# EDUCATION AND TRAINING OF LIBRARY AND INFORMATION SCIENCE STUDENTS IN THE DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE, UNIVERSITY OF CALABAR, CALABAR

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## ABSTRACT

*The main aim of this study is to examine the education and training of library and information science students in the Department of Library and Information Science (LIS), University of Calabar, Calabar, Nigeria. To achieve this objective, four null hypotheses were generated to direct this study. As a basis for the study, a literature review was conducted in line with the variables under the study survey research design. A sample of two hundred and eighty (280) LIS students were selected for the study. Selection was performed using purposive and accidental sampling technique, with which 40% of the population was drawn for the study. Questionnaire was used for data collection. The instrument was subjected to face and content validation by the experts in measurement and evaluation. The reliability of the instrument was established through split-halt reliability method with very high reliability estimates. Population t-test analysis was the statistical analysis technique adopted to test the hypotheses under study to ascertain whether to reject or retain them. All hypotheses were subjected to testing at 0.5 level of significance with relative degrees of freedom. The result of the analysis revealed that there were significant teaching resources for education and training of LIS students, LIS students have significant awareness of emerging topics in their field, there is no significant provision of ICT training for LIS students and the quality of staff in the Department of LIS, UNICAL is significantly high. Based on the findings of the study, it was recommended among others that staff should continue to prioritize their proficiency in ICT so that they can properly educate and train potential librarians to serve the present and future information users. In addition, LIS students should be introduced to emerging topics especially with trending technological advancement to enhance the abilities to operate in the digital age.*

*KEYWORDS: Education and Training, Information Science, Library ICT Training*

## 1. INTRODUCTION

Education is an essential tool for successive replenishment of the workforce with well-meaning, innovative and energetic citizens vested with knowledge and capabilities to pilot the economic, social, and political development of a nation. In the same vein, library and information science is an educational field of study that is concerned with the information needs of

citizens in every society. The field of Library and Information Science encompasses knowledge management, knowledge economy, and knowledge dissemination. Therefore, the roles being played by librarians in societal building and sustenance cannot be underrated as they provide equitable access to all types of information that is needed for the transformation of societies. Consequently, Library and Information Science Students who will eventually become professionals, serve as gatekeepers and brokers of information which is essential for knowledge acquisition, decision-making and national development. The success of libraries, archives and information centres in effectively meeting their obligation of information provision will eventually hinge on the education and training of these students.

In essence, the need to create opportunities for those undergoing formal education to acquire knowledge and ultimately improve their productive capacity have become more apparent. According to Ogar (2022), Nigerians have absolute confidence in education as the spring-board for change and development. This implies that the education and training of Library and Information Science (LIS) students would play an important role in the production of high quality librarians who will occupy a unique position in national development (Nkanu & Ogar, 2014). Library and information science education is a joint concept that consists of library education and information science education (Omehia, 2019). Library education is the specialized formal training of LIS students for the acquisition of skills and competences necessary for both library services and transfer of knowledge. These are performed by librarians. Information science is basically concerned with the study of modern devices that could be used in preservation, storage, dissemination of information etc. Information science lay emphasis on the engineering aspects of these devices and their application.

This competence of LIS students will empower them at graduation into professional practitioners to contribute to their future places of employment and perform successfully as citizens in the knowledge economy using emerging technologies in collecting, storing and disseminating information which is one of the significant characteristics of librarianship practice. Consequently, it is imperative to mention that; the field of library and information science has witnessed phenomenal changes in the present time and dispensation of Information Communication Technology. These changes are reflective in the way library services and operations are done, and this will continue to evolve. In developed countries, these changes are integrated into librarianship education and practice by imbedding in ICT using all the software's artificial intelligence (AI) for both teaching and service delivery; notwithstanding, the case is different for developing countries such as Nigeria. This calls for re-evaluation of all the institutions which work with information, data, and knowledge because with development professionalism also changes trends. For instance, in the modern epoch, librarians are said to be professionals and effective on the job when they do not compromise with growing trend of digital innovations (Sun & Yuan, 2012). The fact remains that technology today has modernized 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 utilization of projectors, smart boards, various technologies like video conferencing, and WhatsApp to communicate.

In the light of this, critical analysis of literatures. Nkanu & Ogar, 2022; Anderson, 2017; Moran and Marchionini 2012, shows that the teaching and learning of library and information science in Nigeria and University of Calabar in particular has not

witnessed much evolution with time, because of constraints such as declining teaching resources, quality of teaching staff, awareness in emerging topics in LIS, industrial attachment training and most importantly 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 from manual delivery in most universities offering LIS education.

This situation has become a serious concerned to the University community, management and the society at large. Although the government through Tertiary Education Trust-Fund to universities have provide support for quality education within recommended best practices and quality assurance to citizen. Observations, and personal interactions with undergraduates of library and information science revealed that LIS education in University of Calabar is still lagging behind which may be as a result of no consistent review of Library and Information Science Education curriculum. Contemporary needs, and inability of management to provide sufficient resources and techno-inclined personnel for promotion of educational programmes in universities as LIS education still clinch to traditional methods of librarianship, and when technological inputs are made, there is a serious omission of practical which is not healthy for these future librarians of the digital age.

This observation seem to be consistent with the view of Aina (2017) who stated 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. Based on this premise, it is clear that changes in librarianship practices poses a need for library and information science educators to adopt a global initiative to resolve curriculum and training issues in University

of Calabar. The crux of the matter is that the academic society is the most wanted area for this change and transformation as the centre of learning, research and character building. Therefore, the need for library and information science education to be tailored towards preparing would-be librarians with the desired skills and knowledge as to be relevant in this dynamic world is of the essence and should be investigated into. Thus, this study shall examine the education and training of library and information science students in the Department of Library and Information Science, University of Calabar, Calabar.

**1.1 Statement Of The Research Problem**

The societal change which is driven by advancement in Information and Communication Technology (ICT) amid others has greatly affected the fields of library and information science, especially in the way library is administered, its operations, services and nature of collection development. This paradigm shows that for potential librarians to remain relevant and contribute meaningfully in the transformation of the information society, there is need for innovation in the way they are educated and trained to enable them become properly fitted in the present and future of the information era and sufficiently equipped to serve their community.

This is of essence because, librarians and libraries as information managers and disseminators will continue to be looked upon as society reformers and agents of change based on the information they provide to the population to drive desired changes. Therefore, certified librarians no matter where they finds themselves are expected to provide the desired information that can touch and change the community for good. However, meeting this goal in the Nigerian educational context has been greatly compromised due to declining teaching resources, quality teaching staff, awareness in emerging topics in LIS, industrial attachment training and most importantly the utilization of emerging

information technologies for library services delivery, teaching and learning process.

In spite of the efforts of government through the Tertiary Education Trust Fund to provide funds to universities to run education and training of its citizenry within obtainable best practices and quality assurance, observation and personal interactions with LIS undergraduate students revealed that LIS education in Nigeria and University of Calabar in particular continue to suffer bottle neck. It is against this background that this study was conceived.

This is imperative because, innovations and technological development especially ICT will continue to shape this field and thus, if care is not taken, even the potential librarians will be greatly impoverished since they will be a big gap between the knowledge and capabilities which they hold and the demands which their technologically adaptive community will make on the information system they operate as professionals. It is therefore against this backdrop that this study is carried out to examine the education and training of library and information science students in the Department of Library and Information Science, University of Calabar, Calabar.

## 2. METHODOLOGY
### 2.1 Sampling Procedure and Data Collection

This chapter focuses on the research methodology. This was presented as follows:

The research design adopted for this study was the survey research design. The method is considered excellent for the measurement of attitudes and orientations prevalent with a large population. Studies that make use of this approach are employed to obtain a picture of the present phenomena.

The survey design is directed towards determining the nature of an event as it exists at the time of investigation. Survey research is useful for opinion and attitude studies. It depends basically on questionnaires and interviews as a means of data collection.

The survey research design is considered for this study because data collection for the study will be by means of a questionnaire. In addition, since the population of the study is too large for any direct observation by the researcher, a representative sample would be drown from the population from which generalization to the population will be made. This justifies why the survey research design was considered for this study.

The study area is University of Calabar. The University of Calabar is situated in Calabar, the capital city of Cross River State, Nigeria. The school is on latitude 4.95°N and longitude 8.34°S.

The University of Calabar was a campus of the University of Nigeria, Nsukka (UNN) until April, 1975. It started in the physical facilities of Duke Town Secondary School in Calabar as a campus of UNN in 1973/74 academic session. The university is uniquely located in the boundary between Calabar South Local Government Area and Calabar Municipality. The university is transverse by the old eastern highway running from IBB way through UNICAL Hotel into the main Library Road and Mary-Slessor Road running from the Calabar Road to the main gate of UNICAL. There are two Conference Halls; Chinua Achebe and the International Conference Center, two banks; the UNICAL Community Bank in the main campus and the Union Bank in the halls of residence. At the eastern side, the UNICAL International Demonstration Secondary School, UNICAL International Hotel, University of Calabar Teaching Hospital, UCTH while south of the campus are the halls of residence, the Abraham Ordia Stadium and staff quarters.

The University occupies a 17 hectare site the eastern side of the town, between the great qua River and the Calabar River. The University of Calabar has the following faculties; Faculty of Art and Social Science Education, Faculty of Foundational Studies,

Faculty of Science Education, Faculty of Arts, Faculty of Management Sciences, Faculty of Allied Medical Sciences, Faculty of Basic Medical Sciences, Faculty of Dentistry, Faculty of Medicine, Faculty of Social Sciences, Faculty of Law, Faculty of Biological Sciences, Faculty of Physical Sciences, Faculty of Engineering and Technology, Faculty of Agriculture and Faculty of Pharmacy. There are four Institutes: Institute of Public Policy and Administration, Institute of Oceanography, Institute of African and Asian Language, Institute of Education. There is also the Graduate Institute and University of Calabar Consultancy Services.

The population of the study consists of all Library and Information Science undergraduate student of University of Calabar in the 2022/2023 Academic Session. The total population stood at seven hundred (700) students. The distribution of the population is presented in table 1.

**TABLE 1: Distribution of the population by students' year of study**

| S/N | Year of Study | Population | Percentage (%) |
|-----|---------------|------------|----------------|
| 1. | Year 1 | 223 | 31.86 |
| 2. | Year 2 | 187 | 26.71 |
| 3. | Year 3 | 136 | 19.43 |
| 4. | Year 4 | 154 | 22.00 |
| | Total | 700 | 100 |

Source: Head of Dept. of Library & Information Studies (2022)

Purposive (consensus) and accidental sampling techniques were used in this study to obtain the sample from the population. Purposive sampling technique is a means to use the same for the study because of certain characteristics or elements. Simple sampling techniques were used because the researchers does not precisely know the probability of each element of the population included in the sample. Also, the researchers does not have direct control over the elements in the population. Thus, the researcher intentionally decided to draw as sample; 40% of the total population. In addition, the research instrument will be distributed to respondents that are available, and meets the criteria for inclusion in this study, as well as indicate willingness to take part in the study.

**2.2 Sample**

The sample of this study comprised two hundred and eighty (280) students proportionately drawn from the population of the study. The distribution of the sample by gender and academic year is presented in table 2 below.

**TABLE 2: Distribution of sample by students' year of study and gender**

| Year of Study | Population | Percentage (%) |
|---|---|---|
| Year 1 | 223 | 31.86 |
| Year 2 | 189 | 26.71 |
| Year 3 | 136 | 19.43 |
| Year 4 | 154 | 22.00 |
| Total | 700 | 100 |

Source: Head of Dept. of Library & Information (2022).

The criteria used for the selection of the population was based on the year of study of the student in 2022 academic session.

The research instrument used for this study is the questionnaire titled: Education and Training of Library and Information Science Students Questionnaire (ETLISSQ). The questionnaire consists of two sections (A and B), section A was designed to collect information on respondents socio-demographic variables, while Section B was designed to elicit information on the sub-variables guiding this study. The questionnaire was structured using a four point Likert-type scale of Strong Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) which measure the variable of the study.

The content validity of the instrument was carried out by two experts (in measurement and evaluation) to ascertain the degree of representatives of the items in the instrument before final administration. This was done by giving the initial copy to the research experts for evaluation. Corrections were made and items that were found irrelevant to the construct measured were detected and the final copy was used for data collection.

The reliability of the instrument was established using split-half reliability method. A pilot testing of the instrument was carried out on fifty (50) undergraduate students from the Department of Social Science Education, University of Cross River State, Calabar, who were not part of the real study. The researcher served them the instrument (questionnaire) to respond and return. The response gotten from the respondents were scored, and correlated using Statistical Packages for the Social Sciences to determine the reliability estimate/values. The result as presented in table 3 below showed very high reliability estimate (0.76-0.91) which justifies the use of the research instruments for this study.

**TABLE 3: Spilt-half reliability result (n=50)**

| S/N | Variables | No. of Items | Testing | X | Std. | $r_{xy}$ |
|---|---|---|---|---|---|---|
| 1 | Teaching resources | 4 | Odd | 28.25 | 2.01 | 0.76 |
| | | 4 | Even | 29.11 | 1.99 | |
| 2 | Awareness of emerging topics in LIS | 3 | Odd | 29.22 | 2.39 | 0.86 |
| | | 3 | Even | 29.41 | 2.17 | |
| 3 | ICT training | 7 | Odd | 28.57 | 2.18 | 0.80 |
| | | 7 | Even | 28.61 | 2.09 | |

| 4 | Quality of staff | 3 | Odd | 29.92 | 1.89 | 0.78 |
|---|---|---|---|---|---|---|
| | | 3 | Even | 30.33 | 2.06 | |

The questionnaire was the only research instrument used for data collection in this study. The researcher administered the questionnaire to the respondents personally to the respondents, after introduction and familiarization. In clear and simple terms, she explained the essence of the study and seek for their consent to include them in the study. The questionnaire were administered to respondents who gave their consent to take part in the study.

## 3. RESULTS

This chapter is concerned with the statistical analysis of data collected for the study. The chapter also focused on the presentation, interpretation and discussion of the results that were obtained from the analysis of the data collected for this study. This was done hypothesis by hypothesis with each hypotheses tested at 0.05 level of significance.

**General description of research variables**

This study was carried out to examine the education and training of library and information science students in the Department of Library and Information Science, University of Calabar, Calabar. The study is a two variable topic (education and training of LIS students). With a no dependable variable, the study variable was categorized under sub-variables as follows: teaching resources, awareness of emerging topics in LIS, inclusion of ICT based courses and quality of staff. Based on the variable, four research questions and hypotheses were posed to guide the study.

## 4. DISCUSSION

This section is concerned with the discussion of findings that emerged from the statistical analysis conducted. The discussion is presented according to the variables of the study.

**Teaching resources for education and training of LIS students in the Department of Library and Information Science**

The result of the hypothesis showed that there are significant teaching resources for the education and training of LIS students in the Department of Library and Information Science, University of Calabar, Calabar. This finding is in line with the view of Scott Walter (2018) who stated that the rise of interdisciplinary instructional initiatives such as General Education, First-Year Experience, and Writing across the Curriculum etc. have not only provided increasing instructional opportunities for academic librarians, but have also required academic libraries to focus on teaching as a core service. In the same vein, Brecher & Klipfel (2014) posited that for the future success of academic libraries, it is essential that library schools pay greater attention to instructional pedagogy for training library leaders of the future.

The findings of this study is also in alignment with the observations of Adeoye & Popoola (2011) that textbooks, journals, dictionaries, encyclopedias, handbooks, newspapers/magazines, manuals, atlases/maps were readily available and accessible to the students, whereas internet facilities, CD-Rom facilities were not available. Also, Oriogu, et al (2015) observed that majority of students use scholarly journals twice monthly and by monthly basis and they purposely used it for self-examination, learning more about a subject, for assignment and course work. The researchers further observed that scholarly journals were readily available and accessible to the students.

In regards to specificity of the materials necessary for the education and

training of LIS students, Mamman (2000) noted that digital or electronic library has come to stay. This raises the need for Nigerian LIS professionals in libraries to have acquired modern information technologies if they are to be relevant to the society. The peculiarity of digital technologies is that they have large storage capacities, ability to store and disseminate information at incredible rate, versatile and free of geographical barriers. For Nigerian LIS professionals to fully maximize their roles as information disseminators for the benefit of the society, they need education that will assist them to confidently demonstrate their competence and professional expertise to all. Akanni (2008) also affirmed that potential librarians need education that will stimulate their interest and sustain the awareness of their expected roles as information professionals in the development of every aspect of the Nigerian society.

In line with the findings of this study, Suresha and Narayanswamy (2017) averred that adequacy of infrastructural facilities such as teaching and other non-teaching staff and laboratory equipment are important elements for offering qualities teaching, learning and research. Consequently, Suresha and Narayanswamy (2017) concluded that except for few university departments, the majority of the departments do not have the proper infrastructure facilities. This evidently seen when only minimum staff are found to have latest knowledge of ICT in most teaching departments. At the same time, the laboratories attached to the teaching departments have inadequate number of computer and other equipment to train the library professionals. University libraries are also striving to have comprehensive and proper training facilities for in-service training for the LIS teachers.

**Awareness of emerging topics in Library and Information Science**

The result of hypothesis two revealed that students of the Department of LIS, UNICAL have significant awareness of emerging topics in Library and Information Science. The findings of this study is in line with the view of Okere and Ekere (2008) who poised that LIS students, having undergone specialized training, they are expected to be skillful in the complex art of managing human and material resources, information packaging, library repositioning, strategic planning, budgeting and effective allocation of funds among competing needs. Therefore it is incumbent on LIS professionals to upgrade their technical and human relations skills to remain relevant in the profession and attractive to the patrons of libraries and information centers.

The findings is also in agreement with the observation of Mole (2006) who stated that admits the competitive demands of the information age, Nigerian LIS professionals must be used to and familiar with the wide range of databases available and use them extensively in satisfying users information needs. There are expected to be chief facilitators of the process of information storage, packaging and transfer among individuals and groups, assist in developing websites for their libraries and provide detailed information of their reference sources and services on the website. Omole also agreed that; as LIS students engage in websites creation, they usually would take into consideration collections, publications, catalogues of individual libraries around the world and Nigeria in particular. Again, their role will become more prominent as educators, information managers, information providers, publishers, archivists, records managers, intelligence information officers, editors, dealers in information media etc.

Consequently, as trained professionals, LIS students can increase awareness among clients of available information networks and assist them in the content and usage of reference information network. In addition, Nigerian LIS

professionals who are proficient in internet search have always been educating their professional colleagues through professional continuing education. Therefore, as information management consultants, they can assist network users to build and remain personal information systems which provide access to the subset of networked information resources relevant to each user's work. As information providers, they can make available a wide range of publications and access formats from remote log-in to catalogues and indexes and provision of electronic copies of entire collection or works, in print or other formats.

Through this finding, it is imperative to understand the school view of education for librarianship to prepare individuals to provide information services, products and management regardless of institutional setting or particular application. According to Igbeka (2008), LIS professionals do not only have to work in established institutions, they can establish their own libraries or information centers and become information brokers or business librarians who can search and find information for users for a free. They can also work as corporate librarians in large companies or corporate bodies where they can be members of management by managing knowledge for these bodies. The education of LIS professionals presents new roles which make them become facilitators. These include computerization of all library acquisitions, establishment of www site where computerized materials can be accessed, enabling users to access information from other libraries through installed IT, assisting researchers prepare comprehensive and complete bibliographies assisting students to access materials placed on reading lists by lecturers, fund-raising to support services provided in areas of information packaging, library repositioning, strategic planning, budgeting and effective allocation of funds among competing needs. Well trained LIS professionals must be competent in manual library routines with exposure to library automation of library services in the library school. They can become computer operators and instructors that can order books from vendors through the internet with the aid of c computers and also provide computerized cataloguing and reference services to their clients with sophisticated tasks for information delivery.

In the same vein, the finding have demonstrated that education and training of LIS professionals will promote operational efficiency in libraries and understanding of the theories of library practice and how to apply them. They have been thought to apply the theories, methods, and rules applied to book selection, acquisition, cataloguing and classification processes, care and use of library materials, maintenance of library records, bibliographic compilation, etc. As trained indexers and audio-visual specialists, Nigerian LIS professionals are expected to acquire the skills to classify documents on the basis of their subjects' content and construct indexes to facilitate their retrieval based on the prevailing technology (Nkanu & Ogar, 2014).

Okoli (2005) also stated that LIS professionals of today must be conversant with computer technology hardware/software such as printers, scanners, CD-ROM databases, electronic mails, electronic publishing, electronic bulletin boards, teleconferencing etc. By implication, computers play many roles in LIS professional's operational environment. Therefore, for LIS professionals to integrate and interact meaningfully with patrons in computer-based libraries of today, they need to be computer literate and acquire competence in computer application in the areas of networking, internet search, website creation etc. Aina (2007) further opined that courses such as basic computer skills, computer applications (word processing, spread sheet, databases management

systems), networking internet surfing and web design, publishing, public relations, editing, writing advocacy, conversation and preservation, theories of archives and records management courses should be offered in library schools and also papers presented during conferences, seminars and workshops should be aimed at further exposing LIS professionals to the realities of the information age. The researcher also suggested that LIS professionals are expected to process skills in packaging information, management and operation of audio-visual equipment, documentation of indigenous knowledge, preservation and conversation of records, provision of query and answers service in the communities. Finally, Nkanu and Ogar (2914) averred that LIS professionals should have no option than to tap heavily into the non-traditional jobs, hence Library and Information educators should ensure that the curriculum in library schools is designed to accommodate modern changes prevalent now in the information profession since the infusion of ICT into all human activities has completely changed the practice of library science all over the world.

## Inclusion of ICT based contents in the education and training courses of LIS students in Department of Library and Information Science

The result of hypothesis 3 revealed that there is no significant provision of ICT training for LIS students in the Department of Library and Information Science, University of Calabar, Calabar. This finding is in consonant with the view of Suresha and Narayanswamy (2017) who posited that information and communication technologies (ICT) which include radio and television, as well as newer digital technologies such as computer and the internet have been touted as potentially powerful enabling tools for education change and reform. When used appropriately, different ICTs are said to help expand access to education, strengthen the relevance of education to increasingly digital workplace, and raise educational quality by, among others, helping make teaching and learning into an engaging, active process connected to real life. Velmurugan and Kannan (2011) also posited that LIS curricula need to consolidate ICT concepts, knowledge, skills and proficiency into core competencies, and LIS schools need to provide adequate content and practice that will enable LIS graduates to adopt and use of ICT application in effective manner.

The finding is also related to the observation of Dhanajay (2016) that use of electronic resources in teaching and learning positively impacts the delivery of LIS modules. Some of the new approaches, methods, techniques and instructional resources/tools of teaching/learning, when innovatively used, not only make it easier for students to learn. But also insidiously acquaints students with the ICT tools. For Agaja (2015), libraries have started depending on and providing ICT based information services along with traditional services. However, the significance or magnitude of these issues and challenges vary between countries and institutions, presumably due to socio-political and economic environments.

Also, Suresha and Narayanswamy (2017) purported that the IT revolution of 1990s had major impact in the syllabus of BLIS/MLIS level courses in all universities this affecting syllabi for Library an Information Science subjects. Jeevan

(2018) also purported that e-learning is over searching umbrella that encompasses education, information, communication and training. It is the web enabled system that makes information and knowledge to those who need it; how they need it, anytime, anywhere. Numerous literatures are available in reference to ICT course contents in LIS curriculum. Ranganathan in Tyagi and Yanthan (2016) further stated that cultivation of man's ability and skills should go on throughout life and this can be achieved through education. Tyagi et al (2016), Sharma (2014) and Kavulya (2017) observed that through the relevance of ICT was stressed, only few institutions had incorporated ICT in their syllabus. Since it is been identified that library staff need to develop their ICT competencies to perform better in this modern time, many researchers have com-up with various possible suggestions for corrective measures to be taken in this regard.

The finding of this study come handy with the suggestions of Karisiddappa (2015) that adoption of modular approach is a way of convergence of the present and future needs of a dynamic curriculum. Mondaland Kumar (2016) and Singh and Mohd (2016) explained that the LIS curriculum required consistent monitoring and a statutory body like ALA (American Library Association) to accredit programs according to international standards. The LIS professionals in Nigerian Universities lack ICT skills and encounter problems in the job market. Susan (2011) also concluded that most of the library professionals do not have an optimistic approach towards the application of ICT

based services in libraries. This may be mainly because of lack of adequate ICT infrastructure in university libraries. Majority of the professionals irrespective of their age, experience or qualifications had suggested the need for more ICT oriented topics in the curriculum. It was further recommended that multi-media laboratories should be made compulsory in universities that offer LIS courses. Ganaie (2012), Mahmood (2016) and Pardhan (2016) opined that remodeling of LIS curriculum has to be done by planning and proper integration of ICT into library education.

**The quality of staff in the Department of LIS, UNICAL**

The result of hypothesis 4 revealed that the quality of staff in the Department of LIS UNICAL is significantly high. This result is in line with the view of Devi and Verma (2015) that qualified library professionals are required for helping students understand basic concepts. With the development of ICT, the library professionals are trained and retrained for they can update themselves and can trained the new recruits/administrative staff and students. The information explosion, internet and the technology advancement have tremendous impact on the role of libraries and library professionals. The role of a library professional in the current academic environment and information age is very diverse and dynamic and they can succeed in their new role competent skill of ICT. Bharathi (2013) also point out that the roles of LIS professional in an information society have change a lot. The LIS professionals may acts in an information society as a subject expert, Global information providers, resource managers, Time managers, legal advisors,

leaders, personnel manager, mentors, and as life-long learner. For maintaining these many roles the LIS professionals must require a number of skills in them, like IT skills, communication skills, management skills, learning and teaching skills, etc. for running the service in the library effectively and efficiently.

This finding is also credited by the observation of Pinki (2019) that in today's JOB Profile, the library professionals who have the sound knowledge of ICT are mostly preferred for recruitment in a library post. Nowadays, a number of career prospects are available in library and information science. The qualified LIS professionals are employed in various libraries, information centers, research center, and in the corporate sector too, as per their own interest. Devi and Verma (2015) also state that today's environmental pressure are forcing libraries to focus on accelerating technology, innovation, technical complexities, social and legal issues, cost risks, competence, skills of staff and technology itself. Therefore, the library professionals have to act in a proactive manner to support the 21$^{st}$ century educational change.

Shahid and singh (2010) further highlighted the problem and shortcomings of LIS education to arise from shortage of staff and lack of expertise in ICT. It is also found that the LIS professional lack ICT skills and face problem in the job market. Due to the re4ason, most of the employers are not satisfied with the skills of information professionals. Mahmood, and Khan (2007) suggested that training on ICT can be provided through courses and workshops, hands-on practice, visits of other institutions, professional meetings, seminar/conferences, series of lecturersm, telephonic/video conferencing etc. the researchers further suggest that the arrangement of all trainings and know-how about ICT should be made by the professionals associations, library schools, employers and ICT vendors.

## 5. CONCLUSION

The main thrust of this study was to examine the education and training of library and information science student in the Department of library and information science, university of Calabar, Calabar – Nigeria. As a basis for the study, literature review was done in line with the variables under study. Survey research design was used for the study. This design was considered appropriate because it allowed the researcher to make inference and generalization to the population by selecting and studying the sample for the study. A sample of two hundred and eight (280) LIS students were selected for the study. The selection was done using purposive and accidental sampling technique, with which 40% of the population was drawn for the study. The questionnaire titled: "Education and Training of Library and Information Science Students Questionnaire (ETLISSQ)" was the research instrument used for data collection. The instrument was subjected to face and content validation by the project supervisor. The reliability of the instrument was established through split-half reliability method with very high reliability estimates. Population t-test analysis was the statistical analysis technique adopted to test the hypotheses under study to ascertain whether to reject or retain them. The statistical tools were used because of the nature of the variables involved in the study. All hypotheses were subjected to testing at .05 level of significance with relative degrees of freedom. The results of the analysis revealed that there were significant teaching resources for education and training of LIS students, LIS students have significant awareness of emerging topics in their field, there is no significant provision of ICT training for LIS students and the quality of staff in the Department of LIS, UNICAL is significantly high. Based on the finding of the study, it was recommended among others that staff should continue to

prioritize their proficiency in ICT so that they can properly educate and train potential librarians to serve the present and future information user. In addition, LIS students should be introduced to emerging topic especially with trending technological advancement to enhanced the abilities to operate in the digital age.

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