

## ICT Training, Skills and Use by Librarians in Special Libraries in Abuja, Federal Capital Territory, Nigeria

### *Abstract*

*This study investigated ICT training, skills acquisition and use by librarians in special libraries in Abuja, Federal Capital Territory, Nigeria. Three research questions guided the study. Population for the study comprised of seventy-four (74) librarians in twenty-four (24) special libraries within Abuja. A sample size of fourteen (14) special libraries and fifty-one (51) librarians were selected. Structured type of questionnaire was used in data collection. A total of 51 copies of the questionnaire were administered by the researchers and research assistants. Frequency tables and percentages were used to analyze data. Response rate showed that out of 51 copies of the instrument distributed, 40 were completed and submitted, giving 78% success. Research findings showed that on-the-job training was the ICT training programme acquired by all the respondents. All the respondents indicated to have acquired skills in computer, database, internet/ communication, library software and applications packages as well as networking. Database skill was most popular ICT skill used by librarians in information service delivery. The major inhibiting factor to the acquisition of ICT training and skills was lack of modern training facilities. Recommendations were put forward and they include: attitudinal change of librarians through making personal effort to train themselves, heads of special libraries should persuade the management of their institutions to provide adequate funds to equip the libraries with ICT facilities for staff development and information service delivery. Bodies organizing conferences, seminars and workshops should use the modern ICT facilities for practical training to enable librarians to acquire necessary ICT skills.*

**Key words:** ICT Training; Skills, Librarians; Special libraries; Abuja, FCT.

### **1.0 Introduction**

Information and Communication Technology (ICT) is the convergence between

computing, broadcasting, audiovisual and telecommunication technologies to produce information. The use of ICT has affected all

facets of human life such as education, health information, business and banking sectors, etc. In banks, different types of ICT facilities are being used to provide online, Internet services. These facilities include: IT systems, fax and phones, computer terminals, etc. (Pawar, Sharma, Thatte and Gupta, 2011). The use of information technology in information handling had no doubt revolutionized the operations in modern libraries and information centres. Information communication technology manifests itself in library and information services by accessibility it provides using online data banks and online bibliographical databases. Bowden (1984) posits that Information technology manifests itself in terms of service provision by the immediate access. It ultimately permit user to remote collection of data. To further buttress on the application of ICT to provision of information services, Madu (2008) stressed that the latest in this technological drive for provision of library services to users is the introduction of virtual library.

The availability of ICTs in libraries has created the need for changes in the tools and roles of libraries; new information technology skills in addition to traditional library skills. In digital environments, librarians can only be effective in information service delivery by having the appropriate ICT skills which is the ability to use digital technology, communication tools and/or networks appropriately to solve information problems. To solve information problems is the ability to use technology as tool to research, organize, evaluate and communicate information and possession of a fundamental understanding of the ethical legal issues surrounding the access and use of information. ICT knowledge is information gained or acquired from training on ICT. In order to be fully equipped with requisite skills, librarians need to undergo various forms of training programmes. Training is the

acquisition of skills that enable the employee discharge his or her statutory duties on daily basis in an organization.

Furthermore, Amkpa & Abba (2009) noted that with the fast and rapid growth rate of ICT and high level of increase in the use of the Internet a good number of librarians in Nigerian libraries still have low levels of ICT skills to work with computers, browse and surf the net in order to access and retrieve information. It is based on this background that this study investigated the ICT training, skills acquisition and use by librarians in special libraries in Abuja, Federal Capital Territory, Nigeria.

### **1.1 Brief History of Abuja (Federal Capital territory)**

The land now called Abuja takes its origin from the name of one of the followers and brothers of Muhammed Makau (Abuja and Kwaka). Abuja succeeded Makau in 1825. Abu was his nickname but because he was a red and fair-skinned person, he became known as Abu – Ja meaning Abu the red or Abubakar the fair one. Other sources revealed that Ja is a shortened form of Isaku Jatau, his father's name. "King Abubakar founded the kingdom of Abuja" Abuja has six area councils, each subdivided into ward being headed by the local councils. The temperature ranges between 25°C and 30°C. (<http://www.abujagallery.com>).

### **1.2 Statement of the Problem**

It is well known fact that many special libraries have acquired and used Information communication technology over the years. In fact they are all aspiring to embrace as much ICT as possible within the limit of resources available to them. This is because they do not want to be completely left behind their libraries to acquire the requisite training and skills to put ICT to good use. These training and skills will enable the librarians to function

more efficiently and effectively in information provision, and thus serve their clientele better (Solanje; Chinsega, 1995).

However, it is observed that several studies on ICT skills of librarians have been focused on academic librarians in university libraries. Notable one was the research carried out by Olukemi and Hussaini (2010) on the educational need of academic librarians in the 21<sup>st</sup> century of digital environment. Not much on librarians in special libraries has been examined. In fact the librarians working in libraries require ICT skills most because of the nature of the services they are expected to render. The situation of ICT skills of librarians in special libraries in Abuja is not known. This therefore serves as impetus for this study, to investigate the state of ICT training, acquisition of skills and use by librarians in special libraries in Abuja, Federal Capital Territory, Nigeria.

### 1.3 Objectives of the Study

The study was guided by the following specific objectives.

1. To determine the level of programme by which librarians acquire ICT training and skills.
2. To determine the type of ICT skills acquired and used by the librarians in special libraries under study.
3. To determine the inhibiting factors to the acquisition of ICT training and skills.

### 1.4 Research Questions

This study was guided by the following research questions:-

1. At what levels are ICT training programme offered or received by the librarians?
2. What types of ICT skills are acquired and used by librarians?
3. What are the inhibiting factors to the ICT training and acquisition of skills?

## 2.0 Literature Review

A good number of authors have delved into researching on training of librarians on ICT skills from different types of libraries. Each of the studies have varying results as revealed in the literature reviewed. Mbagwu and Nwachukwu (2010) investigated training and development programmes of professional and paraprofessional staff in Federal University of Technology, Owerri Library. According to them, the kind of training programmes available in Federal University of Technology Owerri library include: induction and orientation, on-the-job training, workshop, seminars and conferences, as well as simulation on extension training.

Nwogo (2011) also examined network literacy skills on academic librarians. The study revealed high literacy skills of academic librarians in the use of Internet. Vast majority of the librarian's studied surf the Internet daily and weekly bases. A survey of ICT knowledge and skills of librarian at Chandigarh city Delhi by Nath, Bahl and Kumar (2007) has revealed a low level of ICT knowledge amongst librarians. A collaborative research was carried out to determine the degree of computer proficiency of professionals in university libraries in Nigeria. The result showed that majority of the professionals has low proficiency in the use of computer. A good number of professionals possessed ICT skills, from computer training programme. The software that was frequently used was that of library operations (Adomi and Anie, 2006). Safahief and Asemi (2010) assessed the levels of ICT proficiency of professionals in University of Isfahan, Iran. The study showed that significant number of librarians failed to meet high level ICT skills, despite the years of cognizance which have not improved their literacy level.

Ugwu (2009) studied the computer proficiency of professionals in Library of the University of Nigeria, Nsukka. It was reported that Librarians acquired ICT skills through

colleagues, while the ICT competency levels of librarians were found to be very low. Constraints to the acquisition of ICT knowledge and skills include lack of funds, overload of working hours and limited opportunities offered by information technology. Adeyoyin (2006) also investigated the level of computer awareness among library personnel in English and French speaking countries in West Africa. It was discovered that out of 370 librarians 170 have ICT proficiency and the other 191 professionals does not have ICT proficiency skills. Choudhurhad and Sethi (2009) analyzed the ICT proficiency skills of librarians in Orissa libraries and reported that most librarians have ICT proficiency. The result showed most of the respondent indicated that they should be given sensitization on the utilization of digital material. Olukemi and Hussani (2010) reported inadequate or total lack of skills/education in digital information provision by librarians.

Ojedokun and Okafor (2011) investigated the qualities of computer skills proficiency of library professionals in an ICT surrounding with particular emphasis on southern Nigeria. The study revealed that majority of respondents had knowledge and skills in e-mail use, word processing and use of search engines. Many of them has no skills to evaluate and catalogue resources of database management, management web design and application. Omoniyi and Akinboro (2009) reported that librarians were of the view that ICT training was unnecessary to them on condition that they offered information science courses in library school. It was further discovered that IT knowledge acquired in university subsumes ICT skill requirement for their job. They were of the view that ICT skills and competency are needed by the junior staff of the library.

Adomi and Famola (2012) examined training and development of 50 cataloguers in

National Library of Nigeria, Abuja. The study revealed that library staff have participated in the in-house training and departmental meetings while major problem was inability of the National Library to send staff for training. Again, Abdullahi and Haruna (2009) reported that the level of information service delivery in three surveyed university libraries in Adamawa state, Nigeria was high while the major problem with the ICT utilization in the surveyed university libraries was constant power failure without alternative power supply.

All these literature reviews point to the fact that there is need to keep training and retraining librarians on application of ICTs to library services. Skills acquisition in this direction is essential for effective and efficient service delivery in the library and information profession especially in the present era.

### 3.0 Research Methodology

Survey research method was used in this study. The population for the study comprised of seventy-four (74) librarians in twenty-four (24) special libraries within Abuja, the Federal Capital Territory. The sample consists of fourteen (14) special libraries and fifty-one (51) librarians. Purposive sampling technique was used to select fourteen (14) special libraries and 51 librarians for the study because the sample special libraries have evidence of ICT application to library services. This was known based on preliminary investigation undertaken by the researchers.

One set of structured type of questionnaire was used as the instrument for data collection from librarians. The questionnaire is made up of four sections: Section A: contains questions on the Educational qualification of librarians. Section B: contains questions on the nature of ICT-related training received by the librarians. Section C: contains items on ICT

skills acquired by librarians and how the skills have been put to use. Section D: contains items on factors in hindering librarians from acquiring ICT training and skills.

The researchers personally visited all the sample special libraries to administer copies of the questionnaire on librarians.

Research assistants were co-opted in the administration and collection of the completed copies of questionnaire. **The data collected through questionnaire from the special libraries were analyzed. The data collected were analyzed and represented in frequency tables and percentages.**

#### 4.1 Data Analysis, Interpretation and Discussion

**Table 1: Administration and retrieval of the copies of questionnaire**

S/N	Selected Special Libraries	Copies of questionnaire administered	Copies of questionnaires retrieved
1	Central Bank of Nigeria, Abuja	6	4
2	Institute for Pharmaceutical Research and Development Council, Abuja	4	3
3	Gwagwalada Specialist Hospital, Abuja	4	4
4	National Assembly, Abuja	5	3
5	Raw Materials Research and Development Council	4	3
6	Institute for Peace and Conflict Resolution, Abuja	3	3
7	Supreme Court of Nigeria, Abuja	3	2
8	National Mathematical Centre, Abuja	4	3
9	Nigerian National Petroleum Corporation, Abuja	5	4
10	Tertiary Education Trust Fund, Abuja	1	1
11	High Court, Abuja	3	3
12	Presidency Library, Abuja	3	2
13	National Center for Women Development, Abuja	3	3
14	National Human Right commission, Abuja	3	2
	<b>Total</b>	<b>51</b>	<b>40</b>

A total of 51 copies of the questionnaire were administered, 40copies were completed and returned. This makes the return rate 78%. Some of the copies of questionnaires were not filled due to the fact that some librarians had gone on annual leave.

**Table 2: Educational qualifications of librarians**

Qualifications	Number of Respondents	Percentage (%)
Ph. D	3	8
MA/M.SC.MLIS	17	42
BA/B.SC/BLIS/BLS	20	50
<b>Total</b>	<b>40</b>	<b>100</b>

On the educational qualifications of librarians, the highest number of librarians were those with bachelor degree thus representing 20 (5%). This might not be unconnected with the fact that in order to attain a professional status in librarianship, first degree in librarianship is required.

### Research Question 1. What levels of ICT training programme are offered/acquired by librarians?

Table 3: Level of ICT training programme

Level of ICT Training	Number of Respondents	Percentage (%)
Ph.D	-	-
MA/M.Sc/MLIS	14	35
Postgraduate Diploma	-	-
BA/B.SC/BLIS	15	37
HND	11	28
OND	25	63
On the job training	40	100

The table reveals the level of ICT training programme benefited by the librarians. All the respondents indicated to have on-the-job training. This could be in the form of workshop, conferences and seminars which may last for one week. It was discovered that 25(63%) respondents acquired ICT training during Ordinary National Diploma (OND) programme either in librarianship or any other courses. Lowest respondents with 11 (28%) received ICT training as part of Higher National Diploma (HND) and degree programmes.

### Research Question 2. What type of ICT skills are being acquired and used by librarians?

Table 5: Acquisition and Use of ICT skills by Librarians

ICT Skills	Acquisition		Use	
	Frequency	Percentage	Frequency	Percentage
Computer Skills	40	100	23	58
Database Skills	40	100	30	75
Internet/Communication Skills	40	100	28	70
Libraries Application Package Skills	40	100	25	63
Networking Skills	40	100	17	43

All the 40 respondents indicated to have acquired computer, database, internet/communication, library software application and package as well as networking skills. However, there was discrepancy in the use of ICT skills as 30(75%) of respondents use database skills more than the other four ICT skills. Database skills attracted higher response rate of 30(75%). This was because librarians struggle to retrieve information through online database for user. This is followed by 28(70%) response rate on internet/communication. No wonder information professionals now communicate via the Internet vis-à-vis e-mail, teleconferencing, answering reference queries from users. It was discovered from 17 (43%) respondents lack networking skills to use Wide Area/Local Area Network (WAN/LAN).

### Research question 3. What are the inhibiting factors to ICT training, acquisition and use of ICT skills?

Table 6: Problems hindering librarians from acquiring ICT Training and Skills

Inhibiting Factors	No. of Respondents	Percentage
Lack of fund for training	10	25
Lack of training opportunities	8	20
Parent organization not willing to send library staff on ICT training	8	20
Lack of interest by the librarians	5	12.4
Lack of modern training facilities	20	50

Data reveal that 20(50%) of respondents have identified lack of modern training facilities as most serious problem hindering the acquisition of ICT training and skills by librarians in special libraries in Abuja FCT. There is digital device among academic libraries and other types of libraries in developing nations. Next to this is 10(25%) respondent respondents that indicated lack of fund for training, while 8(20%) of the respondents have respectively indicated lack of training opportunities and parent organization not willing to send library staff for ICT training. The lowest respondents were 5(12.4%) respondents that indicated lack of interest by the librarians

#### 4.2 Findings and Discussion

The result of the study has revealed that all the librarians in special libraries had acquired various forms of ICT training. The ICT training was acquired as part of National Diploma, Higher National Diploma and Degree programs. They also had the ICT training through personal efforts made to train themselves in private computer schools and through various opportunities given to them by their employer to attend seminars, conferences and ordinary Diploma in computer science, certificate in computer science. It is from the above training, that the librarians in special libraries acquired their ICT knowledge and skills.

This result agrees with Chouhurd and Sethi (2009) who analyzed the computer literacy of library professionals in the libraries of Orissa and reported that majority of the professionals were computer literate. However, these results disagree with in a surveyed study of ICT knowledge and skills of librarians at Chandigarh city Delhi and reported that there was a low level of ICT knowledge and skills amongst librarians. The present finding disagree with the finding of Omoniyi and Akinboro (2009) as the co-

researchers reported that librarians claimed that ICT training is unnecessary to them as they have offered it at library school and that junior staff needed it.

The findings further revealed that majority of respondents use database skill. The findings contradict the findings by Ugwu (2009), Olukemi and Hussain (2010), Ojedokun and Okafor (2011). Ugwu (2009), Olukemi and Hussain (2010) who discovered low level of ICT skills as well as total lack of skills in digital information provision respectively. Ojedokun and Okafor (2011) discovered that majority of the respondents had knowledge and skills in E-mail use, Word processing task and use of search engine.

The result of the study has revealed some inhibiting factors to the acquisition of ICT training and skills by the librarians studied. The major problem was lack of modern training facilities. Other minor problems include: lack of fund for training, lack of training opportunities and refusal of parent organization to sent library staff on ICT training. This result contradicts the findings by Adomi and Famola (2012), Ugwu (2009) and Abdullahi and Haruna (2009). Adomi and Famola discovered inability of National Library of Nigeria to sponsor staff for training programme. It corroborated the finding by Ugwu (2009) who discovered lack of fund as the major problem to the acquisition of ICT Knowledge and skills by librarians as lack of fund can result to inadequate modern training facilities. Abdullahi and Haruna (2009) discovered constant power failure without alternative power supply in the three surveyed university libraries and in Adamawa state.

#### 4.3 Summary of Findings

Findings of the study are summarized as follows:

1. On-the-job training was the level of ICT training programme received by librarians in special libraries in FCT Abuja.

2. Librarians acquire computer, database, internet/communications and application packages skills but use database and internet/communication skills most.
3. Lack of modern training facilities hindered the acquisition of ICT training and skills.

### Conclusion

Based on the findings of the study, it can be concluded that:

1. The fact that the nature of ICT-related training is based on conference, seminar and workshop attendance and the organization of these training programmes are on monthly, by annual or annual affairs or on continuous basis, most of these training programmes are usually accompanied by attendance certificates.
2. Effective ICT service delivery entails the possession of skills. There are a lot of information online (database) and in order to meet users' information need, there is the need for information collection, accessibility and retrieval.
3. The bodies organizing conferences and workshops were unable to provide modern training faculties. This could be attributed to funding and awareness problem that make librarians to still use conventional method of information service delivery in special libraries.

### Recommendations

Based on the findings from study, the following recommendations are given:

The management of the parent organizations which is the umbrella under which special libraries are placed, should be persuaded by the heads of the libraries in such organization to see the importance of ICT training of the librarians so that the management would be

encouraged to release adequate fund and send the librarians for ICT and other relevant training. Heads of special libraries should look out for where there are training opportunities, encourage and recommend their staff for such training.

Librarians must change their attitude towards ICT. They should become proactive. This can be done through their personal effort to continue to train themselves and also make themselves available for any ICT training being organized by their library and parent organization may offer them from time to time. Librarians as a matter of fact and urgency must desire to acquire the necessary ICT skills to be able to play their expected roles in digital environment. Bodies organizing conferences, seminars, workshop and any ICT-related training for librarians should ensure that they use modern ICT facilities for the training so that current knowledge and skills can be acquired. The ICT training for librarians should constitute more of practicals than theories.

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