

ICT Facilities Available in Three Polytechnic Libraries in South East, Nigeria

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ABSTRACT

The Article paper is on ICT Facilities Available in Three Polytechnic Libraries in South East, Nigeria., Nigeria Polytechnic libraries are also categorized as academic libraries that select, search, organize, maintain and preserve library resources. The polytechnic libraries are established to meet the needs of its students and members of the academic staff. It is good to re-state that for itself alone, there is no need for the library to exist. Its value lies in the unique services provided, and its materials, facilities, personnel, can be justified only through the contribution of these services to educational programme of the school. The design adopted for this study was a descriptive survey. The population of the study consists of library staff that includes professional librarians, para professional librarians, and system analysts in the three Polytechnic libraries, South East, Nigeria. This is based on the records available at the office of the Polytechnic librarians of the institutions. A total of 94 library staff in Federal Polytechnic Library, Oko, Anambra State, Federal Polytechnic Library, Nekede, Owerri Imo State and Abia State Polytechnic Library, Aba, Abia State were under study. The instrument for data collection for this research was observation check list, which the researcher used for the identification of ICT facilities available in the three polytechnic libraries under study and a self-constructed questionnaire titled Information and Communication Technology Application in South East Polytechnic Libraries (ICTASEPL) was the main instrument of data collection. Findings showed that the three polytechnic libraries possessed some ICT facilities and applications of them to the services are low.

KEYWORDS: Use, ICT, Facilities, Polytechnic libraries and Library Staff.

INTRODUCTION

Nearly all human activities, including social, political, educational, economic, health and governance have been transformed by Information Communication Technology (ICT). The library as a service-based organization is not left out because a great deal of library services and operations have been transformed by the advancement of new technologies. For instance, the storage media for storing information has been changed to more sophisticated and advanced storage media such as Flash drives, CD-ROMs, Hard-drive and cloud storage. Without doubt, some libraries have been able to move with the trend of technological advancement, while many others remain in need of guidance on how to address these changes.

As Onuoha and Obialor (2015) rightly observed, advancements in ICT now enable libraries to use various types of technologies to aid the services they render. Daily, new technological advances affect the way information is processed and managed in libraries and information centers. Consequently, the impact of new technologies is now being felt by libraries in nearly every aspect. Computing technology, communication technology and mass storage technology are some of the areas of continuous development that have reshape the way that libraries access, retrieve, store, manipulate and disseminate information to users.

Today, libraries especially polytechnic libraries are confronted with intricate and constantly developing network of knowledge and exist in a world where the use of ICT has become essential to progress towards more efficient information service delivery. According to Adewale and Adesanya (2003), the manual method of acquisition, organization, maintenance documentation, circulation of library materials and other services involves a lot of paper work and skilled manpower of labour which is tedious, time consuming and prone to error. It usually leads to unnecessary delays in fulfilling its services to library users. As the library records are becoming larger and keep on increasing by day, the task of controlling the records will be more difficult and complex to handle manually. The situation calls for need to apply ICT to solve problems created by manual methods in this era of information explosion in the acquisition and processing and management of library resources as well as the satisfaction of users' needs.

The concept of the library as a store house of knowledge as embodied in books has been greatly altered by trends in the information, communication technology (ICT) fields. Anaeme (2006), stated that the emerging and fast growing information and communication technology (ICT) application in libraries especially academic libraries have continued to revolutionaries the pattern and scope of library services. Libraries have remained unchallenged until recently as providers of convenient and comprehensive information to meet a wide range of the information needs for the public. Henderson (1992) states that information technology provides numerous benefits and advantages to library users, some advantages he identified include: Provision of speedy and easy access to information; Provision of remote access to users; Provision of round-the clock access to users; Provision of more up to date information; and Provision of information flexibility to be used by any individual according to his or her requirements. Other importance of ICT to the effective organization of materials include: it boosts the service of the library; it facilitates the typical library standard; it brings about standard information and library system; it saves time in processing, organization and retrieval of materials; and Accuracy is guaranteed.

The library as the heart of the polytechnic can benefit tremendously from the full implementation of ICTs. The new technology enables the library to perform all its daily operational routines and provide efficient, effective and optimal services to its clientele. One of the major strategies for ensuring competence in the use of ICT to solve library and information problem is training and re-training of librarians in ICT application. As Akintunde (2003) argued, the relevance of librarians in Nigerian libraries in the 21st century is dependent more on their ability to recognize and carefully adapt global initiative in the provision of library and information services because of the ever increasing changing role of library and information staff worldwide. For instance, the changing patterns in the use of library services by various categories of library clientele and the closer collaborations and mutual interdependence among libraries require shared responsibility in terms of digital preservation and delivery materials as well as digitization of routines and services. Another strategy Polytechnic libraries and librarians can take to meet the challenges that ICT can pose to their staff is by ensuring that ICT facilities are adequately provided for both library staff and clientele. Such ICT facilities include television sets, radio, cellular phones, computers, computer

network, computer software, satellite resources, video conferencing and teleconferencing media. The cyberspace revolution which necessitated the emergence of Information and Communication Technology (ICT) in library operations, coupled with the fast changing information seeking behaviour of users are putting pressure on information organizations and library professionals. Librarians, in this jet age, are responsible for a wide variety of resources and services that expand far beyond the typical eight-hour work day. Igun (2010) opined that “librarians’ role in the global information environment is unique. His roles are critical for the necessary control of information resources in physical and virtual domains”. Notably, the advent of other sources of information like the internet, World Wide Web and the latest one called social media has led to a new challenge for librarians to meet the rapidly changing information needs and expectations of the 21st century users. Librarians now have a challenge of making themselves more relevant in this digital age. Iwhiwhu, Ruteyan and Eghwubare (2010) noted that the challenge of most librarians is to attract users to the library and to retain them. To deal with this challenge, librarians are reconsolidating, reshaping, re-designing and repackaging resources as a means of promoting their services and information.

Information and Communication Technology (ICT) is an umbrella term that includes all technologies for the manipulation and Communication of Information. Information and Communication Technology encompasses any medium to record information (magnetic disk, tape, optical disks (CD/DVD) flash, and paper record), technology for broadcasting information-radio, television and technology for communication through voice and sound or images microphone, camera loudspeaker, telephone to cellular phones. It includes the wide variety of computing hardware (Desktop computers, laptops, servers, mainframes, network storage (Wikipedia 2010).

At this point, it is worthy to note that when ICT is mentioned in the library, it is not just about the facilities as an isolated machine, it is simply the Information and Communication Technology uses/application to these libraries that facilitates its operations. ICT uses to libraries had been responsible for the changing role of traditional libraries setting of handling information packaged in printed format to that of computer networks dealing with all forms of knowledge. Thus, the information stored in libraries has taken a major shift from volume-limiting paper to limitless multimedia digital form. ICT has been described to be the medium by which the highest quality service in the library and information profession can be achieved. ICT in libraries has changed the mode of information storage and retrieval such as acquisition, cataloguing and classification, circulation of materials, serials control, management statistics and administration activities such as budgeting. This has ultimately led to the provision of more efficient information services to the users and overall improvement in the performance of the libraries and other related information institution (Chisenga 1995).

PURPOSE OF THE STUDY

The general purpose of the study is to assess the extent of Information and communication technology uses in Polytechnic libraries in South East, Nigeria. Specifically, the following objectives guided the study:

1. To identify the Information and Communication Technologies (ICT) facilities available in three Polytechnic Libraries, in South East, Nigeria
2. To find out the purpose of ICT application in the three Polytechnic libraries
3. To investigate areas ICT can be applied to in the three Polytechnic libraries.
4. To examine the challenges of ICT application to library services in the three Polytechnic libraries.

METHODS

The design adopted for this study was a descriptive survey. This design is chosen for this study because descriptive survey research is fact-finding in nature. The area of study is South East. The three states include: Abia, Anambra and Imo States which are among the 36 states that make up Nigerian. The population of the study consists of library staff that includes professional librarians, para professional librarians, and system analysts in South East in the three Polytechnic libraries which is based on the records available at the office of the Polytechnic librarians of the institutions. A total of 94 library staff in three polytechnic libraries were under study.

All the Library staff which includes para professional librarians, professional librarians, and system analysts in the three polytechnic libraries under study were used for the study this is because the number is small as well as accessible to the researcher. The instrument for data collection for this research was observation check list, which the researcher used for the identification of ICT facilities available in the three polytechnic libraries under study. A self-constructed questionnaire titled Information and Communication Technology Application in South East Polytechnic Libraries (ICTALPLQ) was the main instrument of data collection. The researcher distributed the questionnaire among the Polytechnic libraries under study for a period of one week. This was to ensure high return rate of the instruments. The data were analyzed using mean score, percentages and frequency table. For clarity, each item was presented in a table and all findings were presented as the tables reveal.

The responses were based on a 4 – point rating scale, a midpoint of 2.5 which is the criterion mean was accepted as positive responses. The point is chosen because the average of the individual mean score is 2.5 thus any mean score that ranges from 2.5 and above was regarded as positive while below 2.5 was regarded as negative, any percentage that ranges from 50% and above was regarded as positive while 49% and below was regarded as negative and not useful in determining the findings of the study.

Research Question 1

What are the Information and Communication Technologies (ICT) facilities available in the Polytechnic Libraries, South East?

Table 1: Observation Checklist on ICT Facilities in the Three Polytechnic Libraries

ICT FACILITIES		Federal Polytechnic Library, Oko,		Federal Polytechnic Library, Nekede,		Abia State Polytechnic Library, Aba,	
		A	NA	A	NA	A	NA
1	Connected computers	√	-	√	-	√	-
2	Stand alone computer	√	-	√	-	√	-
3	Telephone (Mobile)	√	-	√	-	√	-
4	Telefascmile equipment	-	√	-	√	-	√
5	Network facilities	√	-	√	-	√	-
6	Online database	√	-	√	-	√	-

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7	Machine Readable Catalogue (MARC)	-	-	-	√		√
8	Photocopiers	√	-	√	-	√	-
9	Printers	√	-	√	-	√	-
10	Scanner	√	-	√	-	√	-
11	Internet facilities	√	-	√	-	√	-
12	E-mail	√	-	√	-	√	-
13	CD-ROM	√	-	√	-	√	-
14	DVD ROM	√	-	√	-	√	-
15	Online public Access Catalogue (OPAC)	√	√	-	√	√	-
16	Projectors	√	-	√	-	-	√
17	Library based software eg. X-LIB	√	-	√	-	-	√
18	Flash Drives	√	-	√	-	√	-
19	Local Area Network (LAN)	√	-	√	-	√	-
20	Wide Area Network (WAN)	√		√	-	√	-
21	Wireless Internet Access	√	-	√	-	√	-

Key: A= Available, NA= Not Available.

The table 1 above was ticked according to the number of ICT facilities that are available in the polytechnic libraries, South East Nigeria which is shown from the checklist. The table reveals that out of twenty –one (21) items listed above, nineteen (19) are available in Federal Polytechnic , library, Oko eighteen (18) are available in Federal Polytechnic library, Nekede while seventeen (17) are available in Abia State Polytechnic Library, Aba, respectively. This shows that the libraries under review have different levels of availability of ICT facilities.

Research Question 2

What is the purpose of ICT application in the Polytechnic libraries, South East?

To answer this research question, items 22-27 of the questionnaire was used and presented on the purpose of ICT application in the three Polytechnic libraries, South East in the table 2 below:

Table 2: Mean responses of the library staff on the purpose of applying ICT in the three polytechnic libraries under study.

S/N	PURPOSE	SA	A	D	SA	Mean	Decision
22	Increased the range of services offered	63	14	7	-	3.66	A

23	It allows easy integration of activities	80	4	-	-	3.95	A
24	It facilitates library cooperation and networks	78	5	1	-	3.91	A
25	It saves time and generate money	67	10	7	-	3.57	A
26	It increases efficiency	69	14	1	-	3.80	A
27	It help to speed up the process of document delivery	70	14	-	-	3.83	A

Items 22-27 on table 2 above reveals that the purpose of ICT application in Federal Polytechnic Library, Oko, Federal Polytechnic Library, Nekede, and Abia State Polytechnic Library, Aba, as indicated by the respondents which is based on the mean score of 2.5, are thus: Increased the range of services offered; It allows easy integration of activities; It facilitates library cooperation and networks; It saves time, and generate money; It increase efficiency; and it helps to speed up the process of document delivery.

Research Question 3

What areas of the library operations do ICT applied to in The South East Polytechnic libraries?

In addressing this research question, questionnaire items 28-36 was used to ascertain the areas of the library operations where ICT is applied to in the three Polytechnic libraries of South -East as analyzed in table 3 below.

Table 3: Mean responses on library staff on areas where ICT is applied to in the three, Polytechnic libraries, South East as presented in table below:

LIBRARY SECTIONS	Federal Polytechnic Library, Oko,						Federal Polytechnic Library, Nekede						Abia State Polytechnic Library, Aba						
	S A	A	D	SD	ME AN	D	S A	A	D	S D	ME AN	D	S A	A	D	S D	ME AN	D	
28	Acquisition	4	4	21	-	2.41	R	3	4	17	-	2.42	R	4	2	23	2	2.1 9	R
29	Cataloguing	21	5	3	-	3.62	A	5	4	15	-	2.58	A	3	3	23	2	2.1 6	R
30	Circulation	16	-	13	-	3.10	A	3	1	20	-	2.30	R	-	-	31	-	1.0 0	R
31	Serials	4	6	19	-	2.48	R	3	1	20	-	2.30	R	-	-	31	-	1.0 0	R

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32	Africana	-	-	29	-	1.00	R	-	-	24	-	1.00	R	-	-	-	-	0.0	R
33	Reference	11	10	8	-	2.10	R	7	7	10	-	2.88	A	4	2	23	2	2.2	R
34	Bindery	-	1	28		2.04	R	3	3	18	-	2.38	R	-	-	31	-	1.0	R
35	Reprographic unit	28	1	-	-	3.97	A	15	1	9	-	3.36	A	31	-	-	-	4.0	A
36	Administration	21	1	7	-	3.48	A	19	1	4	-	3.63	A	31	-	-	-	4.0	A

Key: A=Accepted, R= Rejected, D= Decision

In answering research question 3, mean score in table 3 shows that the responses in Federal Polytechnic Oko indicated that acquisition, serials, Africana, reference and bindery sections do not apply ICT based on the mean score of 2.5, while cataloguing, circulation, reprographic and administration do apply ICT based on the mean score above.

From the mean score above from Federal Polytechnic library, Nekede it shows that acquisition, circulation unit, serials section, Africana, and bindery section level of ICT application is very low based on the mean score of 2.5 while cataloguing unit, reference section, reprographic unit and administration do apply ICT.

Furthermore, the mean score also reveals in Abia State Polytechnic library, Aba that acquisition, cataloguing, circulation, serials, Africana, reference and bindery sections level of application of ICT is extensively low, while the reprographic section and administration do apply ICT in the library based on the mean score of 2.5, there was no new suggestions specified by the respondents in the questionnaire.

Research Question 4

What are the challenges of ICT application to library services in the three Polytechnic libraries?

To identify any challenges of applying ICT to library services in the three Polytechnic libraries from library staff, the mean scores were computed and analyzed.

Table 4: Mean responses of the library staff on the challenges associated with ICT application in the three Polytechnic libraries.

S	CHALLENGE	Federal Polytechnic Library, Oko,						Federal Polytechnic Library, Nekede,						Abia State Polytechnic Library, Aba					
		SA	A	D	S	ME	D	S	A	D	S	ME	D	SA	A	D	S	ME	D
51	Inadequate funding	28	1	-	-	3.9	A	22	2	-	-	3.92	A	20	6	5	-	3.49	A

52	Lack of infrastructural facilities	22	4	3	-	3.76	A	8	14	2	-	3.25	A	26	5	-	-	3.84	A
53	Incompetent personnel	24	4	1	-	3.79	A	19	3	2	-	3.71	A	31	-	-	-	4.00	A
54	Erratic power supply	29	-	-	-	4.00	A	20	4	-	-	3.84	A	20	6	5	-	3.49	A
55	Management problems	20	9	-	-	3.69	A	16	6	2	-	3.59	A	30	1	-	-	3.97	A
56	High cost of maintenance	20	8	1	-	3.66	A	17	6	1	-	3.67	A	28	3	-	-	3.90	A
57	Software problems	20	8	1	-	3.66	A	12	10	2	-	3.58	A	26	5	-	-	3.84	A
58	Frequent changes in technology	24	4	1	-	3.79	A	14	9	1	-	3.54	A	20	6	5	-	3.49	A

Key: A=Accepted, R= Rejected, D= Decision

Table 4 above indicates that, the challenges of ICT application to library services in the three Polytechnic Libraries, South East, base on the mean score in the above table are; inadequate funding, lack of infrastructural facilities, incompetent personnel, erratic power supply, management problems, high cost of maintenance, software problems, and frequent changes in technology.

DISCUSSION AND FINDINGS

1. It was discovered from the study that the three Polytechnic libraries under study possessed some of the ICT facilities in their libraries.
2. The study also found out that library staff from South East, and Abia State Polytechnic library are of the view that the purpose of ICT application in Polytechnic libraries is to increase the range of services offered, allows easy integration of activities, facilitate library co-operation and networks, saves time and generate money, increase efficiency, and also help to speed up the process of document delivery.
3. It was also evidenced from the findings that in federal Polytechnic library, Oko the areas/sections where ICT is applied in the library are cataloguing, circulation, reprographic unit, and administration, other areas such as acquisition, serials, Africana, reference, and bindery unit are extensively low. In the three Polytechnic libraries, sections such as reference section, reprographic unit and administration are the only sections ICT is fully applied to in the library, while in Abia State Polytechnic library; it was found out that ICT is only applied to the reprographic unit and administration. It was also observed that in Federal Polytechnic Libraries, Oko and Nekede though they possessed more ICT facilities, but the ICT facilities are not fully applied, this could be as a result of incompetent personnel, erratic power supply, management problems, frequent changes in technology etc. while in Abia State Polytechnic library, it could also be that their major problems are inadequate funding, and management problems, that was why their ICT facilities are rated low as well as applying them to library operations.

4. It was equally gathered from the findings that, the extent of ICT application in Federal Polytechnic library, Oke are attributed to library sections such as photocopying, bibliographic searches, lending short loan service, registration of users and charging and discharging of library materials which was rated high above the other services, such as Current Awareness Serviced (CAS), provision of bibliographies, referral service, displays, Selective Dissemination of Information (SDI), indexing and abstracting, inter-library loan and exchange of information which was rated low.

In South East Polytechnic libraries, the extent of ICT application to library services which are rated high are photocopying, referral services, and registration of users, other services are rated low in terms of ICT application, while the extent of ICT application in Abia State Polytechnic library is extensively low, only photocopying, lending, short loan service, as well as registration of users is rated high, above others. The researcher therefore deduced from the findings that only few library services are applied with ICT to a great extent others are under applied.

5. The study further noted that the challenges confronting Federal Polytechnic, Oke and Abia State Polytechnic libraries are inadequate funding, lack of infrastructural facilities, incompetent personnel, erratic power supply, management problem, software problems and frequent changes in technology

RECOMMENDATIONS

Based on the results obtained from the study, the following measures are recommended to enhance ICT application in the libraries:

1. There is need for the polytechnic management to provide adequate ICT facilities in the polytechnic libraries under study for effective service delivery.
2. On a regular basis, training programmes should be organized for library staff to enhance their competency skills in ICT.
3. Adequate fund and other means of generating money should be established because without adequate fund, more ICT facilities will not be purchased.
4. There is urgent need for the improvement of power supply in the libraries in order to enhance maximum use of the ICT facilities because they depend on light (electricity) to function.
5. There is need for more infrastructural facilities to be put in place in order to accommodate more users and also to help reduce the problem of giving the users time frame for ICT facilities use.
6. A good ICT policy should be formulated to enhance effective ICT application in the libraries under review.

REFERENCES

- [1] Adeyinka, T, Adedeji, T. , Ayen, C.O. & Omoba, R.O. (2008). Self-Efficacy and Use of Electronic Information as Predictors of Academic Performance. *Online Electronic Journal of Academic and Special Librarianship*, 8(2), 1-17.
- [2] Adewale O.S. & Adesanya, W.O (2003). Information and Communication Technology for the Implementation of the Virtual Library Management System, *Proceedings of the 44th Annual Conference 2003 Science Teachers Association of Nigeria held in Makurdi: 92-94.*
- [3] Akintunde, S.A.(2006). State of ICTs in Tertiary Institutions in Nigeria: Windows on the University in Libraries: *Dynamic Engines for knowledge and Information Society Proceedings of NLA Annual National Conference and AGM, Abuja. 123-137.*

- [4] Anaeme, F.O.(2006). Information and Communication Technology (ICT) Intervention in Library and Information Science in Nigeria *Library and Information Science Trend*,4 (1&2). 12-21
- [5] Chisenga, J (1995). The Status of Information Technology in Zambia Libraries, *Africa Journal of Library, Archival and Information Science*, 5, (1) 19-24.
- [6] Henderson, F.(1992). *Relationship with Users in Information Technologies in Special Libraries*: Edited by Margaret Britting, London: Routledge.
- [7] Igwe, P.J(2010)Social media librarianship in academic libraries: optimizing trends for real-time user engagement through digital billboards. Retrieved from<http://www.ariadne.ac.uk/issue/77/prince-jacon-igwe/>
- [8] Iwhiwhu, B.E, Ruteyan, J.O & Eghwubare, A (2010). Mobile phones for library services: prospects for Delta State University library, Abraka. *Library Philosophy and practice*. Retrieved 14th June, 2014 from <http://digitalcommons.unl.edu/libphilprac/346>.
- [9] Nkoyo, B. E. (2007), Extent of use of Information Technology Amongst Librarians in selected Nigeria University Libraries, *Global Review of Library and Information Science*,3, 1-12.
- [10] Onuoha, J. A & Obialor, D.C. (2015). The impact of information technology on modern librarianship: A reflective study. *Information and Knowledge Management*, 5 (11), 52- 58.
- [11] Ray, K. & Day, J. (2003). Student attitudes towards electronic information resources. Retrieved from <http://informationr.netlir/4-2/papers54.html>
- [12] Rosenberg, . D. (2005). Towards the digital library: Findings of an investigation to establish the current status of university libraries in Africa. UK: INASP. Accessed from <http://www.inasp.info/uploaded/documents/digital-libr-final-format-web.pdf>
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