

University of Nebraska - Lincoln
DigitalCommons@University of Nebraska - Lincoln

Library Philosophy and Practice (e-journal)

Libraries at University of Nebraska-Lincoln

9-10-2019

An Evaluation of Library and Information Science Education in Some Selected Nigerian Universities

George Azubuike Onwueme

Federal Polytechnic of Oil and Gas, Bonny, Rivers, onwuemegeorge@yahoo.com

Millie N. Horsfall

University of Port Harcourt, millie.horsfall@uniport.edu.ng

Chukwuemeka O. Azubuike

Society for Family Health, Abuja, azubuike_chukwuemeka@yahoo.com

Follow this and additional works at: <https://digitalcommons.unl.edu/libphilprac>

 Part of the [Library and Information Science Commons](https://digitalcommons.unl.edu/libphilprac)

Onwueme, George Azubuike; Horsfall, Millie N.; and Azubuike, Chukwuemeka O., "An Evaluation of Library and Information Science Education in Some Selected Nigerian Universities" (2019). *Library Philosophy and Practice (e-journal)*. 2922.
<https://digitalcommons.unl.edu/libphilprac/2922>

AN EVALUATION OF LIBRARY AND INFORMATION SCIENCE EDUCATION IN SOME SELECTED NIGERIAN UNIVERSITIES

By

George Azubuiké Onwueme CLN
Federal Polytechnic of Oil and Gas,
Bonny, Rivers State.
onwuemegeorge@yahoo.com

Millie N. Horsfall CLN, PhD FCAI
Donald Ekong Library
University of Port Harcourt
Port Harcourt, Rivers State
millie.horsfall@uniport.edu.ng

Chukwuemeka Ogbonnaya Azubuiké CLN
Society for Family Health, Abuja
azubuiké_chukwuemeka@yahoo.com

ABSTRACT

This paper intended to investigate the perspective of final year students of Nigerian Library and Information Science (LIS) schools in ascertaining the current status of LIS education and training in Nigeria. This has been necessitated by the fact that prospective fresh graduates of LIS schools are expected to be fully formed and equipped in providing timely and relevant information services to their immediate environment and the society at large especially in this era where the continued advances of ICTs upon the profession even places greater expectations on the prospective LIS professionals to be agents of transformation and development in Nigeria. The studies revealed that the current sets of students are predominantly between the age bracket of 20-24, with a large enrollment of female students. Cyber Security and Digital Archiving were ranked the least courses included in the departmental curricula. Most of the respondents agreed that Library and Information Science Education is very educative. There is low satisfaction among the respondents in the quality of faculty available in the Library Schools. Facsimiles and Scanners are least accessed and utilized ICTs in the Library Schools. There is a general low rate of ICTs access and utilization in the Library School by the students especially on a daily basis. Power Outage, inadequate computers and limited access and utilization of ICT in the computer Laboratories and departmental Libraries are the major challenges confronting the students in the Library Schools. Recommendations were made for all stakeholders of Library and Information Science Education in Nigeria.

Keywords: Library and Information Science (LIS) education, Curriculum, Entrepreneurship, ICTs, Transformation of Society

INTRODUCTION

With the increasing advances and effects of Information and Communication Technologies (ICTs) upon the Library and Information Science (LIS) profession, there are growing concerns of what kind of LIS education and training should be in place in producing the ideal 21st century LIS professional. An ideal Librarian, having been well trained and formed, is expected to be ICT savvy and willing to embrace new technologies, he or she should be technically competent, enterprising and innovative, highly knowledgeable and current, organized and resourceful, demonstrate leadership and mentorship capabilities, amidst other relevant core competencies and skills. (Farkas, 2006; Okoye, 2013; Uzohue and Yaya, 2016)

Globally, the demand for the services of Librarians and Information Professionals across various levels of educational institutions and other information seeking environments is on an upsurge. Ironically, the relevant workspace for absorbing fresh graduates of Nigerian LIS schools seems inadequate, which is just a mirror to the already pathetic unemployment crisis in Nigeria. Many of the LIS schools until recently, have not been preparing their graduates to be self-employed or job creators. Hence, Saka and Ahmed (2015) asserts that “it is crucial for Library and Information Science (LIS) schools in Nigeria to incorporate entrepreneurial librarianship into their curriculum so that undergraduates would be equipped with adequate skills for self-employment opportunities with high level of productivity and efficiency. “

With these developments affecting the LIS profession, a lot of expectations are now placed before the various Library and Information Science Education schools to turn out competent and knowledgeable graduates who can help navigate the profession through this significant era of the information high way and contribute meaningfully to the transformation of the Nigerian society. Emmanuel (2017) stated that “to all intents and purposes, Library and Information Science Education (LISE) is meant to produce information professionals who are able to provide quality leadership and adapt to technological change in an information-based

environment.” Therefore, a major responsibility of schools of library and information science (LIS) is to ensure that they are developing curricula that are responsive to current trends and needs of the profession, which can effectively produce competent graduates capable of coping with the challenges of ICT applications, access and usage to meet the information needs of all the segments of the society while Mohammed (2008) warned that LIS schools in developing countries like Nigeria need to be more vigorous in attracting quality students to their programmes because there is stiff competition among other fields of study in attracting quality candidates into their respective programmes at all levels.

Furthermore, Edegbo (2011) states that the provision of opportunities to meet the basic learning needs of information professionals is a first step towards preparing Library and Information Science schools in Nigeria for the emerging global society. The relevance and viability of library and information science education in Nigeria requires looking at both the access to and quality in new ways to enhancing the quality of products turned out from the universities into the labour market. The survival of Library and Information Science education in Nigeria depends largely on the quality of faculty and students.

Therefore, this paper seeks to investigate the perspective of graduating students of some selected LIS schools as regards the adequacy of LIS education and training received and their readiness to be active players of the information highway, thereby bringing transformation to the Nigerian society and the world at large.

Statement of the Problem

Many students arrive the various LIS schools with high expectations, hoping to be well trained and prepared for the work life after graduation but it seems these expectations were not be met as the various LIS schools seems to battling with a lot of challenges such as inadequacies in the current curriculum, provision of ICTs and lack of ICTs skilled faculty.

Objectives of the study are as follows:

1. To determine students' perception of the curriculum in use.
2. To determine the students' satisfaction of the quality of faculty available.
3. To determine the students' access and utilization of ICTs in their LIS schools.
4. To identify challenges encountered in the course of their studies in the LIS schools.
5. To seek solutions in confronting the challenges of LIS education in Nigeria.

LITERATURE REVIEW

History of Library and Information Science Education in Nigeria

There are many previous studies (Mohammed, 2008; Abubakar and Hassan, 2010; Ahmed, 2012; Abioye, 2013; Chimah and Nwokocha, 2015 etc) that have dwelt extensively on the historical development or evolution of Library and Information Science (LIS) education in Nigeria. These studies generally, have traced the beginning of LIS education in Nigeria to the UNESCO seminar of 1953 held at the University College Ibadan, which was the catalyst for the establishment of the Institute of Librarianship at the same University College, Ibadan in 1959.

According to Mohammed (2008), the establishment of the first LIS School in Nigeria in 1959 at the University of Ibadan (UI) was a by-product of the Carnegie Corporation of New York's concern for library development in British West Africa when in 1957, it sent Professor Harold Lancour of Pittsburgh University to study the library needs of the region. The report recommended among other things the establishment of the Institute of Librarianship (now Department of Library, Archival and Information Studies) for training librarians leading to the award of Diploma in Librarianship Certificate at graduate level. The resolutions of the 1953 UNESCO seminar gingered the participants to strongly agitate for a formalized training institute on library and information science education. However, academic activities took off in 1960 as the first set of students was admitted. Prior to this, there had been rudimentary training programmes for Library Assistants coordinated by some libraries. The earliest LIS training(s) were meant to prepare the students for the British Library Association examinations. However,

as time went on with the increasing number of various types of higher institutions in the country along with an increase in libraries, the demand for more library and information professionals also led to an increase of LIS training schools in the 1960s and throughout the 1970s as five other university-based library schools were established at Ahmadu Bello University, Zaria, 1968; Bayero University, Kano, 1977; University of Maiduguri, 1978; Imo State University, 1981; University of Nigeria, Nsukka, 1983. Also, the earliest LIS educators were either foreigners or locals who had received their education abroad. The beginning of the 1990s witnessed an expansion in the number of LIS schools in Nigeria which are established in various institutions. According to Diso and Njoku (2007), the subsequent establishment of federal, state and private universities has now brought the numbers of such library schools to more than a dozen which continue to grow with the growth of private and state universities. Presently, LIS education in Nigeria is also provided in Polytechnics and Colleges of Education, as well as in some major libraries. (Ahmed 2012)

LIS CURRICULUM

Ocholla (2000) in Abubakar and Hassan, 2010 described a curriculum as a fundamental part of any education or training programmes which gives information on content, purpose, methods, etc. of a programme or course of study. Chu (2010) stated that “In any educational program, the curriculum perhaps is the best barometer of its nature and content. The same holds true for LIS education.” Ononogbo (2015) further asserts that “the building block of LIS education is the curriculum. It is an essential part of any education or training. It specifies a list of courses or modules to be taught or followed as well as the time or duration of a course. The end product is a graduate fashioned out and made functional to the extent the curriculum is designed.”

In relating the concept of curriculum to the latest trends and developments being witnessed in LIS education and training today, the curriculum of LIS education can be said to be dynamic and progressive. Ononogbo (2015:2) observed that the trend of teaching and the contents of the curriculum are changing fast with some of the notable LIS schools in the United Kingdom ~~are~~ gradually dropping the library components of the studies and now emphasizing the information science aspect. This point is further strengthened by what IFLA considers as the core elements of a LIS curriculum in its most recent set of guidelines for Professional Library/Information Educational Programs, released in 2012. The core elements of a LIS curriculum should include the following:

1. The Information Environment, Societal impacts of the information society, Information Policy and Ethics, the History of the Field.
2. . Information Generation, Communication and Use.
3. Assessing Information Needs and Designing Responsive Services
4. The Information Transfer Process.
5. Information Resource Management to include Organization, Processing, Retrieval, Preservation and Conservation of Information in its various presentations and format
6. Research, Analysis and Interpretation of Information.
7. Applications of Information and Communication Technologies to all facets of Library and Information Products and Services
8. Knowledge Management.
9. Management of Information Agencies.
10. Quantitative and Qualitative Evaluation of Outcomes of Information and Library Use.
11. Awareness of Indigenous Knowledge Paradigms.

In addition to these elements, there has been an increasing emphasis on incorporating entrepreneurship into the curriculum of LIS education in Nigeria. This is in view of the growing

unemployment rate in Nigeria and the seemingly shortage of opportunities for LIS graduates to get meaningful employment to practice their profession. Ochogwu (2015) opined that “the curriculum of LIS schools should contain practically oriented courses that could facilitate self-employment, job creation and wealth creation.” Edewor and Omosor (2012) further stated that Entrepreneurial librarianship therefore concerns itself with stimulating an entrepreneurial spirit with a view to creating innovation or original thinking in terms of information resource design and development. Nigerian LIS curricula should be tailored in this manner to enable librarians and would be librarians develop skills, knowledge required to outperform other competitors in the service of library and information delivery.

Challenges of LIS education in Nigeria

Edegbo (2011), Ochogwu (2015) and Emmanuel (2017) have generally identified the following as challenges of LIS education and training in Nigeria: -Lack of ICT infrastructure, over-enrollment, inadequate funding, inadequate staff and expertise, unreliable power supply and changing nature of ICT. Ochogwu (2015) further identified the inabilities of Heads of LIS schools in engaging in the acts of lobbying and advocacy to get what they really need from their Funders or parent institutions. Kalu and Obasi (2015) extensively discussed the crisis or challenges of nomenclature and proper placement of LIS education in Nigeria. They further lamented that the Professional bodies like the Nigerian Library Association (NLA) and the Librarians’ Registration Council of Nigeria (LRCN) have not done enough in positively impacting on standards for LIS education and training. This point is further supported by Ahmed (2012) who stated that “unlike other prominent professional bodies, there has not been a professional accreditation on the platform of the Nigerian Library Association (NLA) to evaluate the programmes in the schools. Bodies such as Nigerian Bar Association, Nigerianl Medical Association to mention but few, do embark on accreditation separate to that of the controlling

bodies like National Universities Commission, National Board for Technical Education and National Commission for Colleges of Education. The absence of a specialized accreditation for the Nigerian library schools is affecting such institutions negatively.” Kalu and Obasi (2015) expressed concerns that there seems not to be an acceptable position on where LIS education should be placed. They however suggested that LIS education should be classified as a social science, which studies human behaviour in relation to the satisfaction of information needs and information seekers. Another major challenge that has been identified by Mohammed (2008) and Ahmed (2012) is the lack of ICT skills among the faculty. It is a major issue in Nigerian library schools that quite a number of library and information science educators do not have the required knowledge in ICT for library and information service. Some of those who have knowledge in ICT cannot practically educate their students effectively. Similarly, some computer scientists employed in some library schools are also handicapped in the field of librarianship and thus ineffective in their teaching. Mohammed further advised that there should be a deliberate recruitment of Librarians with good computer or ICT backgrounds.

RESEARCH METHODOLOGY

The study adopted a descriptive survey research design, using the simple random sampling method. The questionnaire was used as data collection instrument. The targeted population of the study is the final year students of three selected LIS schools in the southern part of Nigeria, namely University of Benin, Benin (UNIBEN), University of Ibadan, Ibadan (UI), University of Nigeria, Nsukka (UNN). The total population of the three selected LIS schools was put at 150. The sample size from the total population of study is 110 at 95% confidence level and 5% which supports Glenn (2003) criteria for specifying a sample size.

Response rate

Table 1: response rate

Institution	Frequency	Percentage %
UNIBEN	30	41.1
UNN	16	21.9
UI	27	37.0
Total	73	100

A total of one hundred and ten (110) questionnaires were distributed among the three selected LIS schools. A total of 73 copies of the questionnaires were duly completed and returned, representing a response rate of 66.4%

Analysis and Interpretation of Data

Table 2: Distribution of population by Gender

Gender	Frequency	Percentage %
Male	19	26.0
Female	50	68.5
Not applicable	4	5.5
Total	73	100

Table 2 indicates that 50 out of 73 percent of the respondents were female with 68.5% while 19 (26%) were male and 4 of the respondents with 5.5%, did not indicate their gender. This clearly shows that there is a high enrolment of female students into the Library and Information Science profession.

Table 3: Distribution of population by age

Age	Frequency	Percentage %
20-24	60	82.2
25-29	9	12.3
>30	2	2.7
Not applicable	2	2.7
Total	73	100

Table 3 indicates that 82.2% of the respondents are in the age bracket of 20 -24 while those that are within the age of 25 – 29 are represented by 12.3% and beyond 30 years are ranked the lowest with 2.7%.

Table 4: Distribution of population by previous working experience in the library

Working Experience	Frequency	Percentage
Yes	11	15.1
No	47	64.4
Not applicable	15	20.5
Total	73	100

Table 4 indicates that 11 out of 73 respondents have previous work experience in the library before their enrolment into the Library school with 15.1%. 47 respondents indicated No while 15 respondents neither indicated their working experience.

Table 5: Are the following courses included in the Departmental Curricula?

COURSES	YES	NO	N/A	TOTAL
Knowledge Management	65 (89.0%)	7(9.6%)	1(1.4%)	73 (100%)
Information Systems and Network	53(72.6%)	15(20.5%)	5 (6.8%)	73(100%)
Entrepreneurship in Library and Information Science	37 (50.7 %)	32(43.8%)	4 (5.5%)	73 (100%)
Cyber security	13 (17.8%)	56 (76.7%)	4 (5.5%)	73 (100%)
Information Literacy	58 (79.5%)	10 (13.7%)	5 (6.8%)	73 (100%)
Information Ethics	47 (64.4%)	22 (30.1%)	4 (5.5%)	73 (100%)
The Information User	71 (97.3%)	2 (2.7%)	-	73 (100%)
Information Technologies	70 (95.9%)	3 (4.1%)	-	73 (100%)
Foundations of Information	35 (47.9%)	31 (42.5%)	7 (9.6%)	73 (100%)
Oral Information and Indigenous Knowledge	59 (80.8%)	11 (15.1%)	3 (4.1%)	73 (100%)
Application of Software Packages In libraries, Archives and Information Centers	58 (79.5%)	12 (16.4%)	3 (4.1%)	73 (100%)
Digital Preservation and Conservation of Information Sources	61 (83.6%)	9 (12.3%)	3 (4.1%)	73 (100%)
Digital Archiving	34 (46.6%)	36 (49.3%)	3 (4.1%)	73 (100%)
Marketing of Library and Information Products and Services	43 (58.9%)	26 (35.6%)	4 (5.5%)	73 (100%)

From Table 5, Information User ranked the highest course included in the departmental curricular with 97.3%, Information Technologies ranked the second to the highest with 95.9%,

next to knowledge Management with 89.0%. This supports Ononogbo (2015:2) observation that the trend of teaching and the contents of the curriculum are changing fast with some of the notable LIS schools in the United Kingdom are gradually dropping the library components of the studies and now emphasizing the information science aspect. Cyber security ranked the least course with 17.8%, next to Digital Archiving with 46.6%.

Table 6: What is your perception of the curriculum in use in your Library School?

PERCEPTIONS	SA	A	D	SD	N/A	TOTAL
Innovative	28(38.4%)	32 (43.8%)	6 (8.2%)	2 (2.7%)	5 (6.8%)	73 (100%)
Educative	48 (65.8 %)	23 (31.5%)	-	-	2 (2.7%)	73 (100%)
Lucrative	26 (35.6%)	27 (37.0%)	11 (15.1%)	3(4.1%)	6 (8.2%)	73 (100%)
Researchable	34 (46.6%)	34 (46.6%)	2 (2.7%)	1 (1.4%)	2 (2.7%)	73 (100%)
Dynamic	17 (23.3%)	40 (54.8%)	11 (15.1%)	2 (2.7%)	3 (4.1%)	73 (100%)
Visionary	18 (24.7%)	32 (43.8%)	14 (19.2%)	2 (2.7%)	7 (9.6%)	73 (100%)
Unattractive	8 (11.0%)	14 (19.2%)	31 (42.5%)	16(21.9%)	4 (5.5%)	73 (100%)
Limited work prospects	9 (12.3%)	16 (21.9%)	29 (39.2%)	14 (19.2%)	5 (6.8%)	73 (100%)
Traditional	11 (15.1%)	18 (24.7%)	33 (45.2%)	6 (8.2%)	5 (6.8%)	73 (100%)
Boring	4 (5.5%)	14 (19.2%)	38 (52.1%)	12 (16.4%)	5 (6.8%)	73 (100%)

From Table 6, the respondents Strongly Agreed that Library and Information Science Education is most Educative with 65.8%, next to Researchable with 46.6% while the respondents Strongly Disagreed that Library and Information Science Education is unattractive with 21.9% next to Limited work prospects with 19.2%

Table 7: Are you satisfied with the quality of faculty available to teach ICT related courses in your Library School?

Quality of Faculty available	Frequency	Percent%
Yes	19	26
No	38	52.1
N/A	16	21.9
Total	73	100

Table 7 Indicates that 38 out of 73 respondents were not satisfied with the quality of faculty available in their Library School with 52.1%, 26 % of the respondents were satisfied while 21.9% were neutral with the quality of faculty available in their Library School.

Table 8: Are the following ICTs accessible and utilized in your Library School?

ICTs	YES	NO	N/A	TOTAL
Desktop Computers	56 (76.7%)	14 (19.2%)	3 (4.1%)	73 (100%)
Projector and Projector Screens	47 (64.4%)	22 (30.1%)	4(5.5%)	73 (100%)
Laptops	46 (63.0%)	24 (32.9%)	3 (4.1%)	73 (100%)
Academic Online/ Offline Databases	51 (69.9%)	16 (21.9%)	6 (8.2%)	73 (100%)
Facsimiles	22 (30.1%)	43 (58.9%)	8 (11.0%)	73 (100%)
Printers	51 (69.9%)	18 (24.7%)	4 (5.5%)	73 (100%)
Photocopiers	55 (75.3%)	15 (20.5%)	3 (4.1%)	73 (100%)
Internet Connectivity	55 (75.3%)	15 (20.5%)	3 (4.1%)	73 (100%)
Audio CDs/DVDs	50 (68.5%)	20 (27.4%)	3 (4.1%)	73 (100%)
Scanners	39 (53.4%)	29 (39.7%)	5 (6.8%)	73 (100%)
E-resources like e-books, e-journals	51 (69.9%)	16 (21.9%)	1 (1.4%)	73 (100%)
Library Management Software Packages	46 (63.0%)	22 (30.1%)	5 (6.8%)	73 (100%)

Table 8 reveals that Desktop Computers are most accessed and utilized in the Library Schools with 76.7 % of the respondents; next is Internet connectivity with 75.3% while Facsimiles are least accessed and utilized ICT with 30.1% next to Scanners with 53.4% of the respondents.

Table 9: How often do you access and utilize these ICTs in your Library School?

FREQUENCY OF ICT USAGE	SA	A	D	SD	N/A	TOTAL
Everyday	9 (12.3%)	15 (20.5%)	23 (31.5%)	16 (31.5%)	10 (13.7%)	73(100%)
Weekly	9 (12.3%)	23 (31.5%)	18 (24.7%)	10 (13.7%)	13 (17.8%)	73(100%)
Monthly	9 (12.3%)	20 (27.4%)	15 (20.5%)	11 (15.1%)	18 (24.7%)	73(100%)
Twice in a Year	7 (9.6%)	7 (9.6%)	20 (27.4%)	24 (32.9%)	15 (20.5%)	73(100%)
Once in a year	9 (12.3%)	9 (12.3%)	16 (21.9%)	25 (34.2%)	14 (19.2%)	73(100%)

Table 9 Indicates that 23 out of 73 respondents agreed they often have access and utilize the ICTs in their Library Schools mostly on weekly basis. While 23 respondents (31.5%) said they disagreed they have access and utilize them mostly every day.

Table 10: Challenges encountered in the course(s) of the Students studies in the Library Schools?

CHALLENGES	SA	A	D	SD	N/A	TOTAL
Power Outage	38 52.1%	20 27.4%	5 6.8%	2 2.7%	8 11.0%	73 100%
Inadequate or lack of Internet Facilities	25 34.2%	30 41.7%	10 13.7%	2 2.7%	6 8.2%	73 100%
Inadequate Computers	27 37.0%	23 31.5%	13 17.8%	3 4.1%	7 9.6%	73 100%
Outdated Curricula	19 26.0%	27 37.0%	15 20.5%	4 5.5%	8 11.0%	73 100%
Poor ICT Skills among Lecturers	15 20.5%	21 28.8%	23 31.5%	5 6.8%	9 12.3%	73 100%
Inadequate Furniture	8 24.7%	26 35.6%	18 24.7%	4 5.5%	7 9.6%	73 100%
Poor communication skills among Lecturers	12 16.4%	19 26.0%	27 37.0%	8 11.0%	7 9.6%	73 100%
Limited access and utilization of ICTs in the Computer Laboratory and Departmental Library	24 32.9%	32 43.8%	6 8.2%	5 6.8%	8 8.2%	73 100%
Inadequate Lecture Halls	35 47.9%	19 26.0%	6 8.2%	7 9.6%	6 8.2%	73 100%
Few Lecturers	19 26.0%	27 37.0%	12 16.4%	6 8.2%	9 12.3%	73 100%

Table 10 indicates that power outage ranked the highest challenge confronting Students' studies in Library Schools next to inadequate computers and limited access and utilization of ICTs in the Computer Laboratory and Departmental Library. While poor communication skills among Lecturers are the least challenge confronting their studies in Library Schools.

SUMMARY OF FINDINGS

The research surveyed Library and Information Science Education for the transformation of the Society. The study covered three Universities in Nigeria namely: the University of Benin, the University of Nigeria and the University of Ibadan. From the data analysis, the following significant inferences were drawn

- i. There is a very high enrolment of female students in Nigerian Library and Information Science Schools.
- ii. The respondents are predominantly between the ages brackets of 20-24.
- iii. Cyber Security and Digital Archiving were ranked the least courses available in the departmental curricula
- iv. Library and Information Science Education was found to be very educative and researchable
- v. There is low satisfaction among the respondents in the quality of faculty available to tech ICT related courses in the LIS Schools
- vi. Facsimiles and Scanners are least accessed and utilized ICTs in the Library Schools
- vii. There is a general low rate of ICTs access and utilization in the Library Schools by the students especially on a daily basis
- viii. Power Outage, inadequate computers and limited access and utilization of ICTs in the computer Laboratories and departmental Libraries are the major challenges confronting the students in the Library Schools.

CONCLUSION AND RECOMMENDATIONS

The study has shown that Library and Information Science Education has been identified as a highly relevant academic discipline in the digital age that can positively transform the society especially in Information and Educational services delivery. There should be room for the employment of more dynamic and passionate minds into the faculty and apart from having respectable academic qualifications; these faculty members should be able to demonstrate the required ICT competencies and skills. Continuous professional development programmes should be re-enforced and organized for existing early career and mid-level faculty members. Courses like Cyber Security, Digital Archiving, should be included in the curriculum while Entrepreneurship in Library and Information Science should be given more emphasis in the departmental curriculum and implemented by the stakeholders of Library and Information Education in Nigeria.

Finally, Stakeholders of Library and Information Science Education in Nigeria should not neglect the integration of new innovations in ICTs with Library Education to train the students in these Library schools. These library schools should also seek for other ways of improving the Students' access to and utilization of ICTs in their education in order to help them to become competent information professionals, great innovators, visionary leaders and entrepreneurs in the information profession, thereby becoming transformational agents of the Nigerian society and beyond.

REFERENCES

- Abioye, A. (2013). Enhancing Library and Information Science Education through cross-border Collaboration: The experience of University of Ibadan, Nigeria and University of Ghana. Paper presented at the IFLA WLIC2013. Retrieved January 23, 2018 from <http://library.ifla.org/174/1/199-abioye-en.pdf>
- Abubakar, B. M. & Hassan, B. B. (2010). Incorporating Information Technology in Library and Information Science Curriculum in Nigeria: A Strategy for Survival in the 21st Century. *Library Philosophy and Practice*, 1-8. Retrieved January 23, 2018 from <https://www.webpages.uidaho.edu/~mbolin/abubakar-hassan.pdf>
- Ahmed, A. O. (2012). Modern Trends in Library and Information Science Education in Nigeria: Challenges and the Way Forward. *Library Philosophy and Practice*. Retrieved January 25, 2018 from <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?referer=https://www.google.com.ng/&httpsredir=1&article=2106&context=libphilprac>
- Chimah, J. N. & Nwokocha, U (2015). Library and Information Science Education in Nigeria: Analysis of Master's Degree Programmes in Selected Federal Universities in Nigeria. In *Contemporary Issues in Library and Information Science Education in Nigeria: Proceedings of the 16th National Conference of National Association of Library and Information Science Educators (NALISE)* (1st ed., pp. 206- 222). Umuahia, Nigeria: Zeh Communications.
- Chu, H. (2010). Library and Information Science Education in the Digital Age. In A.Woodsworth (Ed.), *Advances in Librarianship* (pp.77-111). doi:<http://www.emeraldinsight.com/doi/abs/10.1108/S00652830%282010%290000032007>
- Diso, L & Njoku, F. I. (2007) Library and information science education in Nigeria: Curricula contents versus cultural realities. *The International Information & Library Review*. 39. (pp 121- 133)
- Edegbo, W. O. (2011). Curriculum Development in Library and Information Science Education in Nigerian Universities: Issues and Prospects. *Library Philosophy and Practice*, 1-14. doi:<https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1591&context=libphilpra>
- Edewor, N. & Omosor, U. A. (2012). Reflections on the Prospects of Entrepreneurial Librarianship in Nigeria.. *Information Impact*, 3(1 & 2), 1-10.
- Emmanuel, A. N. (2017). *Approaches to Innovation and Transformation in Library and Information Science Education (Lise) in Nigeria*. [online] Retrieved January 25, 2018 from <http://article.sapub.org/10.5923.j.library.20170603.03.html>.
- Farkas, M. (2006, July 17). Skills for the 21st Century Librarian. *INFORMATION*. Retrieved January 23, 2018, from <https://meredith.wolfwater.com/wordpress/2006/07/17/skills-for-the-21st-century-librarian/>

- IFLA (2012). Guidelines for Professional Library/Information Educational Programs. Retrieved February 13, 2018, from <https://www.ifla.org/files/assets/set/publications/guidelines/guidelines-for-professional-library-information-educational-programs.pdf>
- Kalu, A. U. & Obasi, N. F. K. (2015). The Crisis of Nomenclature and Location of Library and Information Science Education in Nigeria: A Discourse. In *Contemporary Issues in Library and Information Science Education in Nigeria: Proceedings of the 16th National Conference of National Association of Library and Information Science Educators (NALISE)* (1st ed., pp. 69- 81). Umuahia, Nigeria: Zeh Communications.
- Mohammed, Z. (2008). Attracting Students into Library and Information Science Programmes in Developing Countries: The Nigerian Experience. IFLA, 1-19. Retrieved February 23, 2018, from <https://archive.ifla.org/IV/ifla74/papers/123-Mohammed-en.pdf>.
- Ochogwu, M. G. (2015). Entrepreneurial Librarianship: A Call for paradigm Shift in Library and Information Science Education. In *Contemporary Issues in Library and Information Science Education in Nigeria: Proceedings of the 16th National Conference of National Association of Library and Information Science Educators (NALISE)* (1st ed., pp. 27-34). Umuahia, Nigeria: Zeh Communications.
- Okoye, M. O. (2013). Assessment of Competencies of Professional Librarians in Nigeria. *Library Philosophy and Practice*, 1-24.
doi:<https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=2376&context=libphilprac>
- Ononogbo, R. U. (2015). Contemporary issues in Library and Information Science Education: The Nigerian Experience and Sustainability Thereof. In *Contemporary Issues in Library and Information Science Education in Nigeria: Proceedings of the 16th National Conference of National Association of Library and Information Science Educators (NALISE)* (1st ed., pp. 14-26). Umuahia, Nigeria: Zeh Communications.
- Saka, K. A. & Ahmed, A. O. (2015). Entrepreneurial Librarianship for Self Employment Opportunities in Nigeria. In *Contemporary Issues in Library and Information Science Education in Nigeria: Proceedings of the 16th National Conference of National Association of Library and Information Science Educators (NALISE)* (1st ed., pp. 35- 51). Umuahia, Nigeria: Zeh Communications.
- Uzohue, C. E., & Yaya, J. A. (2016). Knowledge Management Competencies Required for Library and Information Professionals in 21ST Century Nigerian Libraries. *American Journal of Business and Society*, Vol. 1(No. 3), 90-97. Retrieved January 22, 2018, from <http://www.aiscience.org/journal/ajbs>