

Use of ICT Facilities in Three Polytechnic Libraries: Comparative Study

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ABSTRACT

This paper is all about use of ICT facilities in three polytechnic libraries: comparative study. These polytechnic libraries are also regard as academic libraries that serves both students and staff. Its value lies on the unique services provided through available resources and facilities to justify its contribution of these services to educational programmes of the school. Descriptive survey was adopted for the study. Library staff that includes professional librarians, para professional librarians, and system analysts consists of the population. There are ninety-four (94) staff strength in these categories of staff in the three polytechnic libraries under study. A self-constructed questionnaire entitled ICT Application in Lagos State Polytechnic Libraries (ICTALSPLQ) was the main instrument for data collection accompanied with observation checklist which the researchers used for the identification of available ICT facilities in the three institutions' libraries under study. Major findings showed that "the three polytechnic libraries possess considerable degree of ICT facilities but their applications to library services are low due to several challenges". The study therefore recommends that management of the libraries need to encourage staff training programmes to enhance their ICT applications towards achieving effective service delivery to meet the 21st century users' information needs.

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

INTRODUCTION

Information is a valuable resource in all types of libraries. From the past few years, the world information environment especially in libraries experienced automatic change and no longer the same as before in areas of collection, organization and services. Presently, electronic resources are the main library collection. Automation is transaction of library materials into electronic format. Libraries presently on the web space to provide services for the users. Information Communication Technology (ICT) brought this change to librarianship, which has also made a sea changes in the walk of librarians' life. These ICT facilities provided libraries with new opportunities to

improve the resources of libraries and to effectively cater for user's demand. To manage ICT, Library information professionals must have the modern skills. With Information communication technology library services and librarians would add knowledge and skills on daily basis.

According to Ani, Esin, and Edem, (2005) opined that internet is component of ICT, which is important for tertiary library from issues of owner system to users model, from book to e-resources, from old archives of libraries to quick access points, information collection to repackaging are great impact in the libraries. The issues of electronic facilities in academic libraries have today not only increased and expanded the impact of information resources at users' doorsteps, but placed increasing emphasis on effective and efficient service delivery. Application of these facilities in libraries has commonly be referred to as "library automation" which has indeed continued to promote ease, quick, unlimited access and retrieval of information resources among users.

In the olden days, libraries used computers or info-techs for several library operations and presently still being used to for the following library functions:



- For library resources acquisition and financial system or budgeting;
- For the organization of acquired library resources;
- For improved customer services (information consultation center)
- For periodicals/serials' control or journals' management;
- To access information for users in the internet.

In the 50s, ICT in libraries usage has four steps namely:

- To make sure internal operations are properly carryout.
- The library local materials will be quickly retrieved.
- With the use of computer even outside the library people can still get what they want without being physically present within the four walls of the library building.
- The library system could be inter-operability

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According to Adewale and Adesanya (2003) Nigerian polytechnic libraries are usually confronted with intricate and constant developmental challenges in the midst of a networked knowledge society existing in a world where the use of ICT has become essential in progressing towards more efficient information service delivery. Furthermore, the authors explained that “the traditional ways 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 and unnecessary delays in fulfilling its services to library users”. As we all know library is growing in materials, the duty of controlling the records will be more difficult and complex to handle traditional method. 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 word library has been regarded since as place or house where knowledge are embodied in both print and non-print. The emergence and use of fast-growing electronic information tools in libraries have continuously revolutionized the nature, pattern and scope of library services across the globe. Libraries have remained unchallenged until recently as providers of convenient and comprehensive information gateways in meeting a wide range of information needs of our modern society resulting from the new generation of people (Anaeme, 2006).

All over the world library as the heart of the polytechnic can benefit tremendously from the full implementation of ICTs. The new technology enables the house to execute all its activities and provide good 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 21st century in the provision of information services because of there is 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. Busari (2006) classified library ICT resources into the following five categories of technology: capturing technologies, storage technologies, processing technologies, communication technologies, and display technologies. According to Krishnamurthy, (2005) electronic facilities can be utilized for the following library applications “resource sharing, digitized circulation services, subscription, ordering and acquiring information materials, creation and management of databases, electronic mail services, publications, information storage, information analysis and design, (information) networking, selective dissemination of information, advisory services, bibliographic control services, lending and borrowing”.

The umbrella term electronic tools is known as ICTs that includes all technologies for the manipulation and Communication of Information. ICT tools encompasses media facilities which includes: “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 has been described to be the medium by which the highest quality service in the library and information profession can be achieved.

STATEMENT OF THE PROBLEM

The application of ICT has provided more effective and efficient service delivery in the library. The use of ICT facilities is an important tool in the polytechnic libraries as it supports resource sharing among polytechnic libraries, increase effective and efficient service delivery, saves time, provide marketing opportunity of its services, provide speedy and easy access to information and to provide more up to date information to users. ICT facilities in the polytechnic libraries are meant to work towards the actualization of the polytechnic aims and objectives. The essence of the polytechnic library is to provide, preserve, retrieve and disseminate available information resources essential for teaching, learning and research. To offer these services effectively, ICT facilities are very important as it will enhance effective service delivery among polytechnic libraries. Any polytechnic library that does not possess ICT facilities as well as applying them to library operations is living in the past because it will slow down the pace of information services as well as dissemination of information.

Previous studies Nkoyo (2007) that explored the concept of electronic tools application in any information store house only focused on university libraries in the western region where the three Polytechnics under study are situated. The study reveals that ICT in university libraries were extensively not used and the level of use was very low. This scenario could have resulted from poor or inadequate use of electronic tools to library activities. The study therefore, seeks to assess the uses of this electronic tools in the three libraries in order to point out areas where they could benefit maximally from ICT which is widely used today.

If these areas are not properly assessed and pointed out, there could be poor performance, low productivity and decline in effective use of information materials in the various areas of the libraries. It is the recognition of this problem that motivated the researcher to embark on this study in order to explore the various library aspects or operations in which information and communication technologies is applied in the three polytechnic libraries under study, and the extent of use of ICTs in such libraries.

PURPOSE OF STUDY

The main aim of this study is to investigate the level of ICT usage in polytechnic libraries in Lagos State; while its specific objectives are to:

- I. Find out available ICT facilities in Polytechnic Libraries in Lagos State
- II. Establish the purpose(s) of ICT usage in Polytechnic Libraries in Lagos State
- III. Ascertain areas of ICT application in Polytechnic Libraries in Lagos State
- IV. Identify factors challenging ICT usage in library operations in Polytechnic Libraries in Lagos State

METHODOLOGY

A descriptive survey was adopted for this study. The area of study is Lagos State. Lagos State is one of the 36 states that make up the Nigerian. The people used for the study are staff of the three libraries that includes: both professional and non- professional staff, and computer officer. They are 94 staff from the library under study. The institutions are Yabatech, Lagos State Polytechnic, and Grace Polytechnic libraries and all the staff were used for the study.

The instruments for data collection in this study are the “observation check list and questionnaire”. The observation check list was used for the identification of electronic information tools otherwise referred to as “ICT facilities availability” in the three polytechnic libraries and a self-constructed questionnaire entitled ICT Application in Lagos State Polytechnic Libraries (ICTALSPLQ) were the instruments of data collection. The researchers 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. Collected data through these means were analyzed using “mean score, percentages and frequency tables”. For clarity purpose, each item was presented in a table and all findings were presented as the tables reveal.

The decision by the researchers was based on a four–point Likert type rating scale with the mid–point of 2.5 as criterion mean, at which point and above responses were considered or 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, while any score between the 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 electronic (ICT) facilities available in Polytechnic Libraries in Lagos State?

Response: Available ICT facilities in Polytechnic Libraries in Lagos State

TABLE 1: OBSERVATION CHECK-LIST ON ICT FACILITIES OF THE THREE LIBRARIES IN LAGOS STATE

Electronic tools		Yaba College of Technology (Yabatech), Library		Lagos State Polytechnic Library (LASPOTECH)		Grace Polytechnic Library (GPL)	
		A	NA	A	NA	A	NA
1.	Networked Computers or joint together	✓	-	✓	-	✓	-
2.	Desktop computers (Standing alone)	✓	-	✓	-	✓	-
3.	Mobile-Phones/Telephones for library services	✓	-	✓	-	✓	-
4.	There is also Tele-fasmile machine	-	✓	-	-	-	✓
5.	Network tools/gadgets in the library	✓	-	-	-	✓	-
6.	There is also online database in my library	✓	-	✓	-	✓	-
7.	Our library has MARC	-	✓	✓	-	-	-
8.	Our library has photocopy machine	✓	-	-	-	✓	-
9.	They also printing with the machine	✓	-	✓	-	✓	-
10.	Document are scan in our library	✓	-	✓	-	✓	-
11.	There is internet tools	✓	-	✓	-	✓	-
12.	Dedicated electronic mail in our library	✓	-	✓	-	✓	-
13.	CD ROM or DVD Rom are available in the library	✓	-	✓	-	✓	-
14.	The library OPAC is working perfectly	✓	-	-	-	✓	-
15.	There is also projector tools	✓	-	✓	-	✓	-
16.	Open access software for	✓	-	-	-	✓	-

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	automation available						
17	Flash/ hard disk drive available	✓	-	✓		✓	-
18	The library have local area network	✓	-	✓		✓	-
19	Another network made available Wide area network	✓		✓		✓	-
20	Wireless network also available for both students and staff	✓		✓		✓	-

Key: A= Available, NA= Not Available.

Table 1 above was ticked according to the number of information communication and technologies tools that are available in Polytechnics Libraries ICT Units in Lagos State as presented on the checklist or Table I. Table I shows that “out of twenty (20) items listed, nineteen (19) of them are readily available in Yabatech library, eighteen (18) in Lagos State polytechnic library, while seventeen (17) are available in Grace polytechnic library respectively. This simply indicates that the three polytechnic libraries under review possess different but similar level or degree of ICT tools or facilities.

Research question 2: What is the purpose(s) of ICT application in Polytechnic Libraries in Lagos State?

To answer this research question, items 21-26 of the questionnaire were used as presented in Table 2 below:

Table 2: Purpose(s) of ICT Application in Libraries under review

S/N	PURPOSE(S)	SA	A	D	SD	MEAN	DECISION
21	Expand library Services rendered to users	65	15	8	-	3.73	Agreed
22	Activities are together in one place (ease of control)	79	5	-	-	3.86	Agreed
23	Ease of Library co-operation or connectivity	76	6	2	-	3.85	Agreed
24	Improved Financial management & time-saving	65	11	8	-	3.55	Agreed
25	Enhances daily routine activities basis very effective	68	13	2	-	3.81	Agreed
26	Information resources are delivery easily and faster	71	13	-	-	3.82	Agreed

Items 21-26 on Table 2 above establishes the purpose(s) of ICTs application in YabaTech Library, Lagos State Polytechnic Library (LASPOTECH), and Grace Polytechnic Library. Based on the cut-off point/mean score of 2.5, the purposes of ICT application in the three libraries include: “To increase the range of services offered; allows easy integration of activities; It facilitates library cooperation and networks; saves time, helps in generating fund; increases efficiency; and facilitates easy and faster information resources and services delivery”.

Research question 3: What aspects/areas of library operation can ICTs be applied in Polytechnic Libraries in Lagos State?

In addressing this research question, questionnaire items 27-35 were used to ascertain the areas of the library operations in which ICTs are applied to in the Polytechnic Libraries in Lagos State as analyzed on Table 3.

Table 3: Mean responses of investigated aspects/areas of ICTs application in Polytechnic Libraries in Lagos State

Units in the Library	TABATECH, Library							Lagos State Polytechnic Library					Grace Polytechnic Library						
	SA	A	D	SD	Mean	D	SA	A	D	SD	Mean	D	SA	A	D	SD	Mean	D	
27	There is ICT in acquisition	3	5	22	-	2.15	R	2	5	18	-	2.44	R	5	4	26	3	2.20	R
28	Cataloguing unit use ICT	23	4	3	-	3.18	A	6	3	16	-	2.54	A	4	5	25	3	2.18	R
29	There is circulation unit	17	-	17	-	3.19	A	4	2	22	-	2.36	R	-	-	37	-	2.00	R
30	There also serials unit	5	7	18	-	2.34	R	4	2	26	-	2.34	R	-	-	36	-	2.00	R
31	Africana units house African resources unit	-	-	28	-	2.00	R	-	-	22	-	2.00	R	-	-	-	-	1.00	R
32	There is a unit called Reference Section	12	11	7	-	2.12	R	8	8	12	-	2.71	A	6	6	25	2	2.45	R
33	Bindery units	-	2	29	-	2.06	R	3	4	19	-	2.37	R	-	-	32	-	2.00	R
34	Reprographic units	29	2	-	-	3.98	A	5	2	8	-	3.45	A	37	35	-	-	3.00	A
35	General administration office	23	2	8	-	3.49	A	17	2	3	-	3.76	A	38	-	-	-	3.99	A
	Total						2.67						3.56						2.34

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

Table 3 reveals the mean scores responses of individual institutional libraries under review with Yabatech Polytechnic Library indicating that ICTs are applied in "acquisition, serials management, Africana, Reference and Bindery sections, cataloguing, circulation, reprographic and administration based on the mean score of 2.69" signifying that ICT application in Yabatech Library is high. Lagos State Polytechnic library had an average mean score of 2.14 indicating that ICT is applied to "acquisition operation/unit, circulation unit, serials section, Africana, and bindery section cataloguing unit, reference section, reprographic unit and administration but its (ICT) application is very low". Meanwhile, "the mean score of 1.96 was recorded for Grace Polytechnic library's

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application of ICT to its acquisition operations/unit, cataloguing, circulation, serials, Africana, reference and bindery sections, reprographic section and administration indicating that ICT application to library operations and services is extremely low”.

Research question 4: “What are the challenges confronting ICTs application to library services in Lagos State Polytechnic libraries”?

For the identification of problems confronting the application of ICTs to library services in Lagos State Polytechnic libraries, the mean score of respondents responses in items 35-42 were computed/analyzed on Table 4.

Table 4: Challenges Confronting ICTs Application in Libraries

Problems Faced by Staff	YABATECH, Library							Lagos State Polytechnic, Library							Grace Polytechnic, Library						
	SA	A	D	SD	Mean	D	SA	A	D	SD	Mean	D	SA	A	D	SD	Mean	D			
35 Inadequate financing (Funds not always enough)	28	1	-	-	3.97	A	22	2	-	-	3.92	A	20	6	5	-	3.49	A			
36 Inadequate infrastructural facilities	22	4	3	-	3.76	A	8	14	2	-	3.25	A	26	5	-	-	3.84	A			
37 Incompetent personnel (lack of skills)	24	4	1	-	3.79	A	19	3	2	-	3.71	A	31	-	-	-	4.00	A			
38 Erratic power supply	29	-	-	-	4.00	A	20	4	-	-	3.84	A	20	6	5	-	3.49	A			
39 Administrative/management problems	20	9	-	-	3.69	A	16	6	2	-	3.59	A	30	1	-	-	3.97	A			
40 High cost of systems maintenance	20	8	1	-	3.66	A	17	6	1	-	3.67	A	28	3	-	-	3.90	A			
41 Software problems	20	8	1	-	3.66	A	12	10	2	-	3.58	A	26	5	-	-	3.84	A			
42 Frequent change in Technology	24	4	1	-	3.79	A	14	9	1	-	3.54	A	20	6	5	-	3.49	A			

Key: A=Accept, R= Reject, D= Decision

Table 4 indicates the problems of “ICTs application to library services” in the three polytechnic libraries via their mean scores which include: Funds not always enough; staff in library are not doing well with equipment (lack skills); there is no regular light; administrative structure is not proper; it is very expensive to maintain the library general; challenges of software to manage the resources and technology always changing per time.

DISCUSSION AND FINDINGS

From the study, the three Polytechnic libraries have ICT facilities considerably. It was evidenced from the findings that in Yaba College Polytechnic library or Yabatech Library, the units where ICTs are applied include: “the catalogue section, circulation, reprographic unit, and administration”; while other areas such as acquisition, serials, Africana section, reference, and bindery unit are extensively low. In Lagos State Polytechnic library, sections such

as “reference section, reprographic unit and administration are the only sections ICT is fully applied to in the library”; while in Grace Polytechnic library; it was found out that ICT is only applied to the reprographic unit and administration.

The study revealed or observed that in Yabatech and Lagos State Polytechnic Libraries, 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 Grace 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. Moreover, the purpose of ICT application in library operation as depicted on Table 2 include expansion of library services rendered to users, easy control of library operation (activities are together in one place), facilitation or ease of library co-operation and connectivity services, for improved financial management & time-saving as well as enhancement of daily routine activities and effective resources/service delivery easily and faster when compared with conventional or manual method. It was equally gathered from the findings that the library areas or sections of ICT application in Yabatech Polytechnic library include: “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 Services (CAS), provision of bibliographies, referral services, displays, Selective Dissemination of Information (SDI), indexing and abstracting, inter-library loan and exchange of information” which was rated low.

In the three polytechnic libraries reviewed in this study, “the extent of ICT application to library services that were rated high are majorly cataloguing, circulation, users’ registration and administration, while other services were rated low in terms of ICT application in Yabatech”; while the extent of ICT application in Grace library is extensively low. It was only photocopying, lending, short loan service, as well as registration of users that were rated high above others. The researchers therefore deduced from the findings that ICT is only applied to few library services to a great extent while they are under-applied to many other vital services. It was also discovered that there are several common problems confronting the three libraries in their efforts to the ICT use in library service delivery such as Funds not always enough; staff in library are not doing well with equipment (lack skills); there is no regular light; administrative structure is not proper; it is very expensive to maintain the library generally; and challenges of software to manage the resources as well as frequent change in technology.

RECOMMENDATIONS

The following are recommended to management of institutions in this study:

1. Management of polytechnic should provide electronic facilities for effective service delivery.
2. Training for library staff on regular basis
3. Proper money should be provided to purchase more tools to the library.
4. Electricity issues should be resolved in all the tertiary institutions in the study
5. Modalities should be put in place to address the urgent need for more infrastructural facilities not only to accommodate the increasing number of users but to enhance efficient service delivery to patrons.

There should be ICT policy to facilitate effective ICTs adoptions and application in the three polytechnic libraries.

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