

# Availability and Accessibility of ICT in the Provision of Information Resources to Undergraduate Students in Babcock University Library

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## Abstract

The paper investigated availability and accessibility of ICT in the provision of information resources to undergraduate students in Babcock university library in Ogun State, Nigeria. Three research questions guided the study and the data collection instrument used was the questionnaire, the study adopted survey research method. The findings of the study revealed that most of the ICT facilities in the university library are available and accessible, except scanner, CD-ROM and projector that are not available, accessible and use by the students. The provision and use of ICT is an integral part of student learning and research. Therefore, the study recommends that university libraries should endeavour to put in place ICT facilities that will promote students educational pursuit.

**Keywords:** Availability, accessibility, Information and Communication Technology (ICT), Information resources, Babcock University library, Nigeria

## INTRODUCTION

The use of information and communication technology (ICT) is gaining momentum in universities libraries especially now that most universities in Nigeria are adopting ICT in the development and improvement of their services. Therefore, availability of ICT in university libraries will increase accessibility; if proper awareness is adequately created for its use. Thus, ICT usage will facilitate development since there will be free flow of information between lecturers and students and also the librarians and the academic community.

The current shift from the age-long conventional means of providing library services to technological approaches necessitated by advancements in computer technology, telecommunication system and the integration of both have given rise to a new digital paradigm known as information and communication technology (Onyeneke, 2007). Therefore, this study investigated the availability and accessibility of ICT in the provision of information resources to undergraduate students in Babcock University library.

## LITERATURE REVIEW

According to the American Library Association (1983) information technology (IT) is the application of computers and other technologies to the acquisition, organization, storage, retrieval, and dissemination of information. Grant (1995) defined information technology as the nervous system of contemporary society, transmitting and distributing sensory, control information and interconnecting a myriad of independent units. He argued that the convergence of telecommunications and computing or informatics has resulted to what is known as "New information and Communication Technology (NICT)." Thus, Information and communication technology (ICT) encompasses the effective use of equipment and programs to access, retrieve, convert, store, organize, manipulate and present data and information (Gay and Blades, 2005). Therefore, information and communication technology is the application of technologies in the handling of information, in order to achieve efficient management, access to, use and delivery of information.

The radical influence of information and communication technology is evident in all spheres of human endeavour through the following ICT tools: digital telephone, computers, and printers, photocopying machine, fax machines, cable networks, printer, Internet, projectors, CD-ROMs, etc. It is important to note that ICT use in teaching, learning and research has become the norm across tertiary institutions where students have been identified as stakeholders in its development and implementation (Ling et al., 2001; Petrova and Sinclair, 2005; Lee and Nguyen, 2005). The use of information and communication technology in information handling and

processing has arisen because of information explosion. In order to keep track of the increasing number of information carriers, computers are utilized to handle information processing with greater speed and accuracy than manual processing (Aina, 2004).

However, the availability of information and communication technology is the presence of ICT facilities in the provision of information resources in the libraries. Etebu (2010) observed that the state of ICT availability for library services in the Niger Delta University libraries is not totally encouraging. Almost half the number of available computers in the libraries does not function. Also, Afolabi (2009) also observed that the prospects of ICT and the ideal situation of educational research in our ICT driven campus is still a mirage. This is why university libraries should endeavour to make ICT facilities available and accessible to their users. More so, accessibility of ICT is the ability of a person to perceive, use, navigate, communicate and interact with the ICT facilities. Meanwhile, increasing the availability of accessible ICTs is considered a positive step in removing barriers that limit students to effective use of ICT facilities in the university libraries in Nigeria.

According to Popoola and Haliso (2009) information resources are those information bearing materials that are in both print and electronic format, such as text books, journals, indexes, abstracts, newspapers and magazines, reports, CD-ROM databases, the Internet/E-mail, video tapes/cassettes, diskettes, magnetic disk, computers, microforms etc. They further assert that these information resources are the raw materials that libraries acquire, catalogue, stock and make available for their patrons, as well as utilize to provide various other services. Aguolu and Aguolu (2002) assert that resources may be available in the library and even identified bibliographically as relevant to one's interest but the user may not be able to lay hands on them. One may identify citations in indexes, but may not have access to the sources containing the relevant article. They further maintain that availability of an information source does not necessarily imply its accessibility because the source may be available but access to it, is prevented for one reason or the other.

Therefore, library is a repository of resources; it is an integral part of the educational system whose primary function is to serve users. Today, the Internet is the apex of information and communication technology, offering limitless access to all kinds of information and records, facilitating information generation and sharing across the globe. Internet has reduced the world to a global village, linking cultures and people and creating new vistas of knowledge. Through the Internet one can record, access, share and retrieve information anywhere in the world in minutes (Unagha, 2006; Mwatawala, 2005 and Awake!, 1997).

Cuban (2001) found out that, university students in America usually utilized computer for word processing, searching the Internet and for using email, while teachers used computers for research purpose rather than for teaching in the classroom. Frizzier (1995) argued that computers may never replace teachers, and that computers could make excellent and fairly inexpensive supplementary materials available to improve classroom teaching.

It is an indisputable fact that information technology has revolutionized the traditional means of information processing, storage and dissemination. Henderson (1992) stated that information technology provides numerous benefits and advantages to the information users. They are:

- Provision of speedy and easy access to information
- Provides remote access to information
- Provision of round – the – clock access
- Provision of access to unlimited information from different sources.
- Provision of information flexibility to be used by an individual according to his or her requirements
- Provides increased flexibility
- Facilitation of reformatting and combining of data from different sources.

Chavez (1997) asserts that Internet and computer usage can also impact positively on critical thinking, problem solving, prompt feedback and collaborative instruction. Goldman et al (1999) has argued that computer usage has numerous benefits as it primarily assists student learning. As Seely Brown and Duguid (2000) noted that:

These technologies offer new ways of producing, distributing and consuming academic materials. As with so many other institutions, new technologies have caused universities to rethink not simply isolated features but their entire mission and how they go about it.

Generally, university libraries should play active role in adopting ICT facilities as a means of effective information delivery, so as to equip students with the right skill to access information independently.

### **STATEMENT OF THE PROBLEM**

The role of ICT in the provision of information resources in university libraries is crucial to students' academic growth. Therefore, the way undergraduate students' access available ICT facilities in university libraries are still generally poor. This is why the study investigated the availability and accessibility of ICT in the provision of information resources to undergraduate students in Babcock university library.

## OBJECTIVE OF THE STUDY

The main objective of this study is to investigate the availability and accessibility of ICT in the provision of information resources to undergraduate students in Babcock university library.

Their specific objective to the study are to:

- (1) determine the availability of ICT in the Babcock university library;
- (2) determine the accessibility of ICT in the university library;
- (3) ascertain the extent of use of ICT by students.

## METHODOLOGY

Survey research method was adopted for the study and structured questionnaire was used to collect data. A total of hundred (100) undergraduate students of Babcock University library users were sampled, out of which ninety one was completed for analysis using frequency counts, simple percentage, mean, standard deviation, to answer the research questions. Thus, Random sampling technique was used to administer the questionnaire.

## Results and Discussion

### Demographical Variables:

**Table 1: Distribution of the respondents by Gender**

| Gender | Frequency | Percentage |
|--------|-----------|------------|
| Male   | 37        | 40.7       |
| Female | 54        | 59.3       |
| Total  | 91        | 100.0      |

The male respondents are 37(40.7%) and their female counterparts are 54(59.3%).

**Table 2: Distribution of the respondents by Age**

| Age         | Frequency | Percentage |
|-------------|-----------|------------|
| < 18years   | 13        | 14.3       |
| 18-22 years | 59        | 64.8       |
| > 23 years  | 19        | 20.9       |
| Total       | 91        |            |

Table 2 shows that 13(14.3%) of the respondents are un 18 years, 59(64.8%) are aged 18-22 years while 19(20.9%) are over 23 years of age.

**Table 3: Distribution of the respondents by Level of Study**

| Level of Study | Frequency | Percentage |
|----------------|-----------|------------|
| 100            | 15        | 16.5       |
| 200            | 17        | 18.7       |
| 300            | 27        | 29.7       |
| 400            | 29        | 31.9       |
| 500            | 3         | 3.3        |
| Total          | 91        | 100.0      |

Table 3 shows that 15(16.5%) are in 100 Level, 17(18.7%) are in 200 Level, 27(29.7%) are in 300 Level, 29(31.9%) are in 400 Level, 3(3.3%) are in 500 Level respectively.

**Table 4: Availability of ICT facilities in the Babcock University Library**

| S/N | Availability of ICT | Available   | Not Available |
|-----|---------------------|-------------|---------------|
| 1   | Computers           | 82<br>90.1% | 9<br>9.9%     |
| 2   | Internet            | 82<br>90.1% | 9<br>9.9%     |
| 3   | Network             | 73<br>80.2% | 18<br>19.8%   |
| 4   | E-mail              | 77<br>84.6% | 14<br>15.4%   |
| 5   | Printer             | 76<br>83.5% | 15<br>16.5%   |
| 6   | CD-ROM              | 45<br>49.5% | 46<br>50.5%   |
| 7   | Projector           | 24<br>26.4% | 67<br>73.6%   |
| 8   | UPS                 | 58<br>63.7% | 33<br>36.3%   |
| 9   | Scanner             | 42<br>46.2% | 49<br>53.8%   |
| 10  | Photocopier machine | 85<br>93.4% | 6<br>6.6%     |

Table 4 shows the availability of ICT items in Babcock University Library. Most of the respondents revealed that Photocopier machine (93.4%) are highly available, follow by Computers (90.1%); Internet (90.1%); E-mail (84.6%), Printer (83.5%) Network (80.2%) and UPS (63.7%) are all available.

**Table 5: Accessibility of ICT facilities in the University Library**

| S\N | Accessible of ICT   | Accessible  | Not Accessible |
|-----|---------------------|-------------|----------------|
| 1   | Computers           | 80<br>87.9% | 11<br>12.1%    |
| 2   | Internet            | 80<br>87.9% | 11<br>12.1%    |
| 3   | Network             | 68<br>74.7% | 23<br>25.3%    |
| 4   | E-mail              | 71<br>78.0% | 20<br>22.0%    |
| 5   | Printer             | 63<br>69.2% | 28<br>30.8%    |
| 6   | CD-ROM              | 33<br>36.3% | 58<br>63.7%    |
| 7   | Projector           | 19<br>20.9% | 72<br>79.1%    |
| 8   | UPS                 | 54<br>59.3% | 37<br>40.7%    |
| 9   | Scanner             | 38<br>41.8% | 53<br>58.2%    |
| 10  | Photocopier machine | 79<br>86.8% | 12<br>13.2%    |

Table 5, shows the responses on the level of accessibility of ICT facilities in the university library. It was revealed that majority of the respondents shows that the following ICT facilities are highly accessible: Computers (87.9%); Internet (87.9%); Photocopier machine (86.8%); E-mail (78.0%); Network (74.7%); Printer (69.9%) and UPS (59.3%).

**Table 6: Extent of Use of ICT by Students in the University Library**

| S\N | Extent of use of ICT | No use      | About everyday | Two or more times a week | About once a week | Once a month | Mean | SD   |
|-----|----------------------|-------------|----------------|--------------------------|-------------------|--------------|------|------|
| 1   | Computers            | 8<br>8.8%   | 20<br>22.0%    | 24<br>26.4%              | 13<br>14.3%       | 26<br>28.6%  | 3.32 | 1.33 |
| 2   | Internet             | 8<br>8.8%   | 22<br>24.2%    | 23<br>25.3%              | 21<br>23.1%       | 17<br>18.7%  | 3.19 | 1.25 |
| 3   | Network              | 11<br>12.1% | 21<br>23.1%    | 23<br>25.3%              | 20<br>22.0%       | 16<br>17.6%  | 3.10 | 1.28 |
| 4   | Printer              | 24<br>26.4% | 8<br>8.8%      | 19<br>20.9%              | 16<br>17.6%       | 24<br>26.4%  | 3.09 | 1.55 |
| 5   | Photocopier machine  | 19<br>20.9% | 18<br>19.8%    | 22<br>24.2%              | 14<br>15.4%       | 18<br>19.8%  | 2.93 | 1.41 |
| 6   | E-mail               | 25<br>27.5% | 15<br>16.5%    | 13<br>14.3%              | 20<br>22.0%       | 18<br>19.8%  | 2.90 | 1.51 |
| 7   | UPS                  | 49<br>53.8% | 15<br>16.5%    | 12<br>13.2%              | 6<br>6.6%         | 9<br>9.9%    | 2.02 | 1.36 |
| 8   | Scanner              | 59<br>64.8% | 6<br>6.6%      | 7<br>7.7%                | 7<br>7.7%         | 12<br>13.2%  | 1.98 | 1.50 |
| 9   | CD-ROM               | 63<br>69.2% | 4<br>4.4%      | 6<br>6.6%                | 8<br>8.8%         | 10<br>11.0%  | 1.88 | 1.45 |
| 10  | Projector            | 67<br>73.6% | 7<br>7.7%      | 8<br>8.8%                | 5<br>5.5%         | 4<br>4.4%    | 1.59 | 1.14 |

Table 6 shows the responses on the extent of use of ICT facilities by Students in the university library; Computers (Mean= 3.32), Internet (Mean= 3.19), Network (Mean= 3.10), Printer (Mean= 3.09), Photocopier

machine (Mean= 2.93), E-mail (Mean= 2.90), UPS (Mean= 2.02), Scanner (Mean= 1.98), CD-ROM (Mean= 1.88) and lastly Projector (Mean= 1.59).

## CONCLUSION AND RECOMMENDATIONS

ICT has tremendously improve library services and also contributed to students academic development in providing timely and easy access to and use of wide range of information resources to students worldwide. Therefore the study shows that ICT facilities are adequately available and accessible in the university library but the extent of use of UPS, CD-ROM and projector is generally poor. However, it is worthy to note that the provision and use of ICT is an integral part of student learning and research. Therefore, university libraries should make adequate provision of CD-ROMs, scanners and projector in order to increase its effective use by students.

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