others continue to keep their original names (e.g., Information Science, Information Studies, Information Systems and Management, and LIS). A few schools of Computer Science and Informatics (along with Schools of Mathematics and Information Sciences, Media and Information, Convergence Science and Technology, among others) are also members of iSchools. (Tonta, 2016).

On the other hand, the inter-disciplinary nature of the LIS has now made LIS schools to change the names of their programmes, degree titles and programme offerings and in some instances even offering joint degrees with other faculties, particularly in the advanced nations like the United States, which, according to Salawu and Igwe (2018), reflects the breadth, depth and diversity of careers requiring information and knowledge management. According to Wiggins and Sawyer (2012), the composition of the iSchools faculty members represents, to a large extent, the inter-disciplinarity of the iField. The authors further stated that nearly one third (30%) of a total of 769 faculty members working full-time at 21 iSchools in 2009 obtained their Ph.D. degrees in computer science, 11% in information, 10% in librarianship, 10% in social and behavioral sciences, 9% in management and politics, 9% in science and engineering, 8% in education, 7% in humanities, while only 5% in communication.

The next trend noted is in Europe where epic transformation is also taking place through the formation of EUCLID (the European Association for Library and Information Education and Research) which serves as a joint forum for European LIS schools. In addition, according to the same author, "EUCLID' is solely concerned with the convergence of LIS educational programmes and the contents of LIS curricula in European countries which led to the completion in 2005 of the European LIS curriculum project". Moreover, the association establishes interactive forums through which they support and advance LIS in the area of curricula development, quality assurance, collaborative and networking structures, staff/students mobility and exchanges, course structures, conceptual/theoretical issues, internationalization of LIS education etc. (Diso, 2009). Besides, interest is growing globally on the internationalization of LIS education. According to Virkus (2015), internationalization of higher education has been an important priority for many international organizations, governments and higher education institutions for many years and is a trend that is expected to continue in higher education.

In particular, the changing landscape has encouraged LIS schools worldwide to invent new approaches in order to be receptive to the new environment. In line with this, Virkus (2015) studied change and innovation in European LIS education. The survey which concentrated on five (5)

LIS institutions in Europe established that there were structural changes in the LIS programmes, inclusion of ICT into the curriculum as well as in the teaching and learning process.

Another trend in the LIS landscape is that, presently, many LIS schools offer different programmes of studies which comprise archive administration, archival imaging technology, digital curation, digital information services, health informatics, knowledge management, to mention just a few. In fact, according to Weech (2019), perhaps the increasing number of specializations within ALA-accredited programmes is likely as a result of the expanded definition of what constitutes the information professions.

A number of studies have been conducted on various aspects of LIS education. For instance, Malik and Ameen (2020) used interview technique and surveyed the current and future employment opportunities for LIS graduates in Pakistan through qualitative approach. The study found that the job market for LIS graduates was still traditional in nature. However, it was also found that non-traditional job markets existed in the country. Mole, Dim and Horsfall (2017) examined the concept and characteristics of LIS vis-à-vis knowledge societies through conceptual framework and critical examination. The study emphasized that LIS education must equip LIS professionals with the relevant ICT skills and competencies. Hence, according to the authors, there is always the need for the re-engineering of LIS education in the area of content and methods of training for the LIS profession so as to meet industrial needs for knowledge societies.

Wei, Chumg, Li and Li (2020) studied trends in LIS education in China through bibliometrics approach and found that China has increasingly paid more attention to LIS education in recent years. Also, the addition of practical courses to the teaching system was another trend reported by the study. In another study, Bronstein (2009) analyzed the curricula of 30 LIS departments in 21 countries in different parts of the world using websites in order to determine current trends. The study used Wilson's typology (2001) for coding data and found out that the largest percentage of courses examined relates to information content. Furthermore, technology courses were the second major category present in the curriculum. The study concluded that, in the dynamic job market, LIS programmes should aim at providing the widest range of skills and competencies necessary in educating their students for all positions in the information environment.

Saladyanant (2014) compared the courses offered in the curriculum of nine LIS master degree programmes in Thai universities with IFLA guidelines for Professional Library/Information programmes. The study established that there were 43 courses on Application ICT to all facets of Library and Information Products and Services; 28 courses on Information Resources Management and 12 courses on Assessing Information and Designing Responsive Services. Similarly, Hu (2013) examined 14 LIS schools in the United States through a quantitative analysis. The study found that seven of the fourteen

(50%) LIS schools offer IT related degrees from LIS school programs. Some schools have merged with Computer Science Programs or Information Technology Programs. The study further reported that the School of Library and Information Science, Indiana University has merged with their Computer Science and Informatics program and the School of Information, University of Michigan at Ann Arbor has changed to offer Master of Science in Information as a substitute of the traditional Master of Library and Information Science; while the University of Illinois at Urbana-Champaign was offering multiple IT based degree programs such as Specialization in Data Curation, Socio-technical Data Analytics, Certificate of Advanced Study in Digital Libraries etc.

Xue, Wu, Zhu and Chu (2019) examined the challenges of LIS education in China and the United States through quantitative and qualitative content analysis method. The study found that LIS education in China and the United States have been facing multiple challenges mainly in the areas of accreditation and identity, survival and thriving, curriculum enhancement and course delivery format.

IV. The Nigerian Perspective

Presently, any meaningful discussion on LIS education in Nigeria needs to consider the fact that LIS education has come a long way since the formation of the first university-based LIS School in the country at the University of Ibadan as previously reported. The most recent development is the proliferation of LIS schools in universities, polytechnics and colleges across the country. Hence, one can conveniently say that LIS education in Nigeria is at the moment witnessing a turning point. It is therefore significant to know that expansion in LIS education has become obvious in the country, mostly in recent years. Moreover, many new institutions are founded fueling the need for more LIS schools that will train LIS professionals that will manage the libraries attached to those institutions.

Given the growing development, LIS education in Nigeria has reached its peak with many universities (both public and private) offering different programmes at bachelors, masters, and PhD levels in LIS, although operating under different faculties. At the moment, some LIS schools in Nigerian universities are housed under faculties of education, some in social sciences, some in management sciences, while few are under faculties of information and communication etc. (Abubakar, 2019; NALISE, 2020). Generally, the goal of library and information science education is to produce qualified library and information science professionals.

In view of the above, it is pertinent to note that information about university-based LIS institutions was collected from published sources (LRCN, 2014; Abubakar, 2019; NALISE, 2020) as well as through discussions with colleagues and telephone calls. Also, the information obtained shows that nearly all the universities are offering regular courses, while only few are providing LIS education through the distance learning mode (ABU,

BUK, UNICAL, ATBU etc.). Furthermore, the names and nomenclature of the programmes vary. In the beginning, most departments were simply named Departments of Library Science or Library Studies. Lately, however, many of the departments have changed their names to Department of Library and Information Science/Sciences. At the moment, some of the prominent names for LIS departments in Nigerian universities include: Library and Information Science, Library and Information Sciences, Library, Archival and Information Studies, Library and information Studies Information Resources Management etc.

In terms of nomenclature, different bachelor's degree courses are provided by LIS departments in Nigerian universities which include among others: Bachelor of Library and Information Science (BLIS), Bachelor of Arts (Library and Information Science) (B.A. LIS), Bachelor of Science (Library and Information Science) (B.Sc. LIS) where LIS is offered together with other academic subjects in the Sciences, Social Sciences or Arts (commonly found at University of Nigeria Nsukka and Bayero University, Kano). Another one is B. Tech (Library and Information Science/Technology). While at the postgraduate level, LIS schools offer variety of Post-graduate programmes. For instance, the Bayero University, LIS School has Post-Graduate Diploma in Information Management (PGDIM), Master of Library and Information Science (MLIS), Masters in Information Management (MIM) and PhD in Library and Information Science. Similarly, according to Saka (2015), the University of Ibadan (UI) LIS School runs post-graduate programmes such as Masters in Library and Information Studies (MLIS), Masters in Archives, Records and Information Management (MARIM), Masters in Health Information Management (MHIM), Masters in Publishing and Copyright Studies and PhD with specialization in diverse areas. Other university-based LIS schools have post-graduate programmes in different areas

With regards to the curriculum, for a student to earn a BLIS, B.Sc. or B.A LIS degree, they must pass at least 120 credit units in a four-year programme or at least 90 credit units in a three-year programme (NUC, 2014; Abubakar & Auyo, 2019). It is worth stating that the system uses both external and internal examination patterns to finally grade the students. There are little variations in terms of curricula offerings, although the contents are more or less the same. However, this is normally dictated by the NUC Benchmark for Minimum Academic Standards (BMAS). For the post-graduate programmes, there is also a difference in the curriculum of the LIS schools in Nigerian universities. Nonetheless, some of the LIS schools have updated the content of their post-graduate curricular to reflect the changing paradigm and societal needs and some are in the process of doing so. Masters and PhD degree programmes are offered on full-time or part-time in most of the universities.

The undergraduate course content from the NUC Benchmark for Minimum Academic Standards (2014) includes some of the following courses: Introduction to Library and Information Studies, Introduction to Information Science, Information in Libraries and Society, Introduction to Library and Information Resources, History of Libraries and Information Centres, Library and Information Centre Visit, Introduction to Bibliography, Organization of Knowledge I, Library and Information Service to the Rural Community, Management of Library and Information Centre, Libraries and Information Services for Children and Adolescents, Serials Management, The Information User, Information Literacy, Indigenous Knowledge System etc.

In an effort to address squarely and decisively the curricular issues in Nigerian LIS education, the Librarians' Registration Council of Nigeria (LRCN) has made a gigantic 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. In that summit, lingering matters concerning course contents for LIS schools in Nigeria, facilities, nomenclature, staffing, location of LIS programmes, process of implementation of benchmark, establishment of LIS programmes and accreditation were painstakingly deliberated by stakeholders. Incidentally, the author of this article was a participant at the summit. As a result of the summit, the LRCN is currently developing a unified curriculum for LIS schools in Nigeria which has passed through some stages.

A situational analysis of students' enrolment shows that LIS as a course of study is gradually becoming popular in Nigeria. However, it is important to note that regardless of the increase in its popularity, some students are not interested or passionate about studying or choosing LIS as their first choice course. This situation raises serious concern about the need for attracting quality students into the various LIS programmes. Despite the negative trend, thousands of students are yearly enrolled into LIS departments in Nigerian universities, although no definitive statistics is available about the students' enrolment. This situation additionally means that thousands of LIS professionals are being produced every year by universities. In terms of job prospects for LIS graduates, the job market continues to be brighter. With the increasing demand for higher education, more tertiary institutions are being established, which means more potential jobs available for LIS graduates. Recently, the Federal Government granted operational license to 56 newly approved tertiary institutions in the country (PM News, 2019). Similarly, some LIS graduates are employed in other sectors of the economy since the modern day LIS training encourages the training of LIS professionals to think outside the box. That is why the acquisition of 'critical thinking' skills by LIS graduates is emphasized; others are on their own courtesy of the entrepreneurship education they received during their study years. The entry point into the profession remains a bachelor's degree.

In addition, it is worth reporting that some LIS departments in Nigerian universities have computer laboratories, while others utilize the central computer

laboratories of their mother institutions for practical and hands-on training, thereby emphasizing practical training on the use of ICTs. This is with the aim of making their students proficient to work efficiently and professionally in the rapidly changing electronic information environment that is evolving by the day, although many of the computer laboratories in the LIS schools have inadequate facilities.

Accreditation and quality assurance in LIS is also another precarious area of attention. In other words, as is common with other disciplines, LIS programmes tend to be subjected to thorough check by established bodies. According to Rehman (2016), accreditation adds value to the efforts of LIS programmes, because it keeps them current and relevant. As a result, LIS schools, whether university or non-university based, are expected to be regularly scrutinized by the various regulatory bodies, or perhaps the quality assurance agencies in the country i.e. the National Universities Commission (NUC) for university based programmes, the National Board for Technical Education (NBTE), and the National Commission for Colleges of Education (NCCE) for polytechnics and colleges respectively. With reference to the university based LIS schools, the NUC has minimum academic standards (MAS) for all undergraduate LIS education in Nigeria (NUC, MAS, 2014). As such, there is the need for regular and continuous assessment process to ensure compliance with the set standards.

As it is with other professional courses like Law, Engineering, and Medicine, to mention just a few, LIS schools are expected to be additionally subjected to occasional assessment by the several professional bodies in the country e.g. the Librarians' Registration Council of Nigeria (LRCN), the Nigerian Library Association (NLA) and other professional bodies. Though, currently, that process is yet to be inaugurated in the Nigerian LIS environment.

The success of any educational programme is solely dependent upon the quality of the educators', i.e. in terms of quantity and quality. In other words, educators are the pillar of the LIS programmes as well as the principal stakeholders in the entire education process. According to In the Nigerian scene, LIS schools in Nigerian universities have faculty members. However, in reality, there are some differences and hurdles. Some LIS schools are more advanced than others in terms of the number of lecturers particularly PhD holders. Despite that, there is a general deficit of faculty members. The shortage of faculty members with PhDs is even more prevalent in the northern part of the country. Furthermore, the general dearth of faculty members has forced many LIS schools in the Nigerian university system to rely heavily on the services of visiting lecturers and part-time lecturers. This situation is also applicable to LIS schools in polytechnics and colleges across the country. The NUC's recommended staff/student ratio of 1:30 for faculties of Education and Social and Management Sciences, where most LIS departments in Nigerian universities are based, is grossly violated with over-admission of students into the programmes. In fact, many LIS schools admit more

than what they can possibly handle, or perhaps, more students than they can cater for in order to withstand pressures from different angles. This, in turn, impacts negatively on teaching and learning in the LIS schools.

Opara (2007) examined the archival component in the undergraduate curricula of LIS departments in Nigeria to determine their adequacy or otherwise. The study found that the archival component in the core and elective areas were inadequate in terms of course content. The study recommended that the curricula be expanded to include more archival related courses. Likewise, Kacunguzi and Samuel (2016) assessed the curricula of four LIS programs in East and West African countries to determine whether they were in synergy with professional demands in the digital market. The study found that the four programs based in Nigeria and Uganda were not adequately digital compliant. Moreover, the two LIS schools in Nigeria were even far from achieving digitally attractive LIS curricula. Diso and Njoku (2007) examined four university-based LIS programmes through identifying the challenges affecting them. The study found that there was poor funding for LIS programmes, inadequate teaching facilities as well as the existence of inadequate curricula.

V. Challenges Confronting Lis Education in Nigeria

The previous section aptly describes the real picture in the Nigerian LIS educational system. LIS education anywhere is expected to be in conformity with global best practices. This means that if substantial advancement is to be made, global best practices and requirements cannot be handled with flippancy. Additionally, the predominant local condition should also be given utmost priority in any significant LIS education. Although there have been momentous increase in the number of LIS schools in the country, it is imperative to mention that LIS education in Nigeria is seriously bedeviled by some challenges that affect its quality and some of which have been discussed in the preceding sections of this article. However, the principal challenge faced, according to Salawu and Igwe (2018), is that of attracting students that are interested in studying the course. This issue has persisted and has been adversely affecting LIS education in Nigeria since its inception. This makes many LIS schools to continuously remain sluggish. Other prominent challenges as discussed by various writers (Abubakar, 2019; Saka, Garba & Zarmai, 2018; Abubakar & Harande, 2016; Abubakar & Farouk, 2018; Diso, 2009) include the following:

a. Inadequate funding of education and LIS programmes in general. According to Paulley (2019), among all the challenges facing Nigerian education, especially at the university level, the challenge of funding appears to be the most critical. Also, according to the author, in spite of the bulk of revenue at the country's disposal, the country has not met the 26% benchmark of annual allocation of funds to education as recommended for developing countries by UNESCO. Thus, it is very clear that the perennial failure of the government to fund

education at all levels has fundamentally undermined LIS education in Nigerian universities and other tertiary institutions. This situation has led to deterioration of physical facilities, learning environment and overall degeneration in standards.

b. Insufficient infrastructure/teaching and quality learning resources which emanates as a result of prolonged underfunding.

c. Lack of participation of critical stakeholders in LIS education matters. Many at times, stakeholders are not fully engaged in curriculum development. This is a long-standing problem since the commencement of LIS education in the country.

d. Proliferation of LIS schools devoid of respect to established standards, i.e. there is no check and balance regarding the mushrooming of LIS schools in the country. According to Ochogwu and Nwokocha, (2014), the rate at which LIS schools proliferate without due regards to standards in the areas of curriculum development and resources is not a healthy development.

e. Contradiction in nomenclature and organizational placement for LIS departments in the country. Some LIS schools in Nigerian universities are housed under faculties of education, some in social sciences, while few are under faculties of information and communication etc. Such scenario has created confusion in the nature of the LIS programmes being offered in Nigerian universities as there have been debates regarding their exact status.

f. Shortage of information technology facilities as a result of the poor funding situation. Additionally, it is sad to note that the acquisition and use of technology resources in most LIS schools have been a mirage rather than a reality.

g. Improper development, implementation and review of LIS curricula as well as non-involvement of LIS professional bodies in accreditation of LIS programmes in Nigeria.

h. Inadequate cooperative efforts in form of collaboration among LIS schools, exchange and linkages programme both locally and internationally.

i. Paucity of LIS lecturers specifically those with PhD. Majority of newly established LIS schools always tend to rely seriously on their institution's librarians and in some cases the use of visiting and part-time lectures.

j. Finally, another lingering issue is poor ICT literacy among LIS lecturers in Nigeria which tends to affect negatively the trainings provided.

VI. Expectations in the Digital Age

If LIS education is to flourish and continue with its main mission of educating and training of LIS professionals in Nigeria and even beyond, and to join the modern-day trend of globalization of LIS education, LIS schools must re-examine their philosophical foundation and apply necessary proactive measures aimed at dealing with the challenges in the digital age so as to meet the demands of the society and to also be in line with the global dictates. LIS education is significantly and fundamentally changing over the past decade as pointed above. Hence, emphasis to new perspectives in LIS education especially in developing countries and Nigeria in particular has become paramount. Hashim and Wan Mokhtar (2005) have observed that we live in an information society where the development of ICTs and telecommunication networks is accompanied by a corresponding increase in knowledge, with a rapidly growing flow of information. This new information environment, according to them, requires new skills in seeking, processing and using information which requires the LIS curriculum to respond accordingly. In the first instance, training in LIS should be technologically compliant if graduates are to fit into the digitally changing environment. In addition, acquisition of digital skills has become necessary. Moreover, the following aspects should be given priority:

a. The adjustment of LIS courses to include new areas such as ICT skills (Internet searching skills, database management, website design and management and networking). Others are publishing, multi-media applications, electronic resources management and information literacy etc. Tella, Olufemi and Sunday (2018) investigated the ICT skills required for recruitment of LIS professionals in the digital age through survey approach. The results shows that ICT skills such as word processing, spread sheets/excel, power point presentation, knowledge of databases, email/internet skills, hardware/software, web design, mobile technology and social media skills are the most basic ICT skills needed in the digital age. Similarly, Nonthacumjane (2011) presented the key skills and competencies of a new generation LIS professionals to include among others: personal skills (analytical, creative and flexibility), generic skills (communication, critical thinking, and information literacy) and discipline-specific (metadata, digital archiving, content management and database management). While, Narasappa and Kumar (2016) categorized the skills required by LIS professionals in the digital age into four categories: professional competencies, personal competencies, soft skills and ICT skills and networking. Given the importance of ICT skills to the modern day training in librarianship, LIS schools in Nigeria should take up this challenge so that they can go in line with the requirements of the digital age. By doing this, LIS training can be more meaningful because employers in this digital age expect LIS professionals to be conversant with emerging technologies.

b. The aspect of management is also another essential or critical knowledge that LIS professionals should have in the digital age. To manage libraries and other related agencies successfully, LIS professionals should have basic knowledge of

management. Yadav and Gohain (2016) examined the perception of LIS graduates in India regarding the skills needed for employment in the digital age through survey method. The study established among others: budgeting skills, motivational skills, public relations skills and supervisory skills were the most recommended skills. Hence, such skills are the important managerial skills that LIS education in Nigeria should give priority to in order to ensure effective management of information organizations in the digital age.

c. The fact that LIS professionals will no longer be employed in the library only in this digital age demands for the injection of entrepreneurial skills to would be graduates by the LIS schools. This would make LIS graduates to be enterprising and also have the ability to be self- reliant whenever the need arise According to Georgy (2009) some new fields must be incorporated in the LIS curricula e.g. Knowledge Management, competitive intelligence, change and innovation management and project management. Consequently according to the author, LIS curricula can no longer be attached to the potential employers (i.e. libraries), but have to orientate on the different fields of work and the required working qualifications. Similarly, according to Agim (2020) the library profession has gone beyond the acquisition, organization and dissemination of information resources, but has shifted to ICT-based profession which demands entrepreneurial knowledge in the digital age. Therefore, courses in business skills, information brokering, contingency skills, as well as policy, critical, reflective and creative thinking as well as strategic planning are desirable in Nigerian LIS education. Besides, they are critical issues that cannot be handled with levity in this digital age.

d. The acquisition of research skills is also another aspect that should be given prominence by LIS education in Nigeria. According to Yadav and Gohain (2016), the acquisition of research skills not only helps in improvement in researches to be conducted, but also assists in improving technical writing and presentation skills. Therefore, imparting of research skills should be upheld by LIS schools in Nigeria.

e. Another critical area to be giving priority in the digital age is the inclusion of courses with digital library background. Nonthacumjane (2011) stressed that in order to work conveniently in the digital library environment, the new generation of LIS professionals should have basic knowledge of database development and database management systems that are connected to Functional Requirements for Bibliographic Records (FRBR), Resource Description Framework (RDF) as well as related technologies. According to Okeji and Mayowa-Adebara (2020), there is the dire need for digital library education in LIS schools in developing countries that will help equip graduate

librarians with competencies and skills for developing and managing digital libraries in this digital era. This means that LIS education in Nigeria should give priority to this aspect so as to comply with the dictates of the digital age.

f. Other essential areas of consideration include Indexing and abstracting services, information policy and information architecture which are all critical areas in the digital age.

Taking into consideration the global trend in LIS education and perhaps the LIS profession, the challenges appear to be enormous. This consequently has serious implications for the education and training provided. The situation can change through aggressive approach by the LIS educators, professional associations and the heads of the LIS schools. This demands keeping abreast of the current global changes and perspectives. Hence, emphasis should be placed on improvement in teaching and learning resources, recruitment of quality academic staff particularly those with PhD degrees and requisite ICT skills, research and innovation and the total restructuring of the curriculum among others to meet the yearnings and aspirations of the digital age especially in the area of injecting more ICT-related courses. Diso and Njoku (2007) emphasized that the quality of LIS educators is of primary importance, not just in terms of academic or professional qualification, but also in terms of their philosophical outlook, their vision and their ability to deliver. Furthermore, according to Varalakshmi (2010), LIS education has to embrace ICTs as part of course contents with the aim of complying with the requirements of the digital environment. There is also the need for a change in attitude by the government towards funding of education and LIS education in particular. Harmonizations of the nomenclature as well as proper housing of LIS programmes are also desirable.

There is also the need to decrease the number of students' enrolment so as to provide quality education and reduce the overstretching of faculty and facilities. Improvement on national policies for the LIS profession would further boost the image of the profession and ensure its compliance with the requirements of the digital age. Similarly, there is the need for partnership and networking at different stages among LIS schools in Nigeria and even beyond. This would ensure cross-fertilization of ideas for improved LIS education. All these would assist in the design of LIS education in accordance with the changing landscape and the requirements of the digital age and would also enable the LIS schools to know about their current status in the constantly changing global LIS marketplace. It would additionally help in creating awareness about the present status of LIS education in Nigeria. Appropriate handling of such issues is a challenge for LIS educators.

VII.   Conclusion

In the last two decades, LIS education globally has experienced an unprecedented development due to technological advancements and penetration. The discussion above has examined the emerging trends in

LIS education in Nigeria. It traces the historical backgrounds of LIS education in Nigeria. It is important to state that education for the LIS profession has advanced speedily, particularly in the last couple of decades and this has resulted in structural changes in all the aspects of the profession. In addition, changes in the LIS marketplace also require new competencies. Hence, LIS schools in Nigeria need to accept the changes taking place in the profession worldwide and to also upgrade the quality of their programmes so that they can produce skilled graduates that are relevant to this digital age. Moreover, digitalized LIS education in Nigeria will speedily advance and even flourish when LIS schools make judicious use of ICTs to train their students. But the bottom-line lies in their availability. This digital age, devoid of sentiment and overemphasis, has brought about exceptional opportunities to LIS education more than ever before, with many activities evolving by the day. The paper concludes by stressing that all hands must be on deck in Nigeria to ensure compliance with the dictates of the digital age.

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