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# Justification and Curriculum Requirement for New Era Librarians in \*Department of Library and Information Science, Federal University of Technology Minna, Nigeria

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#### Abstract

This study investigated the justification and curriculum requirements for new era librarians in the proposed Department of Library and Information Science, Federal University of Technology Minna, Nigeria. The proposed undergraduate programme and curriculum is aimed at training and producing 21st century librarians capable of withstanding the challenges and complexities in executing library operations, and the information service delivery of the 21st century. The objectives of the study are to determine the organizational structure of the Department, employers' rating of the graduates of existing program, the components of the existing and proposed department/ curriculum, available resources to support the implementation of the proposed program/curriculum. Documentary method was employed alongside student handbook, file containing employers' rating of Library and Information Technology (LIT) graduates; National Universities Commission (NUC) 2018 Benchmark Minimum Academic Standards (BMAS), Self-study form for 2019 NUC program accreditation, and proposed academic brief (Bachelor of Technology: Library and Information Science). Documentary analysis was carried out. Tables (tabulation) were used to present data and information. The major findings include; the existing and the proposed curriculum contain ICT components and there was high level of performance on the part of LIT graduates. Other major findings include availability of adequate human resources, information and teaching facilities to support the establishment of the proposed undergraduate programme/curriculum. The conclusion was that the proposed curriculum would equip the 21st century librarians with ICT skills that would enable them compete with their counterparts in other parts of the world and in organizations other than that of LIS.

**Keywords:** Curriculum Emerging trends, LIS Education, Nigeria, Undergraduate programme, University.

<sup>\*</sup>New/Proposed Dept/Programme

<sup>\*\*</sup>Existing Dept/Programme

#### Introduction

The Bachelor of Technology in Library and Information Technology programme began in 2001/2002 session in the then School of Science and Science Education (SSSE), Federal University of Technology, Minna, Nigeria. The objective of the programme is to develop work force in Library and Information Technology in order to meet the demands of managing modern information institutions in the digital age. In 2001, the Department of Library and Information Technology was established as an addition to the existing Departments in the School of Science and Science Education (SSSE). The Department had the National Universities Commissions Pre-Accreditation Resource Verification visit in 2002. Based on the visit by the NUC, the Department of Library and Information Technology emerged and started running her undergraduate programme in full force.

The undergraduate programme- Library and Information Technology had NUC interim accreditation in 2006 and in 2008 had full accreditation. For the Department to meet up with the trends of 21st century, in 2009 the Department was relocated from SSSE to School of Information and Communication Technology (SICT). To ensure hitch-free accreditation, the Department was reverted to School of Science and Technology Education (SSTE) in 2014 where it had another NUC full accreditation status. The National Universities Commission Benchmark Minimum Academic Standard stipulates that undergraduate curriculum in Nigerian Universities should have the minimum number of 160 credit units and a maximum of 180 credit units (with respect to core and electives courses, and Students Industrial Work Experience Scheme-SIWES) as part of graduation requirements (NUC, 2018). For prospective LIT professionals to fit into modern world, the Department was finally relocated to School of Information and Communication Technology (SICT) in the last quarter of year 2015. With the proposed undergraduate programme, the NUC has mandated that the name of the department and programme be changed to Library and Information Science (LIS) under School of Science and Technology Education, (SSTE) and then the NUC (2018) BMAS be used as working document for the new/ revise curriculum for 5-year B.Tech Library and Information Science Programme.

The proposed Department is called "Department of Library and Information Science" was approved by the university senate in the second quarter of 2019 and the department presently prepare for the NUC resource assessment prior to the recommendation by the NUC to JAMB/JAMB website for enlisting and take-off of the new undergraduate programme (Library and Information Science). It is a programme designed to train prospective 21<sup>st</sup> century librarians the application of information and Communication Technology (ICT) in library operations and provision of information services respectively.

# Justification for Undergraduate Library and Information Science programme in FUT Minna:

- Library practice and services in the 21<sup>st</sup> century is driven by use of ICTs. The focus of LIT programme is the shift from the traditional librarianship to the modern library and information disciplines as many Universities offering the programme still emphasis the traditional library practices. The LIT curriculum focuses on the use of ICT to meet the demands of information age
- 2. The existing and proposed LIT/LIS programme is special and the only one of its kind in Nigeria to bridge the gap between the conventional/traditional librarians and the contemporary/digital librarians. Hence other universities offering LIS programmes run purely Library Science, Library and Information Science, Library Studies, Information Resource Management and so on.
- 3. Course Component: For each of the proposed undergraduate courses in LIT Department, 60% of the curriculum/ course content is ICT components, while 40% is Library Science components. This is evident in the course synopsis of NUC BMAS (2018).
- 4. Professional jobs: The existing and proposed undergraduate LIT/LIS programme prepares students to enter Library and Information Professional jobs which include: Digital Librarians, Information broker, System Analyst, Information Business centres Manager, Public Relation Center Manager, Multimedia Centre Manger, Records Mangers, Archives, Curators, Information Scientists, Librarians and Academic staff (Library Educators/Practitioners). There are available vacancies for most of these career opportunities and LIT graduates can be self-employed and at the same time become job creators.
- 5. Staffing: The Department has crop of specialists in Library Science, Library and Information Science, Management Information System, Information Organization, Library and Information Technology. The academic staff with Library Science/Library and Information Science background handles and teaches pure Library Science courses, while those of Information Technology, Management Information System (MIS) handle and teach IT courses within the Department. As at now, LIT Department has reasonable number of academic staff (Professors, Associate Professors, Senior Lecturers, Lecturer II, Assistant Lecturer and Graduate Assistants). With the crop of academic staff more especially the graduates of the existing programme possessed the two skills (theoretical librarianship and the ICT application to the Library and Information Centers/fields.)
- 6. Postgraduate programme: The Department commenced postgraduate programmes (PGD and M.Tech) in 2013/2014 while in 2015/2016 session PhD programme emerged. As at February 2020 about sixty-six (66)M.Tech students have graduated. The postgraduate programme in the department is ongoing and regular. The PG curriculum (academic brief) in the department as in the other academic departments in the university underwent revision and the revised copy was forwarded to postgraduate school. The PG retreat took place between 26<sup>th</sup> and 28<sup>th</sup> June 2018 and the revised academic brief was recommended for onward consideration and approval by the university senate, and adoption in 2021/2021 session for the commencement of the new undergraduate programme. As at June 2021, the Department graduated three(3) PhD students in various aspects of Library and Information Technology.

- 7. Undergraduate students in the existing LIT department take the same ICT courses with their counterparts in Computer Science, Cyber Security Science, and Information and Media Technology Departments.
- 8. The 2019 NUC Accreditation: The LIT Department underwent accreditation of 17<sup>th</sup> and 18<sup>th</sup> undergraduate program between November. 2019. The Department/programme scale through the exercise with full accreditation status going by the existing human and information resources as well as exit report by the Assessors, more so that the entire results of the November, 2019 NUC accreditation of 14 undergraduate programmes in FUT Minna was contained in the FUT Minna campus news bulletin of 24th April, 2020. It revealed that LIT as a Department and undergraduate programme scaled through the November 2019 NUC programme accreditation with full accreditation status though with 300, 400 and 500 level students as at year 2019.
- 9. This Library School in Federal University of Technology Minna, Nigeria, has commenced digitization of some aspects of degree and higher degree research works (projects and theses). The digitization project is ongoing in the department. It is aimed at digitizing each of the projects/theses through direct input of text to computer system. A data base is being developed to include the following fields of information: title of thesis; name of student; year of research/graduation and name of supervisor(s).

# Aim and Objectives of the Study

The aim of this study is to determine the justification for the establishment of the new/proposed undergraduate programme in Library and Information Science and the curriculum requirements for producing prospective 21<sup>st</sup> century librarians in Federal University of Technology, Minna, Nigeria. The specific objectives of the study are to:-

- 1. Determine the organizational structure for the department of Library and Information Science:
- 2. Identify the employers' rating of Library and Information Technology products between 2008 and 2019:
- 3. Assess the curriculum components of the existing and proposed undergraduate programme;
- 4. Identify the types of resources available to support the implementation of the proposed undergraduate Library and Information Science programme.

#### **Literature Review**

Ibraheem and Aduku (2018) conducted a study to assess the undergraduate degree programmes in Library and Information Science schools in Northern States of Nigeria. Survey method was used and the population of the study consisted of all library and information science schools recognized by National Universities Commission (NUC). Simple random sampling method was used to select university-based library schools. Questionnaire and documentary sources were the instruments used in data collection while descriptive statistics was used in data analysis and interpretation. Results showed the need for continue reviewing of the curriculum to be in line with the contemporary age, while emphasis be laid on the current information technology courses.

In a related study Ojoboh and Oserada (2018) examined challenges to education and training of library and information science professionals using Delta State University Abraka and Ambrose Ali University Ekpoma, Nigeria as study areas. Lecturers in the studied library schools form the population while sample was drawn from the population. Questionnaire was the only instrument used in data collection and frequency counts, mean and percentage were used for data analysis. It was discovered that absence of ICT facilities negatively affects education of library and information science students. Other challenges include: overload of curriculum, slow space of the completion of course outline arising from the shortage of LIS lecturers.

Okon, Asukwo and Mbu (2019) examined the restructuring and reviewing of LIS School's curriculum in Nigeria with special emphasis on ICT components in relation to job market. The study employed descriptive survey using old and new generation library schools in south-south Nigeria. Both online and the printed copies of Brochure were used to identity ICT courses offered. The study discovered that many library schools do not offer ICT courses; have ICT laboratories and thus the curriculum could not prepare graduates for job market. It further discovered inadequacies in funding, qualified educators in ICT competency.

In a study to assess the entrepreneurship opportunities and preferences among LIS graduates in university libraries in North Central geo-political Zone of Nigeria. Amidu, Mohammed and Ayodele (2019) conducted a study to determine "entrepreneurship opportunities and preferences among library and information science graduates in university libraries in North Central Nigeria". Survey research design was used with the population LIS graduates in selected university libraries in the geo-political zone. Closed-ended questionnaire was used to collect data. Descriptive statistics was used to analyze data. Results showed that lecturing top the list in the area and type of available and preferred entrepreneurial opportunities in university libraries. LIS graduates were satisfied with training received in library administration, cataloging and information as well as resource management.

# Methodology

Documentary sources was used for the study. It involves document analysis, which are official publications of the university and department. Thus, include: Self-study form section B; student handbook of 2018/2019 session; employers' rating of products of the existing programme file, undergraduate revised academic brief (curriculum) of 2019 and NUC completed application form for the establishment of the new/proposed Library and Information Science undergraduate programme and available teaching facilities for the proposed undergraduate programme. The self-study form section B contain list of existing course titles with corresponding synopsis, graduation requirements, names of lecturers, qualifications, list of undergraduate projects and areas of specialization as well as students enrollment figure and lecturers/students ratio.

Student handbook also contains list of existing academic and non-academic staff, their qualifications, course titles/structure and synopsis as well as core and electives courses, etc. File containing list of various organizations where LIT graduates

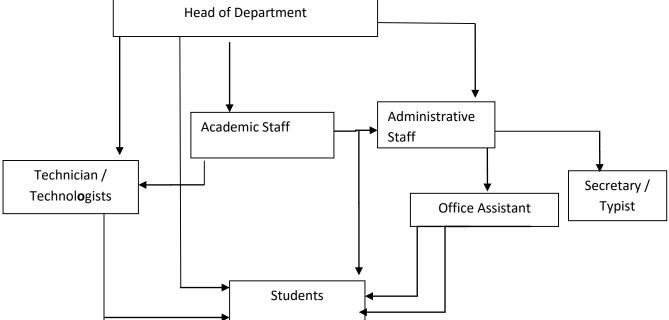
are currently serving and employers' rating. The NUC completed form for the proposed programme containing number of resources with 10 year projection; available relevant information resources and facilities in university library. The last document is a departmental document containing available teaching facilities in library school. All the above listed/enumerated documents were used for the study. Statistical methods used in the study was the simple tabulations; and use of frequency and percentages as the case of staff in library school.

#### Results

The results from the documentary analysis are presented into Tables and Figures.

Figure 1. Organogram/Organizational Structure of the Department

Head of Department



**Source**: Federal University Technology Minna (2019) Self -Study form Section B. 2019 NUC Accreditation.

The nature of organizational structure showed that the academic and administrative Head of the Department is at the apex and below him/her are the technologists, academic and administrative staff and down to students, office assistant and secretary/typist. In this contemporary age, prominence is accorded to practical in the ICT laboratory.

Table 1: Employers' rating of existing Library and Information Technology graduates (2008-2019)

S/N	Organization (Employer)	Controlling/Regulatory Body	Nature of job	Rating of graduate' performance
1.	Central Bank of Nigeria Headquarters Abuja	Central Bank of Nigeria (CBN) (Federal Ministry of Finance)	Library service	High
2.	National Examinations Council (NECO)	Federal Ministry of Education	Admin/ library service	High
3.	Prison, Immigration, Civil Defence,	Federal Ministry of Interior	Security service	High
4.	Military (Air force, Navy, Army)	Federal Ministry of Defence	Security service	High
5.	National Information Technology Development Agency (NITDA)	Federal Ministry for Communications and Digital Economy	ICT/ Library Service	High
6.	Universities, Polytechnics, Colleges of Education, Monotechnics	State/Federal Ministry of Education, NUC, NBTE & NCCE	Admin/Academic Services	High

**Source**: Employers' rating of LIT Products (2008-2019)

**KEY** 

**NBTE:** National Board for Technical Education

**NCCE:** National Commission for Colleges of Education

The existing LIT curriculum and program prepare students to work in libraries, information centers and virtually in all establishments with information centres being attached to them or not. Some of the products work as librarians, administrators and/or security. This is as a result of the rich curriculum covering library, ICT and administrative components.

Table 2: Components of Undergraduate Curriculum

a. Existing Library and Information Technology Curriculum

Mode of Entry	UTME	200 Direct Entry	300 Direct Entry
University General Courses	13	13	13
School/Faculty Course	46	35	31
ICT /Education			
Department Course/ Elective Course	120	110	99
SIWES	2	2	2
Total	181	160	145

The existing LIT curriculum is in the ratio of 50:50 i.e. 50% Library Science and 50% ICT components.

b. Proposed Undergraduate Library and Information Science Curriculum

Mode of Entry	UTME	200 Direct Entry	300 Direct Entry
Department Core Courses	111	107	70
ICT Core Courses	39	34	23
General Studies/Education courses	13	11	9
Basic Science	12	2	-
Elective Course	10	7	5
SIWES	2	2	2
Total	187	163	109

**Sources:** FUT Minna 2018/2019 Undergraduate Student Handwork LIT FUT Minna (2019) NUC Accreditation Self –Study Form Section B b : Revised Academic Brief B.Tech Library and Information Science Curriculum February, 2021.

Holders of HND in Library and Information Science are to be admitted to the B.Tech LIT programme through 300 level and the total credit units for graduation is 109 which may be attributed to the fact that majority of departmental core and elective courses were offered at HND level. It is also possible that HND candidates admitted may be required to take Basic science and add more elective courses from related department/courses and/or unrestricted elective courses from other departments within the university to meet the minimum graduation requirement as stipulated in the NUC/BMAS 2018 edition.

**UTME** Candidates are holders of "O" Level certificates/qualifications (WAEC, SSCE, or equivalents) are subjected to entrance examination i.e Computer Based Test (CBT) which is normally conducted by Joint Admission and Matriculation Board (JAMB) and are required to pursue 5-year undergraduate programme. **Direct Entry** (DE) candidates to 200 Level are holders of "A" Level qualifications (National Diploma, Nigeria Certificate in Education and/or Interim Joint Matriculation Board (IJMB) qualifications are to pursue 3 or 4-year undergraduate programme; while DE admission through 300 level, candidates are holders of Higher National Diploma (HND)

qualification and are required to pursue 2 or 3-year undergraduate programme in conventional and specialized universities respectively. Regardless of the mode of admission into undergraduate programme, "O" level qualifications, ND, HND, NCE, IJMB, etc. the admission is through JAMB-being regulatory body. Whether the admission is through UTME or direct entry, the O'level subjects credit requirement as prescribed in the Postgraduate Brochure (FUT Minna, 2019-2024) five (5) credits in English and Mathematics, any three (3) other subjects from Physics or Chemistry, Geography, Economics, Biology/Agricultural Science and Government which are to be obtained from any of the following examination bodies: NECO, WAEC, GCE and NABTEB.

Towards meeting the challenges of information age, courses are split to synopsis and within the synopsis ICT components have been injected and now have proposed 60:40 i.e. 60% of ICT components and 40% of Library Science components. This means more than the number of core, elective and department courses but the ratio concentrate on the synopsis. The quantity of synopsis of the ICT components is 60% while that of library science component is 40% respectively. The 60:40 ratios of ICT and library science components is looked at on the basis of the synopsis but not on the number of courses alone. Few education courses are included in the revised academic brief because the new programme/department will be domiciled in School of Science and Technology Education (SSTE).

Table 3. Resources to Support the proposed Undergraduate Library and Information Science Programme/Curriculum

#### a. Faculty Members

Faculty Members	Number	Percentage %
Professor	4	15
*Associate Professor	6	23
Senior Lecturer	1	4
* Lecturer I	2	8
*Lecturer II	5	19
Assistant Lecturer	5	19
Graduate Assistant	3	12
Total	26	100

<sup>\*</sup> Include adjunct staff

**Source:** Revised Academic Brief (curriculum) B.Tech LIT February 2021. NUC Application form for the establishment of new academic programmes in Nigerian Universities February, 2021.

From Table 3A, it in evident that the proposed undergraduate programme is fully equipped with teaching staff which cut across various ranks and has met both undergraduate and postgraduate programme requirements as stipulated in the document for things needed for resource assessment of undergraduate and postgraduate programme respectively. Some of the academic staff specializes in pure

Library Science while others specializes in Library and Information Technology, Computer science and teach in the existing Department of Library and Information Technology, Minna undergraduate and postgraduate programme respectively.

Out of 26 academic staff for the proposed programme, four (4) are adjunct lecturers from Departments of Computer Science, Cyber Security Science and Information and Media Technology respectively. From the four lecturers, one is an Associate Professor, one on the rank of Lecturer I and two on the rank of Lecturer II respectively. They are to teach ICT courses relevant to LIS undergraduate programme.

With the quality and quantity of academic staff in the existing/proposed undergraduate programme/department, there is hope that the proposed undergraduate programme in the proposed Department will take-off in year 2021/2022 respectively. This is because the academic staffing situation in library school has met the requirements for resource assessment. As part of standards for the establishment of library schools and preparation for resource verification for the proposed undergraduate and postgraduate programmes, a minimum of six academic staff with at least one Professor/Reader, two senior lecturers and three lecturers 1 and below are required. For PG programmes, the requirements are: a minimum of six academic staff with at least one Professor and two senior lecturers while the rest should be PhD holders capable of teaching any PG degree.

\* Part or four of the academic staff are adjunct staff from related departments (Computer Science, Cyber Security Science and Information and Media Technology) within the same university. They are to teach relevant ICT courses in LIS undergraduate programme. Within the ranks of Associate professor, Lecturer 1 and Lecturer II: four of the academic staff are adjunct from the above stated but related departments within the same school/faculty in the same university.

#### b. Administrative and Technical Staff

Support Staff	Nature	Number
Principal Data Processing Officer I	Administrator	1
Executive Officer	Administrator	1
System Analyst II	System Administrator	2

Source: Revised Curriculum B.Tech LIS 2021.

In the area of Non-teaching staff, there exist two technical staff and two administrative staff. These are the support staff that carryout both administrative and technical functions in the department. The technologists assist in translating theory to practical i.e. practical training using ICT laboratory.

#### c. Available relevant information resources in University Library

Resources	Collection Strength
Textbooks	4, 849
Journals	17,790
Computers	250
Database	AGORA, Hinari, Pro QUEST, Science Direct, e.t.c

**Source:** Completed NUC Application form for undergraduate program in Nigerian Universities February, 2021.

The university library uses Library of Congress (LC) classification scheme and Z-class allocated to librarianship. Textbooks, journals and databases were available and adequate while computers are housed in the e-library unit for students' use and practical purposes.

# d. Available Teaching Facilities in the Existing/Proposed Department

Types of Teaching Facility	Quantity
Computer and Networking devices	28
LC	2 sets
DDC	2 sets
LC List of Subject Heading	2 sets
AACR <sub>2</sub>	2 sets
SLSH	2 sets
Projector	2 sets
Book/journals	1, 354

**Source:** Completed NUC Application form for undergraduate program in Nigerian Universities. February, 2021

As at now, the Department possessed the above listed teaching facilities which are currently being put to use in teaching and consultation by undergraduate students. In the area of sources of funding the proposed programme, in the first 10 years in terms of the current expenditure include: government allocation through NUC, University and donor agencies while for capital expenditure, the source of funding will be through government via NUC, University and TETFund/PTDF respectively (NUC, 2021).

### **Discussion**

Research objective one sought to find out the nature of organizational structure in library school. The study revealed well–structured academic department, showing the position and responsibilities of staff, which is not in line with the empirical literatures of Ibraheem and Aduku (2018), Ojoboh and Oserada (2018), Okon, Asukwo and Mbu (2019) as well as Amidu, Mohammed and Ayodele (2019) respectively as their findings are not related to the organizational structure.

Research objective two investigated the employers' rating of LIT graduates between 2008 and 2019. The study revealed quite a number of organizations that employed LIT graduates. No wonder librarianship is a multidisciplinary and interdisciplinary in nature and so its graduates can work in any department, organization or field of human endeavor. This finding disagrees with the findings by Okon, Asukwo and Mbu (2019) as the co-researchers discovered that LIS graduates reported that many library schools could not prepare graduates for job market coupled with inadequacies in funding, staffing as well as ICT competency.

The third research objective was achieved through documentary analysis of the curriculum components of LIT, both existing and the proposed undergraduate programme, which have not only gone beyond the NUC benchmark but also met the employers' market needs with more ICT components to address 21<sup>st</sup> century phenomenon. This findings is not in conformity with that of Ojoboh and Oserada (2018) in a report to the study stated that there was absent of ICT facilities which has negatively affected the education of LIS students.

The fourth research objective focused on identifying the types of resources available to support the implementation of the proposed undergraduate programme/curriculum to run Library and Information Science Programme. Teaching, administrative staff/technologist; information resources in the University Library and the teaching facilities were all adequate. The available resources have met the NUC requirements. This finding is not in conformity with the research report by Ibraheem and Aduku (2018) as the co-researchers reported the need for continuing review of curriculum in line with contemporary age thus, with emphasis on current information technology courses.

#### Conclusion

From the results and discussion, the implication is that a well-structured academic department is a function of quality teaching, research and learning and that the products are likely to compete with counterparts in the rest parts of the world. Rich curriculum with reasonable ICT components/facilities means that in future the library school will produce graduates that would be in better position to apply ICT to library operations and services as well as related fields. With the adequate human, information and material resources, there is going to be innovations in librarianship. Library and Information Science is one option in undergraduate programme and is concerned with the study of processes involved in the generation, production, distribution and use of information in libraries and information related institutions with emphasis on the application of technology in all its operations and services

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Dr. K.A Saka, an Associate Professor, holds BLIS, MLS, and PhD degrees in Library and Information Science from Ahmadu Bello University, Zaria, Bayero University Kano and University of Maiduguri, Nigeria respectively. He is a lecturer and former Head of Department, Library and Information Technology; currently University Librarian, Federal University of Technology Minna, Nigeria. He is a member of Nigerian Library Association (NLA), National Association of Library and Information Science Educators (NALISE) and Certified Librarian by the Librarians' Registration Council of Nigeria (LRCN). Dr. Saka is widely published in local, national and international publications and he has also attended and presented papers at local, national and international levels.

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