Training the Undergraduate Students in Entrepreneurial ICT Skills in University-based Library Schools in Nigeria

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Abstract

Purpose: This study investigated the ICT course offered, the use of available physical resource and the acquisition of ICT skills in university-based library schools in Nigeria.

Design/Methodology/Approach: Survey research was employed with population of undergraduate students and ICT course lecturers in the 25 university-based library schools being accredited by the Librarians' Registration Council of Nigerian (LRCN). Eight university-based library schools were selected by propulsive sampling technique. Documentary source (student handbook) and structured questionnaire were data collection instruments. Both descriptive statistic (frequency counts, mean and standard deviation) as well as inferential statistical tool (t-test) were used in the analysis of data in respect of research question and testing of null hypothesis.

Findings: Study revealed variations in the ICT course content offered and inadequate to equip undergraduate students with ICT skills for self-reliance. There was no significance difference between the use of physical resources and the acquisition of ICT skills.

Practical implication: With the variation in the ICT course content, there will be corresponding variation in the acquisition of ICT skills such that some undergraduate students will be at advantage in some library schools, others will be at disadvantage in other library schools in terms of the acquisition of ICT skills.

Originality/Value: The paper originality has its empirical evidence to support the position of training the undergraduate student in the area of entrepreneurial ICT to make them self-reliance after graduation from library schools.

Keywords: Training, Undergraduate student, Entrepreneurship, ICT skills, Library schools, Universities, Nigerian

Introduction

During the colonial era, Nigerian labour market was very easy to come-by. That is to say that there was high rate of employment opportunities. In fact, graduates and school leavers of that time were offered jobs prior to the completion of their programmes/schools. Between 1950s and 1970s with the buoyant economy, Gross Domestic Product (GDP) was high especially in Agriculture sub-sector of the economy which serves as a means of foreign exchange and increased employment. During the period under-review neither the issue of unemployment nor entrepreneurship was known.

The issue of unemployment was noticed in the past three (3) decades and till date graduates and young school leavers now roam the street in search of greener pasture. Federal government through National Universities Commission has included entrepreneurship as one of the general studies courses but also make it as one of the compulsory GS courses in Nigerian universities. Presently, some universities in Nigerian are offering entrepreneurship as undergraduate programme. As part of the entrepreneurship training, skills are taught to the undergraduates in Nigerian Universities include "fashion designing, catering and hospitality management, hairdressing, barbing, events planning, decoration, counseling and human development; cinematography, electrical installation and wood work and carpentry" (Oluwade, 2014 p. 40).0

The concept of entrepreneurship is all about creativity, skill acquisition, self employment/reliance and wealth creation. The mission of Federal University of Technology Minnaas, one of the specialized

Universities of Technology in the country is to produce students with skillful and innovative workforce that will positively change Nigerian's natural resources into goods and services through entrepreneurship and ICT. The Nigerian library school (LIS) is a department that is charged with the responsibility of training different cadre of personnel that will work in libraries of any type. The LIS as a department and discipline is not left out in this direction as literature and students handbook revealed that Entrepreneurship has not been fully incorporated into the undergraduate programmes of Federal University of Technology, Minna, MadiboAdama University of Technology, Yola, Abia State University, Uturu, University of Nigeria, Nsukka, while Eyo, Ettong and Akin-Fokarede (2014) also reported same issue on university-based library schools of Calabar and Uyo.

In a study of the availability and adequacy of curriculum contents, resources and facilities in Nigerian library schools, Saleh (2011) reported that though there were variations in the curriculum but it was discovered to be adequate for the transmission of appropriate knowledge of librarianship. Study further revealed that qualified teaching staff are taking and information resources (textbooks, journals and facilities) were giving inadequate attention.

Olanike (2014) reported that undergraduates' reason for studying full LIT in F.U.T. Minna library school is to become "New Age Librarians." The researcher further discovered that majority of the respondents claimed the availability of computer in the library schools. A good number of respondents indicated that they don't undertake practical's in the computer laboratory of the library school.

Eyo.Ettong and Akin-Fokarede(2014) examined the relevance of LIS course content to the training of trainers. The result showed non-uniformity in the LIS courses (with few ICT courses) offered at undergraduate level.

However, the study revealed that the LIS course content is relevant and matches with the areas of specialization. Musa, Gana, Mohammed, Abubakar and Ayodele (2014) discovered that computers, internet, projectors and public address system were the major facilities available for teaching entrepreneurship courses.

From the above related studies, it can be deduced that university-based library schools in Nigeria are yet to properly incorporate entrepreneurial ICT skills into their curriculum which may be attributed to inadequate information resources to be use by lecturers and students. The study therefore examine whether ICT skills acquired will enable undergraduates to be self-reliant on graduation.

Objectives of the Study

The purpose of the study was specifically to:-

1. Determine the undergraduate ICT courses offer in Nigerian library schools;
2. Investigate the use of physical facilities for the acquisition of ICT skills.

Research question: The study was guided by a research question:

What type of ICT courses are taught at undergraduate level in Nigerian library schools?

Hypotheses:

A null hypothesis was formulated and tested at 0.05 level of significance:

   i.   H0: there is no significant difference in the mean rating of the uses of physical resources in the acquisition of ICT skills

Methodology

Survey method was used with population of final year undergraduate students in the 25 LRCN accredited Universities offering library and information science programme in Nigeria. The accredited library schools are as follows:

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Table 1: List of Approved / Accredited Nigerian Universities offering Library and Information Science Programmes

S/No	Universities	Approved Programme
1.	Abia State University, Uturu	Library & Information Science
2.	AbubakarTafawaBalewa University, Bauchi	Library & Information Science
3.	Adeleke University, Ede	Library & Information Science
4.	Ahmadu Bello University, Zaria	Library & Information Science
5.	Ambrose Ali University, Ekpoma	Library & Information Science
6.	Bayero University, Kano	Library & Information Science
7.	Baze University, Abuja	Library & Information Science
8.	Benson Idahosa University, Benin City	Library & Information Science
9.	Benue State University, Makrudi	Library & Information Science
10.	Delta State University, Abraka	Library & Information Science
11.	Federal University of Technology, Minna	Library & Information Technology
12.	Federal University of Technology, Yola	Library & Information Science
13.	Ibrahim BadamasiBabangida University, Lapai	Library & Information Science
14.	Imo State University, Owerri	Library & Information Science
15.	Kwara State University, Ilorin	Library & Information Science
16.	Madonna University, Okija	Library & Information Science
17.	NnamdiAzikwe University, Awka	Library & Information Science
18.	Tai Solarin University of Education, Ijebu Ode	Library & Information Science
19.	Umaru Musa Yar'adua University, Katsina	Library & Information Science
20.	University of Calabar, Calabar	Library & Information Science
21.	University of Ibadan, Ibadan	Library & Information Science
22.	University of Ilorin, Ilorin	Library Science
23.	University of Maiduguri, Maiduguri	Library Science
24.	University of Nigeria, Nsukka	Library & Information Science
25	University of Uyo, Uyo	Library & Information Science

Source:www.lrcn.gov.ng14th March, 2015.

Out of the twenty-five (25) LRCN accredited library schools, eight were selected using purposive sampling. The criteria used for selection was based on only the government-owned library schools by types. Owing to the fact that there are more number of conventional universities than the specialized ones, five conventional and three specialized university-based library schools were selected. Out of these numbers, two universities are those owned by the state government while six were owned by federal government of Nigeria. The selected library schools include the following:

1. Federal University of Technology, Minna;
2. Umar Musa Yar'adua University, Katsina;
3. AbiaState University, Uturu;
4. University of Nigeria, Nsukka;
5. University of Calabar, Calabar;
6. University of Uyo, Uyo;
7. AbubakarTafawaBalewaUniversity, Bauchi; and

8. MadibboAdama University of Technology, Yola.

Data were collected through students' handbook (to identify ICT courses offer in Library Schools) and administration of the copies of questionnaire through research assistants. Respective library schools students' handbooks were used to identify the ICT courses offer while close and open-ended type of questionnaire was designed to contain four sections in relation to the purpose of the study (entrepreneurial ICT courses taught, use of physical facilities and acquisition of ICT skills). Based on the

designed, 250 copies of the questionnaire were distributed among the eight university-based library schools through colleagues. Two null-hypotheses were formulated and tested at 0.05 level of significance.

Results

Out of the 250 copies of questionnaire administered in the eight sampled library schools, 158 copies from five library schools were filled and returned in usable form, representing 63% success. The result of the study is presented in tables below:-

Table 2: Respondents by level of undergraduate programmes

Level	Frequency	Percentage (%)
100	32	20
200	21	13
300	17	11
400	24	15
500	64	41
Total	**58**	**100**

Data was analyzes on the basis of 158 respondents in terms of level of undergraduate programme. Highest frequency was discovered from 500 level students with 64 (41%). This was a reflection of the two universities of technology (Minna and Yola) that were part of responding library schools, more so that spill-over students

may also constitute this number. The highest respondents can be attributed to the fact that respondents being from specialized universities, priority is giving to ICT. Lowest respondents was obtained from 300 level with 17 (11%) of the respondents and may be as a result of the withdrawal of more students from 300 level.

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Table 3: List of ICT Courses offer in responding university-based Library Schools in Nigeria

University of Nigeria, Nsukka	AbiaState University, Uturu	University of Uyo, Uyo	Fed. Uni.of Tech., Minna	Fed. Uni of tech (MAUTECH), Yola
LIS 252: Computers & Data Processing	**IFS 104:** Basic Computer Operation I	**GST 222:** Science & Basic Technology	**CPT 111:** Intro. to Computer Operation	**CS 101:** Intro. to Computer Science I
LIS 402: Contemporary Tech. in Libraries	**IFS 105:** Basic Computer Operations II	**LIS 226:** Computer & Data Processing	**CPT 221:** Info. Programming	**TT 101:** Intro. to Inf. Technology
LIS 444: Inter-Lib Corporation & Inf. Networks	**IFS 243:** Inf. Technology in Lib & Inf. Centre I	**GST 311:** Application of Computer	**CPT 211:** Object-Oriented Programming I	**CS 102:** Intro. to Computer Science II
Source: Dept. of LIS Handbook (2010-2014)	**IFS 271:** Inf. Systems & Structure I	**LIS 314:** Information Technologies	**LIT 213:** Intro. to Computer Systems	**TT 106:** Digital Technology
	IFS 244: Inf. Technologies in Lib. & Information Centre II	**LIS 423:** Inf. Retrieval from the Internet	**LIT 222:** Inf. Technology & Society	**CS 201:** Computer Programming I
	LIS 246: Computer Programming	**Source: Eyo, E.B.E; Otlong, E.J. & Akin-Fakorede, O. (2014)**	**LIT 318:** Data Communications & Networks	**LS 204:** Intro. to Telecommunication
	IFS 272: Inf. Systems & Structure II		**CPT 313:** Operating System I	**CS 202:** Computer Programming
	IFS 411: Automation in Lib & Inf. Centre		**CPT 221:** Object-Oriented Programming II	**LS 303:** Inf. &Comm Technology
	IFS 466: Practical Computer Application		**LIT 312:** Inf. Technology & Libraries	**CS 303:** Operating System I
	IFS 484: Advanced Inf. Storage & Retrieval		**CPT 316:** System Analysis & Design	**CS 311:** System Analysis & Management
	Source: Dept of LIS, handbook ABSU, Uturu(2010)		**CPT 325:** Database Design &Mgt	**TT 304:** Data Communication & Networking Application
			CPT 413: Systems Operation Research	**LS 401:** Data processing in Lib. & Inf. Centres
			CPT 416: Software Engineering & Computer Ethics	**LS 411:** Computer in Inf. Work
			LIT 513: Inf. & Retrieval Systems	**TT 403:** Computer Security
			LIT 514: Implication of Inf. Technology	**LS 501:** Automation in Libraru& Inf. Centres
			CPT 514: Advanced Database Systems	**TT 505:** Web Publishing & Programming
			LIT 522: Lib. Automation & Digitalization	**CS 510:** Computer in Society
			LIT 525: Electronic Publishing	**TT 512:** Telecommunication
			Source: Dept of LIT, student handbooks, Minna (2014)	**Source: Dept of LIS, students handbook MAUTECH, Yola (nd)**

The table 2 revealed that three of the library schools (Abia State University, Uturu, ModiboAdama University of Technology, Yola and Federal University of Technology, Minna) offer more ICT courses while University of Nigeria Nsukka and Uyo Library Schools offer few ICT courses. Critical examination shows that Federal University of Technology, Minna and MAUTECH, Yola Library Schools offer most of their ICT courses from computer science department and few within the library schools. Highest number of ICT courses was noticed from the two library schools owing to the fact that they are universities of technology where prominence is given to teaching of IT courses thus the ICT courses were adequate to equip undergraduate students with necessary skills to make them to be self-reliant. The feature of the ICT courses in these library schools was the divergent curriculum which may not encourage the provision and acquisition of uniform practical IT skills to undergraduates (Saka, 2009).

Hypotheses 1: There is no significant difference between the use of physical resources and acquisition of ICT skills.

Table 4: Summary of t-test of physical resources used and acquisition of ICT skills

Group	N	DF	Mean	SD	t-value	p-value
Physical resources	4	6	287.34	44.715	1.034	.394
Acquisition of ICT skills		3	255.70	31.904		

The table shows the t-test analysis of physical resources available and acquisition of ICT skills. The mean scores were 287.34 and 255.70 respectively. The t-value of 1.03 was not significant at 0.05 level. This indicate that there is no significant difference between the mean scores of physical facilities and acquisition of ICT skills (t = 1.0344, df = 6, p = 0.349). Hence the hypothesis was retained and the two groups were equivalent and comparable. These physical resources were the ICT facilities (computers, internet resources, audio-visual materials etc).

Discussion

The table on ICT courses taught and offered showed that all the survey university-based library schools have met the NUC benchmark though there was disparity in the ICT courses taught. This disparity and inadequacy of the curriculum content is likely to make students acquired inadequate skills owing to the fact that adequate physical resources and ICT facilities were grossly inadequate. This is because every library school is at liberty to incorporate, modify and restructure its course content and curriculum. This finding corroborates that of Eyo, Ettong and Akin-Fokorede as the collaborative researchers conducted a study to determine imaging emerging trend in the LIS content of the university-based library schools of Calabar and Uyo and it was reported that the undergraduate course contents were not uniform i.e. there was disparity in the curriculum of the two library schools.

The null hypothesis tested was accepted. Hypothesis tested revealed that the t-value of 1.034 was not significant at 0.05 level of significance and so the hypothesis which states "no significant difference between physical resources used and acquisition of ICT skills" was rejected. This finding is inconformity with the finding of Saleh, (2011), Musa et al (2014) and Olanike (2014).Saleh (2011) discovered disparity in the LIS undergraduate curriculum and that the information resources and ICT

facilities were grossly inadequate. Musa et al (2014) discovered the availability of major facilities (computers, internet, projector, smart and public address system for teaching entrepreneurship course to LIS undergraduate students of Ahmadu Bello University, Zaria). Olanike (2014) found that good number of undergraduate students indicated not to undertake practicals in ICT laboratories which may be as a result of the limited number of computers in the ICT laboratory in Federal University of Technology, Minna library school

Conclusion

With the Nigerian library schools running divergent ICT curriculum, it means that there is going to be differences in LIS graduates skills acquisition, hence knowledge and skills acquired by undergraduate students in one library school might be different from the one acquired in another library school. While some undergraduate students might be at advantage in acquiring adequate ICT skills, others might be at disadvantage. This will no doubt affect not only their competency and level of performance after graduation but also affect their ability level to create ICT jobs for mankind. As the available of ICT resources are being utilized, there is going to be corresponding effects on skills acquisition by undergraduate students. The more ICT facilities are used, the more proficient and self-reliance undergraduate students are to be after graduation.

Recommendations

Based on the findings, the study recommends that:-

1. Uniform undergraduate ICT curriculum for all university-based library schools in Nigeria should be finally designed and worked for implementation.
2. There should be well-equipped departmental libraries, ICT laboratories, while emphasis should be placed on constant practical lessons for the undergraduate students. This

is to bridge the gap between the use of ICT resources and the acquisition of ICT skills

3. There should be a competitive ground such that each library school will provide adequate ICT practical. These will create a ground for comparison among various university-based library schools in Nigeria.

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