
Use of ICT facilities for teaching library and information science courses at the University of Uyo, Nigeria**Information Impact:**Journal of Information and Knowledge Management
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ISSN: 2360 – 994X (e-version)**Uduak U. Enang***University of Uyo, Nigeria***Mercy E. Ukpanah***University of Uyo, Nigeria***Mercy D. Ebong***University of Uyo, Nigeria***Abstract**

This article investigated availability and functionality of ICT facilities and its utilization in the teaching of Library and Information Science (LIS) students in the University of Uyo. The study adopted a survey design and was guided by four objectives, four research questions, and two hypotheses. The population of the study comprised all 48 final year students in the LIS unit of the departments of Educational Technology and Library Science, University of Uyo and the students were purposively sampled for the study. A structured questionnaire and a checklist constituted the instruments for data collection. The data obtained were analyzed using Mean and Standard Deviation to answer research questions while t-test, Analysis of Variance and Simple Regression Analysis were used to test the hypotheses at 0.05 level of significant. The result revealed that there is a significant influence of availability and functionality on the use of ICT facilities in teaching LIS courses in the University of Uyo library school and concluded that the availability and functionality of ICT facilities enhance usage for the teaching of LIS students. It also recommended proper funding of library schools.

Keywords: ICT facilities, functionality, utilization, library and information science, students, uyo

Introduction

Rapid advances in information technology have provided new learning methods and environments. The goal of higher education in Nigeria as listed in the National Policy of Education is to contribute to national development through high-level relevant manpower training. Technology in education has often been seen and used as providing the answers to educational problems. A critical examination of the impact of globalization and Information and Communication Technology, individual and

national development calls for paradigm shift about the teaching of Library and Information Science (LIS) in Nigerian library schools. ICT permeates almost all the courses taught in Library Schools.

The educational system in Nigeria is faced with the challenges of transforming from the traditional to an enhanced technological method of imparting knowledge to the diversified learners in the 21st-century information age. Information and communication technology facilities are the major aspect in determining the express

technological development in the society. Hetachew (2008) describes ICT facilities to include access to electricity, computer, the Internet, overhead projector, fax machine, multi-media equipment etc. Therefore the use of information technology facilities for educational instruction in the teaching of LIS has become the bedrock for academic success in the profession. Massy & Zemsky (1995) observed that teaching with ICT enables students to work at their own pace with continuous assessment, in contrast to the traditional post-secondary education method, which can be described as batch-processing with the intermittent assessment. ICT facilities strengthen the relationship between the lecturers and the students through interactive facilities at any time of the day.

Library education in Nigeria nevertheless has come a long way today as observed by Ugwuoke (2011). Since the first library school in 1960 at the University College Ibadan several changes have been witnessed in the society at large and in the library profession in particular. The end of the 1980s saw the establishment of several other library schools in Nigeria awarding qualifications up to the Ph.D. level (Igwe, 2005). The University of Uyo started in 1991 and the Bachelor of Library and Information Science (BLIS) programme started in the university in October 1999. Today the school has produced so many graduates at all levels.

To be registered and authorized to practice Librarianship in Nigeria, the individual must pass through a library school. This becomes a necessity for LIS graduates in the

information age to be trained with information communication facilities for effective service delivery and this call for an opportunity to explore diverse ICT facilities during the period of training and be adapted to its usage. ICT facilities are the major foundations needed in library schools in this information age. This is because graduates in LIS must be conversant with these resources. Many library schools the world over have designed their curricula with a view to producing information and communication technology literate graduates who would be relevant and marketable. For example, many library school curricula now include courses on web design, networking, software application, systems design and management, electronic publishing, the Internet and other on-line databases access to reflect the changing competency needs of their graduates (Nel & Wilkinson, 2006).

The method of teaching today goes beyond the physical walls of the classrooms and the curriculum is being modified in line with these technological changes. But the question that arises from this is with this modification and introduction of ICT facilities, are these facilities available in University of Uyo library school? If these facilities are available, are they functional and used for teaching in the department to enhance effective learning? This study is therefore aimed at investigating the influence of the availability of ICT facilities and their use in teaching the LIS students in the University of Uyo?

Purpose of the study

The main purpose of this study was to investigate the influence of availability and functionality of ICT facilities and their usage in the teaching of LIS courses in the University of Uyo, library school.

The specific objectives are:

- To identify the ICT related courses taught in the department of Library and Information Science, University of Uyo.
- To identify the ICT facilities available and functional for the teaching of these courses in the department of Library and Information Science, University of Uyo.
- To ascertain the influence of availability of ICT facilities on their use in the teaching of these courses in the department of Library and Information Science, University of Uyo.
- To ascertain the influence of functionality of ICT facilities on their usage for the teaching of LIS courses in the University of Uyo.

Research question

- What are the ICT related courses taught in the department of Library and Information Science in the University of Uyo?
- What are the ICT facilities available for the teaching of these courses in the department of Library and Information Science, University of Uyo?
- What is the influence of the availability of ICT facilities on their

use in the teaching of these courses in the department of Library and Information Science, University of Uyo?

- What is the influence of functionality of ICT facilities on their usage for the teaching of library and information science courses in the University of Uyo?

Hypotheses

- There is no significant influence of the availability of ICT facilities on their usage for the teaching of LIS in the University of Uyo.
- There is no significant influence of functionality of ICT facilities on their usage for the teaching of LIS in the University of Uyo.

Methodology

The study adopted survey method. Checklist and questionnaire were used to gather data on the variables under study. The population of the study was 48 final year students in the department of Educational Technology and Library Science (Library and Information Science Unit) who were purposively sampled. Out of the 48 copies of a questionnaire administered, 41 respondents duly completed the copies of a questionnaire which were used for data analysis. Mean and Standard Deviation were used to answer the research questions and t-test, Analysis of Variance and simple regression analysis were used to test the hypotheses at 0.05 level of significance.

Findings and discussion

Table 1: List of ICT related courses

S/N	COURSE CODE	COURSE TITLE
1	LIS 113	Introduction to Cataloguing and Classification
2	LIS 215	Audio Visual Resources in Libraries and Information Centres
3.	LIS 212	Information Organization 1
4.	LIS 226	Computers and Data Processing
5.	LIS 311	Information Organization II
6.	LIS 314	Information Technologies
7.	LIS 321	Introduction to Information Science
8.	LIS 325	Interlibrary Cooperation and Information Networks
9.	LIS 327	Cataloguing and Classification of Non-book Resources
10.	LIS 411	Seminar and Contemporary Issues in Library and Information Science
11	LIS 423.	Information Retrieval from the Internet
12	LIS 424	Automation in Libraries and Information Centres

Table 1 above shows the number of ICT related courses taught at university of Uyo library school. This indicates that students

are expected to have hands-on applications with the ICT facilities in the courses taught.

Table 2: ICT facilities available and functional

S/N	ITEMS	NO. AVAILAB LE	NO. FUNCTION AL	NO. NOT FUNCTIONA L	PARTIAL LY FUNCTION AL	NOT AVAILABLE
1.	Computer laboratory	√	√	-	-	-
2.	Computers	20	20	-	-	-
3	Computer Workstations	20	20	-	-	-
4.	Uninterruptible Power Supply (UPS)	20	20	-	-	-
5.	Stabilizers	4	4	-	-	-
6.	Scanners	1	1	-	-	-

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7.	Printers	6	6	-	-	-
8.	Slides	1	1	-	-	-
9.	Internet	√	√	-	-	-
10.	Dedicated Generator	1	1	-	-	-
11.	Digital Cameras	2	2	-	-	-
12.	Smart Boards	1	1	-	-	-
13.	Overhead projector	2	2	-	-	-
14.	Television	1	1	-	-	-
15.	Server	1	1	-	-	-
16.	Air conditioners	2	2	-	-	-
17.	Library Management System Software	-	-	-	-	√
18.	Online Cataloguing and Classification databases	-	-	-	-	√

The table 2 above shows the ICT facilities available and their status of functionality. The table shows that there is a computer laboratory with 20 functional computers, 20 computer workstations, 20 functional uninterrupted power supply (UPS), 4 functional stabilizers, 1 functional scanner, 2 functional overhead projectors, 6 functional

printers, 1 functional slide, Internet access, 1 functional and dedicated generator for the laboratory, 2 digital cameras; 1 television, 1 server and 2 air conditioners, However, an integrated library management system and an online cataloguing databases are not available in the laboratory.

Table 3: Results of independent t-test analysis on the influence of availability of ICT facilities on their usage for teaching of LIS courses

Variables	Availability of ICT Resources	N	Mean	SD	t-cal
Use of ICT Resources for Teaching	Available	24	27.83	1.88	7.75
	Not Available	17	23.82	1.19	

*Significant at .05 alpha level; critical t = 2.021

The result in Table 3 reveals that the high and low mean scores of 27.83 and 23.82 for utilization of ICT facilities for teaching

when available and not available respectively. The result means that availability of ICT facilities influences their

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utilization for teaching LIS in the University of Uyo. The Table also reveals that the calculated- t value of 7.75 is greater than the critical- t value of 2.021at .05 level of significance. With this result, the null hypothesis that there is no significant influence of the availability of ICT facilities

on their usage for the teaching of LIS in the University of Uyo is rejected in favour of the alternate one. The result means that availability of ICT facilities influences their usage for the teaching of LIS in the University of Uyo.

Table 4: The result of analysis of variance for the influence of functionality of ICT facilities on their usage for teaching LIS courses

ICT Resources	N	Mean	S.D		
Functional	18	28.44	1.72		
Partially Functional	18	24.89	1.13		
Not Functional	5	22.60	1.14		
Total	41	26.17	2.57		
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	186.383	2	93.191	45.740	.000
Within Groups	77.422	38	2.037		
Total	263.805	40			

*Significant at .05 alpha level; critical F= 3.25

The result in Table 4 reveals that the high, moderate and low mean scores of 28.44, 24.89, and 22.60 for utilization of ICT facilities for teaching based on functionality (functional, partially functional, and not functional respectively). The result means that functionality of ICT facilities influences their utilization for teaching library and information science in the University of Uyo.

The Table also shows the calculated F-value of 45.740 at .05 with 2 and 38 degrees of freedom and critical F-value of 3.25. Since

the calculated F-value is greater than the critical F-value, the null hypothesis that there is no significant influence of functionality of ICT facilities on the teaching of LIS in the University of Uyo is rejected. The result means that the functionality of ICT facilities significantly influences their usage for the teaching of LIS in the University of Uyo. However, the group where the significant influence lies is not known, therefore, the use of Scheffe' Multiple Comparisons in Table 5. (based on responses)

Table 5: Scheffe 'multiple comparisons for influence of functionality of ICT facilities on teaching of LIS in the University of Uyo

(I) Functionality	(J) Functionality	Mean Difference (I-J)
Functional-	Partially Functional	3.56(*)
	Not Functional	5.84(*)
Partially Functional	Functional	-3.56(*)
	Not Functional	2.29(*)
Not Functional-	Functional	-5.84(*)
	Partially Functional	-2.29(*)

* The mean difference is significant at the .05 level.

Table 5 shows the Scheffe' Multiple Comparisons for the influence of functionality of ICT facilities on the teaching of LIS in the University of Uyo. The result reveals that the significant

influence of functionality of ICT facilities on the teaching of LIS in the University of Uyo lies between each group of functionality (functional, partially functional, and not functional respectively).

Table 6: Simple linear regression analysis for the influence of functionality of ICT facilities on their usage for teaching of LIS in the University of Uyo

Variables		Sum of Squares	df	Mean Square	F-Cal	F-Crit	R	R ²
Functionality	Regression	201.79	1	201.79	126.91	4.10	.875	.765
	n	1	1	1	*			
Use of ICT Resources for Teaching	Residual	62.013	39	1.590				
	Total	263.80	40					
		5						

To further establish if actually these functional facilities are utilized by the students, simple linear regression analysis was employed. The result in Table 6 reveals the calculated F-value of 126.91 at .05 with 2 and 39 degrees of freedom and critical F-

value of 4.10. Since the calculated F-value is greater than the critical F-value, the null hypothesis which claims no significant influence of functionality of ICT facilities on the teaching of library and information science in the University of Uyo is rejected.

The result means that the functionality of ICT facilities significantly influences their usage for the teaching of library and information science in the University of Uyo. The R^2 value of .765 means that the functionality of ICT facilities contributes to 77% of their usage for teaching of LIS in the University of Uyo

The findings from the study revealed that there are 12 ICT related courses that are taught at the University of Uyo library school in which the students are expected to have hands-on practical in the process of these courses. There is a functional laboratory with ICT facilities available and functional for the teaching of LIS students. However, there is no library management software and online cataloguing databases in the laboratory and this hinders students' practical application on library automation and online cataloguing and classification which is the core of librarianship in the information age. This has led to the students being taught mostly the theoretical part of library automation due to lack of the software. This, however, may be attributed to unavailability of sufficient funds to acquire and subscribe to the software. The findings from the study further show that the functionality of ICT facilities significantly influences their usage for the teaching of LIS in the University of Uyo. This confirms Aina & Adekanye (2013) advocacy of the use of ICTs in the teaching processes by noting that students remember only ten percent of what they have read, twenty percent of what they hear, but fifty percent of what they see and hear. Also, Ebrahimi (2009) agreed that the use ICT facilities in

the teaching process have greatly influenced the communication between teachers and students and among students.

Conclusion and recommendations

This study was conducted to find out the availability and functionality of ICT facilities in the University of Uyo library school as it enhances the teaching of students of LIS. The findings from the study revealed that ICT facilities are used to some extent in teaching the LIS students as some of them are available in the library school. It also revealed that the usage of ICT facilities for teaching the LIS students depends on the functionality level. It is therefore concluded that the availability and functionality of ICT facilities enhance usage for the teaching of LIS students and it serves as a developmental stride in the field of librarianship in this information age. The study recommended that there should be proper funding of library schools to enhance the availability of functional ICT facilities to avoid the graduation of impractical LIS professionals from the Library schools.

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