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# LIBRARY AND INFORMATION SCIENCE EDUCATION AND LEARNING IN A WORLD OF DIFFERENCE

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**ABSTRACT:** *The changes in library operations and service delivery inundated by emerging technologies, pose a need for library and information science educators to adopt a global initiative to resolve curriculum and training issues in library schools in Africa. To this end, this paper reviews Library and Information Science education in Nigeria,Library and Information Science curriculum reforms, ICT and LISE, entrepreneurial skills in LISE and major challenges facing LISE in Nigeria.The paper presented a module for a proposed curriculum, identified the entrepreneurial skills needed by LISE graduates and posited that a dearth of qualified IT professionals in Library schools, poor funding, poor policy implementation among others are the major challenges facing LISE in Nigeria. The study recommended that effective policy implementation is an essential tool to enhance LISE transformation in Nigeria. Also, the opportunities the Information technology application offers will transform library and information science education, and these will help bridge the gap between the two worlds.*

**KEYWORDS**: library, information, science, education, learning, world

## INTRODUCTION

Library and information science is a discipline encompassing knowledge management, knowledge economy, and knowledge dissemination. Library and information science education is a joint concept that consists of library education and information science education. Library education is the specialised formal training for would-be librarians for the acquisition of skills and competences necessary for both library services and transfer of knowledge. In the same vein, information science education is a field of study that equips learners with information collection, classification, manipulation, storage, analysis, interpretation and dissemination skills as well as competencies in transferring information literacy skills to learners. Through the study of library and information science, a person acquires approved skills, for maximum utilization and management of information resources (Abdulrazaq&Ladi, 2017). Library reserves constitute one of the essential tools for carrying out information science activities. Library is a holding of diverse kinds of information materials and tools for disseminating relevant information.

However, one of the most rapidly emerging inventions in today's world are technologies used in collecting, storing and disseminating information which is one of the significant characteristics of a functional library. The emerging technologies have advanced the role of a functional library in service delivery and operations. The change dynamics, according to Adeogun (2003), has changed

and enveloped librarianship, where "dissemination" is being replaced by "communication", "repository" replaced by "database" literature by "knowledge", search by "navigation" The phenomenal changes are inevitable in the present time and era. It is pertinent to state that library services and operations in developed countries are long entrenched in ICT using all the software's artificial intelligence (AI) for both teaching and service delivery. The continuous advancement in the information society is pushing to re-evaluation of all the institutions which work with information, data, and knowledge - indirectly also with culture (Mirja, 1999). In the modern epoch, a library is said to be functional and effective in its delivery service when it compromise with growing trend of digital innovations (Sun & Yuan, 2012).

In spite of these global changes, the teaching and learning of library and information science in Nigeria has not witnessed much evolution with time, because great constraints exist in the utilization of emerging information technologies for library services delivery, teaching and learning process (Abdulrazaq&Ladi, 2017). Surprisingly, various library services such as resource acquisitions, management, dissemination, teaching and learning are not yet free frommanual delivery in most university libraries in Nigeria. However, Diso and Njoku (2007) had earlier noted that unstable political culture, poor infrastructure, illiteracy, insecurity, poor reading culture, poor policy formulation and implementation are constraints that have undermined the involvement of ICT in Nigerian Libraries.

In the present perspective, education in Africa may continue to be stagnated if necessary steps arenot taken Okojie (2008) stressed that for reforms in the library and information science sector especially in the library schools, ICT in LISE curriculum and standard facilities should be a top priority to bridge the gap. However, the key issues are to embrace technology in its entirety, review the LISE curriculum and incorporate emerging technologies in LIS education for broad learning. The fact remains that technology today has modernised the methods of teaching and learning, broadened the curriculum which is now dynamic and basically learner-centred, making learners more involved in the experience that brings changes in behaviour, and makes teaching simpler for teachers through utilisation of projectors, smart boards, various technologies like video conferencing, andwhatsapp to communicate. To this, Hargreaves in Adeogun (2003), describes education systems now as "mere porous and permeable" because time and distance has been eliminated, thereby making the traditional classrooms wall collapsed into a super highway where students and teachers now need new skills to navigate the world wide web for information. Aina (2007) reiterated that most library schools in Nigeria have not departed from the traditional library courses and methods of teaching even in the wake of new technologies.

The changes in library operations and service delivery inundated by emerging technologies, pose a need for library and information science educators to adopt a global initiative to resolve curriculum and training issues in library schools in Nigeria.This study therefore reviewed literature under the following subheadings;

- Emergence of Library and Information Science Education in Nigeria; (LISE)
- Library and Information Science Education and Curriculum Reforms;

- Information and Communication Technology (ICT) and LISE;
- Entrepreneurial skills In LISE;
- Challenges in LIS education and Learning in Nigeria

**Emergence of Library and Information Science Education in Nigeria**

The study of library and information science commenced in the 20th century in Africa, Raju (2005); Ocholla (2007); Egbukole (2010) reported that South Africa first started a library school in 1938. Nigeria established the first library school in 1960 at the then University College Ibadan, now the University of Ibadan to train professionals to man the university libraries after the Nigeria independence. This establishment emerged from the seminar organized in University of Ibadan by UNESCO in 1953. Stemming from the seminar, there arose a need to train a special cadre of professionals to manage information necessary for knowledge impartation. The identified need therefore prompted the formation of West African Library Association (WALA) which was championed by John Harris and saddled with such responsibilities as establishing a library school for the training of professional librarians in the sub-region (Abdulrazaq&Ladi, 2017). Also,Aina (2007) has it that in Nigeria, library science programme at bachelors level was first offered by Amadu Bello university, Zaria in 1968. Today, Nigeria can boast over 43 Library schools in Nigeria with revised curriculum for library and information science and benchmark for practicing the profession. However, the implementation of this curriculum is riddled with challenges.

**Library and Information Science Education and Curriculum Reforms**

Curriculum development and implementation is the foundational guide to education; it changes as the society evolves and adopts new strategies. Mba (2003) defined curriculum as "the planned and guided learning experiences and intended learning outcomes, formulated through the systematic reconstruction of knowledge and experiences under the auspices of school, for the learners continuous and wilful growth in personal and social competence"

For Lawal (2003), curriculum is the instrument by which the objectives of a programme are translated through a series of lectures, evaluation, seminars, and tutorials into knowledge skills. Curriculum in education is designed based on the needs and hopes of the society. It should address and equip its recipients with adequate skills and knowledge to fit the changes arising from the society (Okoro, 2007). In the 21st century, drastic changes are in existence through intellectual development, technological innovations particularly information and communication technologies (ICT). This consistent trend and development pose great challenge for library and information science education curriculum in Nigeria (Igwe, 2005). Therefore, the contemporary curriculum must be equipped with learning experiences that would enable learners to survive in the innovative world.

Comparing the type of learning experience organized for would be librarians in developed nations to that of those in the developing nations is contentious. Nigeria has been recycling the 1960 curriculum used by colonial administrators and early library educators whereas the calibres of librarians trained at that time were meant to provide manpower for libraries especially schools and university libraries of that era. However, Oparah (2006) argued that there was no harmonized

curriculum for Nigerian University Library and Information Science schools until 1999. Again, the debate about reviewing the LIS curricula has been on-going in recent years but unfortunately, substantial corrections are yet to be done at the national level, except for some cosmetic changes (Simisaye, 2014).

With global changes and demand for reforms in all sectors comes the need for library educators and accrediting bodies to swing into action and insist the implementation in all library schools in Africa and this should be done without delay to avoid widening the gap, The Library and information science curriculum should change with evolving changes in the environment (Okoro, 2007). Obadare (2019) stated that the roles and responsibilities of librarians have shifted from assisting students find information in the library holding, their new role is imperative to provide services and instruction regardless of place, time or format. Curriculum reforms in LISE should therefore follow the trend of present demands. However, critical issues affecting library education in this part of the world include the type of curriculum, staffing, facilities, and non-compliance with ICT utilisation for effective learning outcome.

Agina-obu (2005) asserts that curriculum designs are not static and must be in tandem with societal changes because it is concerned with the overall rationale of any educational programme. Supporting the views, Ogbomo and Ogbomo (2008) reported that most developed countries' advancement in LIS education was traced to the adoption of ICT in their teaching techniques because technology has changed the dynamics of library practices and service delivery. In conformity to the above assertion Egbukole (2010) reiterates that library schools in Nigeria need ICT to enhance advancement in methods of delivering instruction. Aina (2007) had earlier called for curriculum reforms, so that new courses or modules will be injected to meet the library global demands, without undermining the traditional core courses, whose functions have long been overtaken by information technology. Traditional library courses should be taught as core and woven with ICT to avoid losing the essence of librarianship (Lawal, 2003). Jowkar and Hamdipoor (2001), Ebrahimi (2009), Egbukole (2010) and Simisaye (2014) all advocated for a review of the BLS curriculum and suggested the integration of IT courses and ICT for instructions for better output. The argument is that some of these traditional courses are obsolete, and overtaken by computer technology like cataloguing and classification, reference services, indexing and abstracting, etc. Again, Aina (2007) and Simisaye (2014) raised a concern that educating librarians in 21$^{st}$ century developing countries where technology is at its lowest ebb is challenging, he highlighted the facilities required for implementing the proposed curriculum, and the minium facilities to include are quality staffing, information resource centre, ICT laboratory, indexing and cataloguing laboratory, and proposed a curriculum design that incorporates all modules for LISE as follows!

**Table 1: Proposed modules for LISE curriculum in the world of diference**

| LISE Curriculum content | Percentage |
|---|---|
| LIS | 50 % |
| ICT | 25% |
| Rural communities information services | 7.5% |
| Archives & Records Management | 6% |
| Publishing | 4% |
| Public relations | 2.5% |
| Basic Statistics and Research techniques | 2% |
| Communication and writing skills | 2% |
| Entrepreneurship in LIS | 1% |

In view of the above, one can argue that technological innovations for lecture delivery ,and teaching of information technology modules in LIS education should be a standard requirement for the programme to meet international standard as found in developed countries. This is because education and learning in developed countries have long shifted from the traditional methods of teaching and learning to new ways of learning using trendy technologies. The contention and agitations are in the front burner, but they are not without hitches.The professional body and the NUC who are commissioned to enforce the curriculum reforms are slow about it. On the contrary, the developed countries have woven information and communication technology into library education, with constant researches, and building of IT infrastructure, training and retraining of personnel to man the facilities. All of these continually widen the gap between the two worlds. It is worthy of mention that the present need in the job market is interdisciplinary; the LIS curriculum therefore, must be multidisciplinary to accommodate modern technology for job effectiveness and security. This supports Adeoguns (2003) earlier submission that ICT should be given ample modules in LIS curriculum content, as this will help the students in the much needed skills for knowledge sharing, knowledge management and transfer.Lawal (2007) advised that for visible reforms in the library profession, the following criteria must be applied: existence of a body of knowledge, prescribed courses of training, certification and internship, specialised skills and techniques. The unprecedented changes in the society and the emergence of information technology and knowledge expansion placed a demand on educators to play their role in the information world, by integrating information technology courses, trendy apps and web designs taught in library schools in developed countries.

**Information and communication Technology (ICT) and LISE**

Many institutions in sub-Sahara Africa are still grappling with information communication technology (ICT) needs for students in this digital era, where information is transmitted instantaneously. Akintunde (2004) maintains that the difficulty may not be far from poverty, poor infrastructural development, lack of expertise, and poor national information policy. Changes are taking place and the library school being a part and parcel of the society must change along that line because the overwhelming successes recorded by library schools in advanced countries are linked to the integration of Information and communication technologies (ICT) in the curriculum.

Russell (2000) reported that library schools in developed countries are advanced users of cutting edge technologies such as interactive boards, posting curriculum and lecture notes, homework, assignment, on line evaluation, and video conferencing as well.

It is on this premise, that the library and information science regulatory body should be on the trail of schools not complying with the benchmark and further impose sanctions as the need arises.If not checked, the non-compliance will inadvertently place developing countries far behind. The Librarians' Registration Council of Nigeria (LRCN) established under Act 12 of 1995(CAPL 13 LFN 2004) as a parastatal of the Federal Ministry of Education (FME) to regulate and standardize the practice of the profession, has long joined the initiative with other stakeholders to harmonise and design a curriculum for LISE with a view to making a national, uniform curriculum. There is still emphasis on traditional core courses.This notwithstanding, there are twenty (20) IT related courses out of 48 proposed courses for Nigeria universities. The benefits of integrating ICT in LISE include easy collaboration amongst researchers; students will learn how to design web pages, manage database, and develop software for use especially now that there is a dire need for entrepreneurial skills.

**Entrepreneurial skills in LISEducation**

The introduction of entrepreneurial studies into the Nigeria education curriculum has given LISE another boost; the initiatives are geared to promote skills acquisitions amongst undergraduates. Ezegbe, Eskay and Anyanwu (2013) assert that entrepreneurship education is a process of social training through which the strong innovative skills in business planning and marketing, modern technology, finances accounting, good attitudes, values and business ethics are inculcated in the learner and school curriculum With the premium on ICT and other related courses, LIS educators should take advantage and harmonize some entrepreneurship skills with LISE courses like indexing and abstracting, web design, database designs, book production and binding, printing, editing, information packaging and brokering to form the curricular. Supporting the views, Ekoja and Odu (2016) proposed the inclusion of "infopreneurship" into the curriculum to foster business models based on packaging, gathering, and distribution of information products and services. This will also ensure that LISE graduates be competent in the designing of web systems for data management, storage, retrieval and dissemination especially in the information age where information management and entrepreneurial skills are the end thing that could assure LISE graduate independency and freedom from unemployment. Aboyade (2018) maintained that it will help to cushion the ravaging influence of unemployment among Nigeria graduates. Nwosu (2009) posited that information is regarded as a valuable resource equivalent to natural resources in this modern era, therefore,libraries should be viewed as business enterprise, therefore the concept of information must change from a free resource to a marketable resource that can necessitated the revaluation of free services in the libraries. In the same context, Elonye and Uzuegbu (2013) regard information in this era, as a veritable economic resource marketable commodity and a social wealth. They further proposed that technological innovations are borne out of information sourcing, processing and dissemination, thereby empowering and creating wealth for information professionals. This will also boost the LISE curriculum if eventually approved and implemented,

**Challenges of LIS Education in Nigeria**

There are many challenges facing education and learning in library schools across the continent of Africa including Nigeria.

The Major Challenges are:

i) **Dearth of professional IT librarians to teach in most of the LIS schools**: It is well-known that in today's technology driven world, the well-being of any society depends on its abilities to harness it human resources through a dynamic and innovative educational system that thrives on, and propels technological development (Okello-obura&Kigongo-Bukenya, 2011). The making of modern information professionals is threatened by the lack of professionals in IT to train the upcoming librarians, and if this trend continues then the gap between the developed and developing countries will continue to widen. The alarming rate at which student population has been growing in recent years mounts pressure on the educators and stretches the existing facilities. LIS education and training has become digitalized in the world of difference and unfortunate, there exist insufficient professional librarians who would effectively utilized contemporary library softwares for teaching LISE.Eze and Uzoigwe's, (2013) findings showed that lack of professional IT librarians in library schools is a major factor bearing on the under-utilization of ICT in the teaching and learning of LIS. Recent findings have also attested that library educators phobia for emerging technologies for libraryinstructions, non attendance to workshops/seminars, among others contribute to the unavailability of professional IT librarians in library schools. What this implies is that there would be a consistent replication of half-baked librarians who may not be able to display latest competencies in their professions.

ii**) Poor infrastructure**. In equipping the prospective LISE graduates, it is paramount to note that the teaching mode adopted by many library schools in Nigeria cannot withstand the modern trends, as computers and other ICT facilities are highly required. In the view of Saka (2015), there are no facilities provided and, as such, the acquisition of ICT skills is low at undergraduate levels. This is because of the inadequate computer laboratories, which has led to low level ICT skills/practices. In some library schools in Nigeria, office space for lecturers is a big challenge, learning conditions are deplorable, with most students standing throughout the two hours lectures; Apart from this, there are no projectors , no public address system and no good seats. Common issues of poor infrastructure in library and information science education ranges from lack of adequate computer facilities for teaching and learning, epileptic power supply, low bandwidth, internet failure, low maintenance ability and lack of contemporary library IT softwares for teaching (Ocholla, 2007; Jensen, 2005; Olaifa&Oyeniyi, 2014).

**iii) Poor funding :** This leads to other plights facing the effective delivery of LISE in Nigeria. Obsolete facilities, epileptic power supply, dilapidated infrastructure, lack of technical expertise to handle some of the equipment, lack of spare parts for the maintenance of the equipment amongst others are the natural results of poor funding of library and information science education programmes in library schools. Having advocated for the effective utilization of ICT in LISE curriculum delivery,Olaifa and Oyeniyi (2014) attested that the issue of underfunding is amajor quandary confronting the utilization and sustainability of ICT. Due to the fact that library offer

free services to the students in research institutions, in response to recent ICT implementations in library schools, there exist a lot of challenges in sourcing for funds to sustain libraries. It is in response to this that Ishola (2014) asserts that fee-based services have been advocated and accepted as the panacea to the economic depression in libraries. Nwosu(2009) also posited that the reduced funds allocated to library as well as change in the concept of information education from a free resource to a marketable resource in this era have necessitated the re-evaluation of free services in the libraries. However, in other to strike a balance in this fee-service advocate, it has been approved by NUC that 10 percent of the university approved recurrent annual budget should be allocated for library development, that students' library fees be to their annual payment. LIS education and training is becoming highly dependent on modern computer hardware and software, efficient internet access and connectivity, computer literate and highly skilled IT staff and well equipped computer laboratories.Unfortunately, funding of LISE schools does not meet these requirement in most LIS schools in Africa (Ocholla, 2007).

**IV) Poor policy implementation:** Policy is a set of rules and guidelines to achieve a desired purpose**.** In order to address the challenges of globalization and the requirements for ICT based library training, the implementation of modern educational policies is indispensable. This is so because they clarify existing conditions and objectives, and articulate important actions and strategies to reach the desired goals (Aghoghovwia, 2014). However, it has been advanced that Nigeria's education system is equipped with excellent educational policy but the problem lies in the aspect of effective implementation. little wonder, Makinde (2005) asserted that implementation often turn out to be the graveyard where many polices are buried. The implementation of policies especially in the area of advancing on the traditional means is usually a difficult task that requires enabling environment and consistent evaluation.Where implementation orders are clear, consistent and accurately transmitted, the absence of adequate resources will result in implementation problems (Makinde, 2005).In LISE, various policies have been proposed gearing towards the replication of competent librarians who skillfully carry out library services with modern ICT facilities. For instance, LISE has in its policies to prepare information professionals to be leaders and change agents in meeting the needs of a diverse and evolving society. The evolving society is a society of high use of information and communication technologies. It is unfortunate that library schools in Nigeria have little/no resources for implementing this policy (Aghoghovwia, 2014)

**v) ICT illiteracy**: For effective use of ICT in teaching and learning of LISE, library educators must be well equipped with ICT literacy skills (Anyim, 2018). At present, there exists a wide gap to be bridged among the librarians and the world of difference. This is due to the fact that majority of the present LIS educators were not trained in ICT and computer applications in their field, so they lack the necessary skills and exposure which invariably affects compliance and utilisation even when the facilities are available. ICT illiteracy is a major challenge that discourage the utilization of ICT facilities in library schools. Analysis shows that while a minorityof librarians are conversant with basic operations of computers, a vast majority require further training (Olaifa&Oyeniyi, 2014).

## CONCLUSION AND RECOMMENDATIONS

In the light of the highlighted delimitations, a number of strategies must be deployed to upgrade education and learning in Nigeria to reduce the gap currently experienced.
These strategies include:

- **Curriculum Review and effective implementation**: Designing a workable, integrated and broad curriculum for the LIS education programme as stipulated by the National Universities Commission ( NUC) policy guideline with the assistance of the professional association like the NLA and other subsidiary bodies interested in the growth and development of LISE will be laudable. In addition, implementation of the reviewed curriculum should be taken seriously so as to ensure the replication of librarians who will be fit for contemporary information challenges. In response to this, accreditation of LISE programme must be regular under strict supervision to ensure that proper learning is taking place using the approved methods and facilities judiciously.
- **Provision of adequate infrastructure**: Information Technology (IT) is an expensive venture. Government must develop its IT infrastructure and fund the necessary subscription so that information communication technology can be utilised for teaching in the education sector especially in LISE. Library schools should also be equipped with relevant infrastructure that will facilitate effective teaching and learning.
- **Staff and training**: Library is an organization that should comprise information professionals. Qualified library educators should be engaged to teach LISE in library schools and there should be in-service training organized for librarians who are unable to use modern information tools and software.This will help to eradicate ICT illiteracy among library educators. Regular workshops and seminars for educators within and outside the shores of Nigeria will help to close the gap, so that through capacity building, new techniques will be adopted to help them adapt to modern trends and developments (Ochogwu (2016); Akintunde, 2004).
- **Provision of fund**: It is a known fact that education is capital driven, therefore, all the financing bodies must cooperate so that researches can be funded. Without adequate funds laudable researches cannot be undertaken in academics. Therefore, Government should support academic institution with adequate funding, so as to facilitate research and dissemination of scientific discoveries and information management.
- Finally, Library and Information Science Education and Learning in a World of Difference can be improved, if government adheres to its policy strictly, by providing enabling environment for teaching and learning through the provision of quality infrastructure, adequate funds for capacity building for educators and exchange programmes for exposure. While the university management on the other hand, must encourage collaborative researches, provide soft loans for educators to purchase private laptops. This is trendy is in some Nigeria universities like the Ignatius Ajuru University of Education, Port Harcourt, Nigeria, other institutes should adapt this practice as it will promote effective teaching and learning.

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