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## THE CHALLENGES POSED BY INFORMATION COMMUNICATION TECHNOLOGIES (ICT) FACILITIES TO STUDENTS OF TERTIARY INSTITUTIONS IN BAUCHI STATE

By

**Umaru F. Aliyu**

University Library, Abubakar Tafawa Balewa  
University (ATBU) Bauchi, Nigeria

### Abstract

*This paper examines the problems faced by students using ICT facilities to satisfy their information needs. Survey research method was employed by the researcher where a sample of 900 respondents was drawn from the three institutions of higher learning in Bauchi state. Questionnaire was used throughout to solicit response from the respondents. About 721 (80.11%) of the questionnaire issued was collected and used for analysis. The findings of the research revealed that, about 53.95% (389) of the respondents lack the skills required for utilizing ICT facilities to explore e-resources for their information needs. Other problems such as power supply, cost of maintenance, network problems, etc were also identified. Some suggestions such as provision of uninterrupted power supply, training programmes should be offered to the students.*

**Keywords:** ICT Facilities, Tertiary Institutions, Information Needs, ICT skills, Students

### Introduction

In this technological age, the introduction and utilization of ICT facilities by information seekers to get in touch with their information needs is of paramount importance. The importance of information was stressed by Uwaifo (2009) when he emphatically stated that, information is an essential ingredient required for any form of development: educational, political, economic, and social and lots more. Apart from its immense contribution to effective and efficient access to information, ICT facilities add to information user's skills required to explore the available resources around the world through internet. The internet and its various information resources over the past few decades have thus become an

all-important technological tool in the production, marketing and use of information worldwide, (Ajala, 2010). The impact of ICTs on the information services, was stressed by Lancaster and Sandore (1997), where they noted that, the remote access to the library's electronic resources using computer, modems and network has made the library more accessible, and has potentially attracted a new population of users who have the capability to use libraries without physically entering it, and perhaps more importantly, remote seekers of information can now get direct access to what have traditionally been classified as library information resources without depending on the library's intermediary role. Information and Communication Technologies consisted of both hard and software used to gain access to global information and at the same time used for strong information. The access to global information is made possible through computer facilities. Odufuwa (2006) identified four components of computer system to include: input devices, central processing unit, output devices and external or auxiliary store. The access to information by the users is made possible through on-line searching strategies which allow users to have access to global information stores or data bases. According to Ukachi (2009) the accessibility to Information resources is made possible through the host computer or across computer. This implies that, the users can search the data bases from remote computers or terminals interactively through a system called On-Line Information retrieved System. Information in virtually all subjects and disciplines are available in vast quantities and on wide variety of sources electronically. Students seek information for a lot of reasons ranging from examination, to do assignments, for final year research works or to kill boredom amongst others (Ajala and Ebijuwa, 2010). Kaurand Verma (2006) cited by Ajala and Ebijuwa (2010) found out that users of information regularly used all the resources available to them such as CD-ROMs, web resources, on-line databases and audio video tape to satisfy their information needs for their academic and other purposes.

### **Challenges Poses by Information and Communication Technologies Students of Higher Institutions of learning**

Many researches conducted by scholars revealed that, a lot of obstacles have appeared to impede the efforts of information users to satisfy their information needs from Information and Communication Technologies facilities. Many problems were identified by scholars. For instance Uwaifo (2009) mentioned

erratic power supply, which deters the users of information from getting access to required information they need using ICT facilities. However, effective utilization of ICT facilities in tertiary institution of higher learning may be properly achieved when we consider the fact that, some challenges which appeared to have retarded the easy flow of information were still adamant. Ogbomo (2011) identified challenges associated with the use of ICT facilities to include infrastructure related challenges. These, according to him, would involve a deliberate effort by policy makers and planners to consider the building, electrical wiring, heating cooling and ventilation, etc. to provide conducive environment for ICT facilities operations. Other problems also identified by Ilaonisi and Osuagwu (2010) included paucity of ICT infrastructure and lack of access, high enrollments, inadequate funding and absence of funding allocation to technology, high cost of ownership and cost to the consumer and policy implications of the mismatch between the advertised capabilities of ICT technology and the aims of individual educational institutions. The student in Nigeria educational institutions lack the skills in operation of ICT facilities, this was supported by Asugwu, others (2009) where they said, the users could not retrieve the needed information due to lack of knowledge in the operation of ICT facilities available for retrieval, storage and dissemination of information. Similarly, Abisoye (2010) pointed out that, both librarians and other information users should possess the necessary skills in the operation of ICT facilities to accelerate easy access to information e-resources.

### **Statement of the Problem**

Information and Communication Technology is a new innovation within information circle. Alakpodia and Ikolo (2010) opined that, organizations of all types around the globe are utilizing ICT facilities for not only cutting the cost but for efficiency and effectiveness of the system. Based on these reasons, therefore students of the tertiary institutions of higher learning ought to have acquired necessary skills required to eliminate the huddles posed by the facilities these problems arose from lack of ICT skills needed by the respondents use the facilities to network problems and cost of maintenance of the facilities, etc.

## **Objectives of the study**

The main objective of this research is to find out the ability of students of tertiary institutions in utilizing the ICT facilities to satisfy their information needs. The specific objectives are as follows:

- To examine the level of exposure to ICT facilities by students of tertiary institutions in Bauchi State.
- To determine whether the students of tertiary institution use ICT facilities to access information for their academic activities;
- To determine whether the students are satisfied with the efficiency of ICT facilities in meeting their information needs.
- To identify the problem areas faced by students in using ICT facilities; and
- To offer suggestions on how the academic libraries would provide an effective and efficient services to students of their institutions.

## **Research Questions**

This research is set to answer the following questions:

- What is the level of exposure attained by the students of tertiary institutions in Bauchi state of ICT facilities?
- Do the students use ICT facilities to access their information need?
- Are the students satisfied with the efficiency of ICT facilities to access information for their academic activities need?
- What are the problems faced by the students in using ICT facilities, and
- How would the academic libraries provide effective and efficient services to the students of tertiary institutions in Bauchi State?

## **Research Methods**

For the purpose of this study, descriptive research design was employed. Structured questionnaire was used for the collection of data from the sample of three (3) tertiary institutions in Bauchi state, as follows: AbubakarTafawaBalewa University Bauchi (ATBU) Federal College of Education (FCE) Azare and College of Legal and Islamic Studies (CLIS) Misau. The selection for the population of the

institutions of higher learning was done randomly. The population for the study are students of these institutions of Bauchi state who utilized ICT facilities in libraries, cyber café or personal computers to accomplish their information needs. A sample of three hundred (300) was drawn from the three (3) tertiary institutions in Bauchi state. Nine hundred (900) copies of the questionnaire were distributed. Seven hundred and twenty one (721) were collected and used for analysis. The data collected were analyzed using descriptive statistics.

### Findings and Discussions

The objective of this research is to find out the challenges posed by ICT facilities to students of tertiary institutions of higher learning in Bauchi State. The findings of the research are presented in tables showing the frequency and the percentages of the respondents. Out of 900 copies of the questionnaire issued 721 were collected and analyzed.

**Table 1: Response Rate**

Higher Institutions	Questionnaires collected	Questionnaire issued	No. of invalid questionnaire
A.T.B.U Bauchi	300	261	39
CLIS, Misau	300	234	66
F.C.E, Azare	300	226	74
Total	900	721(80.11%)	179(19.89%)

Table 1 indicated that, 721(80.11%) of the questionnaire were returned, while 19.89% (179) questionnaire were not retrieved. The questionnaires were distributed to the sampled students of the tertiary institutions in Bauchi state regardless of levels or programmes they belong to.

**Table: 2 Level of Exposure to ICT Facilities by Students of tertiary Institutions**

Level of students exposure to ICT facilities	Frequency	Percentage (%)
Highly exposed	87	12.07
Exposed	305	42.30
Not exposed	329	45.63
Total	721	100

Table 2 indicated that, 12.07% (87) respondents are highly exposed to the ICT facilities, while 42.30% (305) of them are only exposed to it. About 45.63% (329) respondents are not exposed to ICT facilities in accessing information for their academic activities. Students of tertiary institution of higher learning have begun to cope with challenges posed by revolution in information circle which brings about the utilization of ICT facilities in storing and retrieving of information with ease by the users. Majority of the respondents (54.37%) are exposed to ICT facilities as a result of either acquiring formal or informal training on operating ICT facilities. The result of the findings confirmed the findings of Ani and Ottong (2010) who reported that, "51.5% of undergraduate students in university of Calabar acquire the IT skills informally". Ojedokun and Owolabi (2003) pointed that, "it would thus appear that not every respondent who claimed internet competence had formal training on internet use". The process involved in acquisition of skills is not limited within the walls of classroom, but constant interaction with the objects would help toward this directions.

**Table 3: Utilization of ICT Facilities by Students of Tertiary Institution**

Utilization of ICT facilities	Frequency	Percentage (%)
Yes	308	42.72
No	413	57.28
Total	721	100

Table 3 reveals that, 308 (42.72%) respondents indicated to have been using ICT facilities for their academic activities, while 57.28% (413) of the respondents were not using the facilities at all for information seeking activities. Ukachi (2009) pointed that many studies advocated that ICT facilities have transformed higher education by providing greater access, new frontier to research and learning and richer contents. Lancaster and Sandore (1997) reiterated that many users presently, especially students prefer to use ICT facilities to satisfy their information needs. Iyande and Ajani (2008) noted that students used ICT facilities to source information through internet. According to them 43.8% agreed to be using ICT facilities whereas 4.3% indicated that they had never used ICT facilities. This means that students value utilization of ICT facilities to have an effective access to information resources available electronically. As indicated however, majority of the respondents represented by (57.28%) were yet to get to use ICT.

**Table 4: Students' Satisfaction with ICT Facilities in Information Services**

<b>Students satisfaction</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Very satisfied	82	11.37
Satisfied	274	38.00
Not Satisfied	365	50.62
Total	721	100

Table 3 shows the students' satisfaction with ICT facilities in information services revealing that, 82(11.37%) respondents were very satisfied with the effectiveness with its services. Thirty eight percent (274) respondents indicated their satisfaction with its roles in information retrievals, while 50.62% of the respondents (365) of them said they were not satisfied with the services of ICT facilities. About forty nine percent (356) of the respondents have agreed to derive satisfaction with the services of ICT facilities. This position taken was not unconnected with the efficiency and effectiveness of the services coming through the facilities. As indicated however, 50.62% of the respondents were not satisfied with the services of ICT facilities as a result of ignorance or lack of accessibility to it.

**Table 5: Problems Faced by Student Utilizing ICT Facilities**

<b>Problems with ICT facilities</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Lack of skills to operate ICT facilities	389	53.95
Problem of power supply	173	23.99
Problem of network	65	9.02
Security threat affecting service delivery	52	7.21
Cost of maintenance	42	5.83
Total	721	100

Table 5 indicated that, majority of the respondents (53.95%) lack the skills required to operate the ICT facilities. The problems of power supply was said to have been the problem associated with ICT facilities as indicated by 23.99% (173) of the respondents. Of all the respondents, about 9.02% (65) associated the problems with network, while 52 (7.21) and 42 (5.83%) of the respondents point to the problems with security threat affecting the service delivery and the cost of maintaining the system respectively. ICT facilities was found to be a revolution within the information cycle especially in the areas of retrieving, storing, dissemination of information. Ajala and Ebijuwa (2010) pointed that, internet access in the university environment provides the library with a means of delivering to its users e-resources and ability to connect to sites which are beyond the scope of the library collections. With all the advantage of ICT facilities within the realm of information cycle, some problems emanated which in one way or the other impeded on the effort of information users to satisfy their information needs. According to Uwaifo (2009), skilled manpower like computer scientists, system designers, system analysts, are lacking in many of the university libraries in Nigeria. Anian and Ottong (2010) identified such problems like power supply, cost of acquiring basic and formal IT literacy program, lack of access to IT, etc. Nwaingwe (2005) had reported similar findings in her study, that, “finance” and “power failure” were major problems impeding IT utilization in Nigeria. The low level of IT utilization was attributed to certain circumstances beyond students such as lack of access and the cost using these vital learning facilities by the students.

**Table: 6 Factor needed for effective services by Academic Library**

<b>Factors for effective services</b>	<b>Frequency</b>	<b>Percentage (%)</b>
Uninterrupted power supply	122	16.92
Acquiring skills in operating ICT facilities	251	34.81
Minimal cost of maintenance	236	32.73
Effective services by network service provider	112	15.53
Total	721	100

Research question 6 which tried to find out the ways the libraries would overcome the problems with ICT facilities shows that, 122 (16.92%) of the respondents suggested that, there should be uninterrupted power supply in the library, while 34.81% (251) of the respondents emphasized the acquisition of skills

in the operation of ICT facilities. About 32.73% (236) of the respondent suggest less cost of the maintenance of the facilities. Fifteen percent of the respondents said there should be effective services by network service providers. Introduction and implementation of basic ICT literacy programmes in the curriculum of senior secondary schools in Nigeria is necessary to prepare students to face the challenges of effectiveness and efficiency in the use of IT in learning in the competitive global environment. Ani and Ottong (2010). Tertiary institutions and other cyber café operators should provide standby generators to affect continuity in information service provision.

### **Conclusion and Recommendation**

Information and telecommunication technologies as a new innovation in information cycle brought about changes on the level of efficiency and effectiveness in accessing information by the users. Upon all the advantages of ICT facilities, to information seekers, some problems associated with these facilities were found to be unavoidable. The findings of this research revealed that, 53.95% (389) of the respondents lack the skills in operating the facilities. Other problems identified were power supply, cost of maintain the facilities, network problem etc. With all these problems, about 49.37% (365) of them show their satisfaction with the facilities.

As a result of the findings of this study and conclusion, following recommendations are made:

- Educational programmes should be organized by tertiary institutions of higher learning to expose students to skills in operating ICT facilities.
- The Federal Government of Nigeria should look for the possible ways of reducing the tariff on importing the ICT facilities to make it affordable to information users.
- Standby generators should be mounted in all ICT centers to ensure continuity of ICT operations.
- Concerned efforts should be made by the Bauchi state government in providing more ICT facilities to tertiary schools and provide those without them
- The charges made on students for ICT centres utilizing ICT facilities should be made affordable to allow students have access to them.

- Qualified ICT facilities operators and technicians should man ICT centres and cyber café for provision of access to information to users.

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