

## ICT Literacy among the Staff of Selected Ghanaian and Nigerian University Libraries

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### Abstract

*This paper reported the survey that was conducted to ascertain the ICT literacy level among the professionals, paraprofessionals and other members of staff of two Anglophone West African university libraries – Ghana and Nigeria. Five Ghana university libraries and seventeen Nigerian university libraries were sampled. The twenty-two universities are all from English-speaking West African countries. Each of the institutions involved in this research was used as a contact for the distribution and collection of the questionnaires from the individual respondents of the twenty-two universities sampled both in Ghana and Nigeria. The information supplied by the respondents were used to analyze the staff situation and the number of computer literate and non-literate staff in their respective libraries. The data analysis revealed that about two hundred and fifty eight (258) professional librarians work in the university libraries surveyed. Two hundred and one (201) paraprofessionals also work in those libraries, while the other members of staff constitute the largest working force of about seven hundred and thirty six (736) staff. The result of this study reveals that out of about 258 professional librarians, 229 of them were ICT literate while the remaining 29 professional librarians were ICT non-literate. This constitutes an overall percentage of 88.76% for the literate professionals as against 11.24% for ICT non-literate professionals. Also, out of 201 paraprofessionals, 150 of them were ICT literate while the remaining 61 were ICT non-literate. This also constitutes 74.63% for the literate paraprofessionals as against 25.37% for ICT non-literate paraprofessionals. Other staff totaled 736. 625 of them were ICT literate while the remaining 111 were ICT non-literate. This also constitutes 84.9% for the literate other members of staff as against 15.1% for ICT non-literate other members of staff. Tables were used to illustrate these in order to ease understanding. The findings of this study shows that there has been remarkable improvement in the ICT literacy level of Nigerian university libraries when compared with the previous studies reported by the leading author in the recent past.*

**Key words:** communication technology, literacy, information services, librarians, university libraries, Ghana, Nigeria.

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## 1. INTRODUCTION

Our society is increasingly ready for the electronic library. But if the librarians fail to assume the challenge, there are others who will, especially where it promises to be profitable. However, Dowlin (1994) warned that without the participation of the professionals that are committed to quick access to information, the end result of this development could threaten the fundamentals of our society. She observed that electronic library would not only ensure the survival of library as an institution and librarians as professionals, it will also elevate the status of libraries and librarians and place them in a key role in the society.

The use of technology can increase the effectiveness and efficiency of library and information centers. The computer allows the library to manage the information resources of its users in an efficient manner. It becomes possible to keep track of sources of information that are not within the library and to keep this information current. Computerized files increase the amount of information that can be organized effectively. A larger database increases the utility of library and information centers. It is only the computer that can offer such a cost-effective methodology to collect and organize the information needs of today's information consumers.

Contrary to the opinion of some, the new technology has increased the ability of most people to access the information needed in their daily lives. The need for the skilled professionals to assist the users in accessing information has increased. In order to be effective and efficient, the skilled professionals must own the responsibility and make the effort to continually update their skills. It is the profession that builds the vision of access to information to all in a technological age. And, it must be the profession that provides the leadership for the individual and the society. The best professionals should have their values and training form the library tradition, and the skills required by the electronic library.

The library institution is traditionally and historically the custodian of knowledge and information. But, the paradigm shift from traditional information handling methodologies to technological platforms seems to transfer the information and knowledge custodian roles of libraries to other institutions and professions like the computer, communication and information technology groups. However, when it comes to information and knowledge, libraries of all categories and classifications remain the dynamic engines for the knowledge and information society. Developments in the information technology field pose serious professional challenge to all libraries, librarians and related information professionals and institutions. These technological advances must be exploited in their applicable forms to oil the engines that process, produce and provide knowledge and information.

Any human society is a labyrinth of complex individuals and institutions connected in a web of relationships. These relationships may be economic, social, religious, educational, governmental, national, regional or international. These relationships may be physically situated or isolated. To be truly human and humane, law and order are the regulatory imperatives. But even in this situation, information is the vehicle that carries the law and orders in the society. Information in the last five decades has become a vital societal resource in the productive process. Investment consultants are already writing about infopreneurs and informercials (Allen, 2004). Omekwu (2005) has indicated that the increasing prime of place given to information through technological development and deployment evolves into an Information Society. Information demand, use and dissemination are critical elements that determine information structuring and services. The globalization of information exchange creates new frontiers for interaction in the economic, educational, legal and information sectors.

The new frontiers for information exchange are premised on developments in the ICTs domain. But, ICTs facilities are unevenly distributed between developed and developing countries. Anan (2000) and Banigo (2001) have all highlighted these digital discrepancies. The result or problem is the emergence of an Information Society that is becoming exclusive rather than inclusive. Somewhere else Omekwu (2005) observed that "librarians in all types of libraries are already at the cross road of management imperatives induced by the changing information environment".

Academic libraries will be challenged to adopt new management styles to support learning, research, and recreation in an environment where scholarship is increasingly migrating to digital frontiers. Special libraries managers will require specialized skills to navigate the ocean of information in order to address the specific information needs of their often sophisticated clientele system. School libraries are already designated multimedia resources centres. Management of multimedia systems, services and staff implies the acquisition of new managerial arts and skills. Astute managerial skills are even more compelling for the expanding roles of public libraries as institutions for the development of the mind, literacy in developing countries and cultural repositories. However, the imperatives for relevance in the Information Society are not only managerial but can be viewed from individual and institutional perspectives.

### **1.1 Statement of the Problem**

This is an era brought about by the emergence of ICT. Librarians in the universities have come a long way from the time when they were considered caretakers of the book collection. Now, they are information providers, consultants, scientists, cyberians and information navigators (Kreiser and Horton, 1992).

There are many technological trends that have changed the role of the professional librarians and information scientists. The automation of the library, the use of CD-ROM's and the Internet have dramatically changed the role of the librarians and information scientists, making their job more

demanding. The use of technology has placed increased demand on librarians and information scientists' time to teach information technology, to learn new technologies, to troubleshoot, and to learn which Internet resources can assist students, researchers and lecturers.

Indifferent, lackadaisical and carefree attitude towards the inevitable change brought about by the ICT have been observed in Nigeria in the recent past, investigated and reported in the literature of library and information science. Similarly, the ongoing embrace, appreciation, acceptance and eagerness to use ICT are also being observed, investigated and reported around the world for academic, professional and scholarship purposes. So, this study investigates the ICT literacy level among the staff of two Anglophone West African nations, that is, Ghana and Nigeria university libraries.

### **1.2 Objectives of the Study**

This study was conducted to achieve the following objectives:

1. To determine the ICT literacy level among the professional, paraprofessional and other staff of Ghana and Nigeria university libraries.
2. To compare the ICT literacy level between Ghana and Nigeria university libraries' staff.
3. To determine whether the ICT literate staff are more in Ghana and Nigeria university libraries than their non-ICT literate counterparts.
4. To ascertain the computerization level of both Ghana and Nigeria university libraries.

### **1.3 Research Questions**

The following research questions were raised for this study:

1. What is the ICT literacy level of the staff of Ghana and Nigeria university libraries?
2. What is the computerization level of Ghana and Nigeria university libraries?
3. Are the ICT literate staff more in Ghana than Nigeria university libraries or it is the other way round?
4. Are the ICT non-literate staff more in Ghana than Nigeria university libraries?
5. Has there been improvement or progress recorded in ICT literacy in Nigeria university libraries in the last decade (2000-2010)?

### **1.4 Scope of the Study**

This study focuses on investigating the ICT literacy among the staff of two Anglophone West African countries, i.e. Ghana and Nigeria university libraries. Five (5) Ghana university libraries and seventeen (17) Nigerian university libraries were investigated in this study.

### **1.5 Significance of the Study**

The significance of this study features in the following:

1. The findings of this study will correct some erroneous impression formed before that ICT deployment in West African university libraries is grossly inadequate and the university library staff are mostly ICT non-literate personnel.

2. The findings of this study will provide information that the library management and policy makers can use to improve its services.
3. This study will reveal the acceptability or otherwise of the ICT by staff of Ghana and Nigerian university libraries.
4. The result of the findings of this study will place the staff of West Africa university libraries, Ghana and Nigeria in particular on a better pedestal in the comity of information professionals and scientists around the globe.
5. This study hopes to contribute to the knowledge in the field of library and information science by investigating the ICT literacy level among the staff of two Anglophone West African nations, that is, Ghana and Nigeria university libraries.

## **2. LITERATURE REVIEW**

### **2.1 Staff Status in Ghana and Nigeria University Libraries**

According to Kadiri, (2000), the Ghanaian university librarians are yet to be accorded the status of academic staff. Nonetheless, the professionals do obtain higher qualifications than their paraprofessional counterparts. This is reflected in their remuneration. The professional librarians in Ghana do not enjoy some privileges accorded the academic staff of their various universities, especially in terms of flexible work hours and teaching and research allowances. The case is different in Nigerian university libraries. The professional librarians have been accorded the status of academic staff since the inception of University College, Ibadan, (now University of Ibadan) in 1948. This has created a wide gap between the professionals and paraprofessionals in Nigerian university libraries. While the former is seen as a career person, the latter is regarded as an administrative staff, who cannot get to the top or even head a unit or section, no matter his years of experience and ability. This also reflects in their remuneration and the morales of the paraprofessionals are easily dampened by the conventional ego common with the academic settings.

### **2.2 ICT Application in Libraries**

The emergence of ICT has greatly shrunk the world into a global village to the extent that anyone or any organization, the library in particular, cannot ignore it. Information and communications technology is a powerful tool that would link Nigerian and other African university libraries with other libraries in the Western countries and facilitate the ongoing revitalization of information acquisition and dissemination processes.

Before the advent of the computer, telephone services were commonly used all over the world for communications purposes. The fax, telex technology came in followed by the computer and networking, and now, the Internet. The fusion of the Information Technology (IT) with that of communications gave rise to Information and Communications Technology (ICT). Banigo (2001), notes that knowledge and information have become the most important currency for productivity, competitiveness, increased wealth and prosperity. According to him, ICT "emphasizes the use of the computer and other technologies such as telephone to process, transport, and transfer voice and

other data singularly or mixed with least interference or distortion of content".

Computer has made such a tremendous impact on the organization, management, and dissemination of information that it readily commends itself to every library to accept it or become limited in satisfying its clientele. For the libraries, several systems have been developed for their various house-keeping chores such as library processes as acquisitions, cataloguing, serials and circulation control. Communication tools such as e-mail, fax, computer, and videoconferencing are being used to overcome barriers of space and time, and opens new possibilities for library services. Librarians and their clients can gain experience of communications through e-mail and electronic conferencing systems that run over the telephone network. Librarians should be able to use the Internet both to access information and to display their own Web pages. These developments are giving learners access to the vast contents of libraries and multimedia resources.

Libraries use ICT in several ways. According to Ugah (2001), they include:

- Library management and administration;
- Processing of Library materials;
- Developing on-line resources;
- Accessing on-line resources;
- Developing off-line resources;
- Accessing off-line resources
- Provision of regular library services to users;
- Inter-library cooperation and lending;
- Video conferencing / teleconferencing, etc.

It is generally agreed that there are at least three areas of skills necessary for carrying out the process of library automation. The first is the Technical Skill, which is an ability to use knowledge, methods and techniques acquired from education, training and experience in the performance of specific tasks. The second is Human Skill – the ability and judgment in working with and through people including an understanding of motivation and application of effective leadership. The last but not the least is the Conceptual Skill which is an ability to understand the complexities of the overall organization, and where one's own operation fits into the organization. This knowledge permits one to act according to the objectives of the total organization rather than only on the basis of the goals and needs of one's own immediate goals.

With the above in mind, qualified library staff with working knowledge of computer and library software has to be employed in the case of staff recruitment. The alternative is to train the available staff who are willing and have the aptitude. The latter option is more practicable in the two West African countries (Ghana and Nigeria) university libraries. Most of the university libraries in these two West African countries have been in existence before the advent of ICT usage in the libraries, as some of them have been for close to five decades.

### 3. METHOD OF DATA COLLECTION

Questionnaire was used to collect the data for this study. The data collected covered twenty-two (22) university libraries, Five Ghanaian university libraries and seventeen Nigerian university libraries. The twenty-two universities are from English-speaking West African countries. A simple percentage analysis was used to analyze the data collected.

#### 3.1 Data Analysis

Five Ghanaian university libraries and seventeen Nigerian university libraries were sampled from the English speaking West African countries. Each of the institutions involved in this research was used as a contact for the distribution and collection of the copies of questionnaire from the respondents from the twenty-two universities sampled in the two countries. The information supplied by the respondents were used to analyze the staff situation and the number of computer literate and non-literate staff in their respective libraries.

The data analysis revealed that about two hundred and fifty eight (258) professional librarians work in the university libraries surveyed. Two hundred and one (201) paraprofessionals also work in those libraries, while the other members of staff constitute the largest working force of about seven hundred and thirty six (736) staff.

Analysis of the data also shows that out of about 258 professional librarians, 229 of them were ICT literate while the remaining 29 professional librarians were ICT non-literate. This constitutes an overall percentage of 88.76% for the literate professionals as against 11.24% for ICT non-literate professionals. Also, out of 201 paraprofessionals, 150 of them were ICT literate while the remaining 61 were ICT non-literate. This also constitutes 74.63% for the literate paraprofessionals as against 25.37% for ICT non-literate paraprofessionals. Other staff totaled 736. 625 of them were ICT literate while the remaining 111 were ICT non-literate. This also constitutes 84.9% for the literate other members of staff as against 15.1% for ICT non-literate other members of staff. The figures presented above are illustrated in tabular form for easy understanding:

Table 1 below shows the computerization level of both Ghana and Nigeria university libraries.

**Table 1: Computerization Level**

<b>Ghana University Libraries</b>	<b>Computerization Level</b>
Balme Library, Univ. of Ghana	Full Automation
Kwame Nkrumah Univ. of Sc. & Tech.	Full Automation
Univ. Coll. Of Education, Winneba Libr.	Full Automation
University for Dev. Studies Library	Full Automation
University of cape Coast Library	Full Automation
<b>Nigeria University Libraries</b>	<b>Computerization Level</b>
Ramat Library, Maiduguri	Partial Automation
FUTA Library, Akure	Partial Automation
Delta State Univ. Library	Initial Automation
Nimbe Adedipe Library, Abeokuta	Full Automation

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Mich Okpara Univ. of Agric Library	Initial Automation
Fed. Univ. of Tech Library, Owerri	Partial Automation
Bayero Univ. Library, Kano	Partial Automation
Univ. of Ilorin Library, Ilorin	Partial Automation
Univ. of Benin Library	Partial Automation
Hezekiah Oluwasanmi Library, Ife	Partial Automation
Univ. of Lagos Library	Partial Automation
Kenneth Dike Library, Univ of Ibadan	Partial Automation
University of Calabar Library	Initial Automation
Kashim Ibrahim Library, Zaria	Full Automation
Tafawa Balewa Univ. Library	Partial Automation
Univ. of Jos Library	Partial Automation
Nnamdi Azikiwe Library, Nsukka	Partial Automation

Table 2 below reveals the total number of professional librarians from the two Anglophone West African university libraries, that is, Ghana and Nigeria. It reveals the number of ICT literate professionals and their non-literate counterparts. It also presents their numbers in percentage form.

**Table 2: Professional Staff**

<b>GHANA UNIVERSITY LIBRARIES</b>					
University Libraries	PS	CLP	CNLP	% of CLP	% of CNLP
Balme Library, Univ. of Ghana	14	14	--	100	--
Kwame Nkrumah Univ. of Sc. & Tech.	12	12	--	100	--
Univ. Coll. Of Education, Winneba Libr.	6	6	--	100	--
University for Dev. Studies Library	5	4	1	80	20
University of cape Coast Library	10	8	2	80	20
<b>Total</b>	<b>47</b>	<b>44</b>	<b>3</b>	<b>93.62</b>	<b>6.38</b>
<b>NIGERIA UNIVERSITY LIBRARIES</b>					
University Libraries	PS	CLP	CNLP	% of CLP	% of CNLP
Ramat Library, Maiduguri	9	7	2	77.8	21.2
FUTA Library, Akure	12	11	1	91.7	8.3
Delta State Univ. Library	12	8	4	75	25
Nimbe Adedipe Library, Abeokuta	10	10	-	100	-
Mich Okpara Univ. of Agric Library	5	3	2	60	40
Fed. Univ. of Tech Library, Owerri	10	9	1	90	10
Bayero Univ. Library, Kano	11	9	2	81.82	18.18
Univ. of Ilorin Library, Ilorin	14	12	2	85.71	14.29
Univ. of Benin Library	16	15	1	93.75	6.25
Hezekiah Oluwasanmi Library, Ife	14	12	2	85.71	14.29
Univ. of Lagos Library	18	17	1	94.4	5.6
Kenneth Dike Library, Univ of Ibadan	18	18	-	100	-
University of Calabar Library	10	6	4	60	40
Kashim Ibrahim Library, Zaria	15	15	-	100	-
Tafawa Balewa Univ. Library	12	9	3	75	25
Univ. of Jos Library	13	13	-	100	-
Nnamdi Azikiwe Library, Nsukka	12	11	1	91.7	8.3
<b>Total</b>	<b>211</b>	<b>185</b>	<b>26</b>	<b>87.68</b>	<b>12.32</b>

**KEYS:**

- PS** - Professional Staff
- CLP** - Computer Literate Professionals
- CNLP** - Computer Non-Literate Professionals

Table 3 shows the paraprofessionals from the sampled Anglophone West African university libraries with their total number, the number of computer literate paraprofessionals and their computer non-literate counterparts.

**Table 3: Paraprofessional Staff**

<b>GHANA UNIVERSITY LIBRARIES</b>					
University Libraries	PS	CLP	CNLP	% of CLP	% of CNLP
Balme Library, Univ. of Ghana	45	40	5	88.89	11.11
Kwame Nkrumah Univ. of Sc. & Tech.	20	17	3	85	15
Univ. Coll. Of Education, Winneba Libr.	8	7	1	87.5	12.5
University for Dev. Studies Library	6	6	-	100	-
University of cape Coast Library	9	7	2	77.78	22.22
<b>Total</b>	<b>88</b>	<b>77</b>	<b>11</b>	<b>87.7</b>	<b>12.3</b>

**NIGERIA UNIVERSITY LIBRARIES**

University Libraries	PS	CLP	CNLP	% of CLP	% of CNLP
Ramat Library, Maiduguri	5	3	2	60	40
FUTA Library, Akure	5	4	1	80	20
Delta State Univ. Library	8	5	3	62.5	37.5
Nimbe Adedipe Library, Abeokuta	7	7	-	100	-
Mich Okpara Univ. of Agric Library	5	3	2	60	40
Fed. Univ. of Tech Library, Owerri	7	5	2	71.5	28.5
Bayero Univ. Library, Kano	7	4	3	57.14	42.86
Univ. of Ilorin Library, Ilorin	6	6	-	100	-
Univ. of Benin Library	6	5	1	83.33	16.67
Hezekiah Oluwasanmi Library, Ife	6	6	-	100	-
Univ. of Lagos Library	8	6	2	75	25
Kenneth Dike Library, Univ of Ibadan	7	5	2	71.5	28.5
University of Calabar Library	7	4	3	57.14	42.86
Kashim Ibrahim Library, Zaria	9	7	2	77.78	22.12
Tafawa Balewa Univ. Library	7	5	2	71.5	28.5
Univ. of Jos Library	6	4	2	66.67	33.33
Nnamdi Azikiwe Library, Nsukka	7	5	2	71.5	28.5
<b>Total</b>	<b>113</b>	<b>84</b>	<b>29</b>	<b>74.33</b>	<b>26.67</b>

**KEYS:**

- PS** - Paraprofessional Staff
- CLP** - Computer Literate Paraprofessionals
- CNLP** - Computer Non-Literate Paraprofessionals

In Ghana and Nigeria university libraries, the following table depicts the total number of other staff members in those university libraries, while both the computer literate and computer non-literate staff

are represented by their figures respectively.

**Table 4: Other Library Staff**

<b>GHANA UNIVERSITY LIBRARIES</b>					
University Libraries	OS	CL	CNL	% of CL	% of CNL
Balme Library, Univ. of Ghana	64	42	22	65.63	34.37
Kwame Nkrumah Univ. of Sc. & Tech.	80	65	25	81.25	18.75
Univ. Coll. Of Education, Winneba Libr.	38	30	8	78.95	21.5
University for Dev. Studies Library	24	16	8	66.67	33.33
University of cape Coast Library	70	52	18	74.29	25.71
<b>Total</b>	<b>276</b>	<b>205</b>	<b>72</b>	<b>74.28</b>	<b>25.72</b>
<b>NIGERIA UNIVERSITY LIBRARIES</b>					
University Libraries	OS	CL	CNL	% of CL	% of CNL
Ramat Library, Maiduguri	25	23	2	92	8
FUTA Library, Akure	20	18	2	90	10
Delta State Univ. Library	32	30	2	93.75	6.25
Nimbe Adedipe Library, Abeokuta	23	23	-	100	-
Mich Okpara Univ. of Agric Library	12	10	2	83.33	17.67
Fed. Univ. of Tech Library, Owerri	15	13	2	86.67	13.33
Bayero Univ. Library, Kano	38	32	6	84.21	16.79
Univ. of Ilorin Library, Ilorin	30	30	-	100	-
Univ. of Benin Library	28	23	5	82.14	17.86
Hezekiah Oluwasanmi Library, Ife	35	32	3	91.43	8.57
Univ. of Lagos Library	35	32	3	91.43	8.57
Kenneth Dike Library, Univ of Ibadan	30	29	1	96.67	3.33
University of Calabar Library	18	15	3	83.33	16.67
Kashim Ibrahim Library, Zaria	47	46	1	97.87	2.13
Tafawa Balewa Univ. Library	32	28	4	87.5	12.5
Univ. of Jos Library	25	23	2	92	8
Nnamdi Azikiwe Library, Nsukka	15	13	2	86.67	13.33
<b>Total</b>	<b>460</b>	<b>420</b>	<b>40</b>	<b>91.3</b>	<b>8.7</b>

**KEYS:**

- OS** - **Other Staff**
- CL** - **Computer Literate**
- CNL** - **Computer Non-Literate**

**3.2 RESULTS AND DISCUSSIONS**

Comparatively, the statistical data made available through the result of our findings revealed that the two groups of university libraries of the Anglophone West African countries sampled, that is Ghana and Nigeria are not faring badly. The two groups of university libraries are doing very well in terms of ICT literacy level among their members of staff.

When compared with the three previous studies carried out by one of the authors (Adeyoyin (2005a,

2005b and 2006), the result of this study shows a significant improvement in the ICT literacy level, especially, among the group of Nigerian university libraries. One of the studies showed that Senegal university professional librarians totaling forty (40), from the country's two university libraries are the only set of professional librarians among the surveyed West African countries where the ICT literacy level among the staff was hundred percent (100 %). Ghana ranked second in the same study while Nigeria was the weakest in terms of ICT literacy among the staff.

However, the result of this study clearly shows that ICT literacy level in Nigeria is considerably acceptable when there is still room for improvement.

It is no longer news that Japan rode on the back of technology to become the world's second biggest economy after the United States of America. What could still be news is that India, South Korea, Singapore and some other developing countries are leaping very fast towards first world standards by making technology the soul of their development efforts. Through conscious and well-programmed strategies, these countries have become technology giants, to the extent that manufacture of computers, chips and telecommunications gadgets, including phones, is no longer the exclusive preserve of big corporations but the pastime of even roadside enterprises. The result of this effort towards Information and communication technologies (ICT) among other technological advancement has been accelerated expansion of the economics of these countries and a quantum leap in their export revenues due totally to increased export of information and communications technology (ICT) products. Today, India for instance earns so much foreign exchange from the export of computer software. On the other hand, ICT products churned out by some South Korean firms like LG and Samsung have become household names in many countries of the world, Nigeria not exempted (Anao, 2003).

Nigerian government has however, recently approved the establishment of a N52.8 billion technology village in Abuja, Nigeria's Federal Capital Territory. It is hoped that if well executed, it could be the beginning of good things to happen in Nigeria technology-wise. This would afford Nigeria to tap into the opportunities that abound in information and communications technology world.

It is evident that a well-established and well-run technology village will help take ICT to the next level in the country. Riding on this initiative, Nigeria will certainly become a true manufacturer of computers and other ICT products in the nearest future. This will drastically reduce the amount of foreign exchange the country spends on the importation of ICT products. Also by this initiative, the country would be able to join the league of computer and software exporters before long. Then the dream of diversifying the country's revenue and foreign exchange base will have been realized. There is also bound to be job creation when the ICT industry begins to boom (Anao, 2003).

The implication of this to Nigerian university libraries is that it would make the acquisition of personal computers (PC) more affordable as the prices of computers would be forced down when produced locally. Also, other ICT equipment and peripherals would become cheap and affordable by many

organizations, libraries inclusive. Nigerian university libraries would no longer face heavy financial budget to automate or digitize their operational systems. This would undoubtedly reduce, if not totally eradicate the evil of ICT non-literacy that is still mildly felt in the academic librarianship in the most populous black concentrated country in the Sub-Saharan Africa. Also, it has recently become a common feature to see new library automation software designed locally among the members of the professional group of librarians, especially, the system librarians, ICT librarians, Computer technologists, system analysts and programmers. Among such software is highly rated X-LIB. This goes to show that there are capable hands in the profession who can turn the situation round if given favourable environment. It is noteworthy that the world acclaimed computer guru, Phillip Emegwali, an American based Nigerian who grew up and schooled in Nigeria before his sojourn in America is one of the best computer scientists of our age.

The study has established that Ghanaian university libraries and Nigerian university libraries are doing well in the area of ICT literacy. This is so because of some factors, among which funding has been identified. After the economic dearth period of the 80s in West Africa, it was observed in the various literature from Ghana that government funding in education has been consistent while the case was not so in Nigeria for some time. Government funding in education was inconsistent in Nigeria so much that for some time in the past few years, budgetary allocation for education was reduced to as low as two percent (2%). To worsen the situation, the library development fund, which has been ten percent of the total money allocated to the Nigerian universities, especially the federal owned was scrapped at a time. Notwithstanding, the spirit of doggedness and resilience kept the professional librarians in Nigerian university libraries going. Things are however changing for better in Nigerian universities as government is doing everything possible within its financial capability to ensure that Nigerian universities are properly placed in its right position within the continent and the world at large.

#### **4. CONCLUSION AND RECOMMENDATIONS**

About two hundred and fifty eight (258) professional librarians work in the university libraries surveyed. Two hundred and one (201) paraprofessionals also work in those libraries, while the other members of staff constitute the largest working force of about seven hundred and thirty six (736) staff. The result of this study showed that 229 out of about 258 professional librarians were ICT literate while the remaining 29 were ICT non-literate. This constitutes an overall percentage of 88.76% for the literate professionals against 11.24% for ICT non-literate professionals. Also, 161 out of 201 paraprofessionals were ICT literate while the remaining 40 were ICT non-literate. This also constitutes 80% for the literate paraprofessionals against 20% for ICT non-literate paraprofessionals. Other staff totaled 736. 625 of them were ICT literate while the remaining 111 were ICT non-literate. This also constitutes 85% for the literate other members of staff against 15% for ICT non-literate other members of staff.

The application of ICT to library processes has come to stay in our libraries, as they make it possible

to analyze the whole operational system of the library and aid the library services as well as decision making at various levels. It is true that many libraries are still dragging their feet on the issue of automation, it is however certain that there is no running away from it if libraries are to remain relevant and useful in technological advancement.

The use of ICT is inevitable for any library in modern times. Even though problems of adopting ICT in Nigerian libraries are multifarious, they are not insurmountable for the determined libraries. The way forward could be that many international funding agencies like Carnegie Corporation of New York, Ford Foundation, and Rockefeller Foundation, British Council, The UNESCO, The Education Trust Fund, etc. should be involved in the general development of ICT and staff training in Nigeria. Such assistance would complement the efforts of Nigerian government in order to leapfrog Nigerian libraries to the global information society brought about by ICT.

It is of interest that the Federal Government of Nigeria and International funding agencies are now interested in the general development of ICT in Nigeria. For example, the Federal Ministry of Education has established the National Virtual (Digital) Library. One of the objectives of this is to provide, in an equitable and cost effective manner, enhanced access to national and international library and information resources and to share locally available resources with libraries all over the world using digital technology. Good enough, staff training in ICT usage is one of the cardinal objectives of this project in all Nigerian universities.

Based on the result of the findings of this study, the following recommendations are proffered:

- The need for a realistic National Information and Communication Infrastructure Policy is a requirement that should no longer be allowed to remain unmet. Nigeria needs a goal-oriented policy as well as well-thought-out plans and strategies to harness the potential of information and communication technologies for national development.
- The National Library of Nigeria should as a matter of priority develop a databank of ICT experts in the Library profession, available library software and their respective vendors to serve as a lodestar to libraries looking for expert consultancy services in their attempt to automate.
- It is also recommended that other West African university libraries should encourage all their professional librarians to be ICT literate while other categories of staff are not left out. The ICT non-literate librarians should emulate their colleagues from Senegal, Ghana and Nigeria university libraries and proudly put their shoulders in the wheel of ICT in the West African continent (Adeyoyin, 2005).
- Also, Nigeria government should, as a matter of urgency, address the issue of funding Nigerian university libraries by earmarking enough fund in the budgetary allocation for education and most importantly to restore the scrapped library development fund without which there can't be any significant growth in the system vis-à-vis its mandate on knowledge for emancipation.

5. REFERENCES

- Adeyoyin, S.O. 2005a**, Information and Communication Technology (ICT) Literacy among the Staff of Nigerian University Libraries. *Library Review*, Vol. 54 No. 4
- Adeyoyin, S.O. 2005b**, Information Revolution: A Review of the Role of Nigerian University Libraries. *Library Progress (International)* Vol. 25 No. 1 pp. 49-60
- Adeyoyin, S.O. 2006**, ICT Literacy among the Staff of West African University Libraries: A Comparative Study of Anglophone and Francophone Countries. *The Electronic Library*. Vol. 24 No.5
- Alemna, A.A. 1993**, The Factor of Publishing as a Criterion for Establishing Status of Librarians in University Libraries in Ghana. *African Journal of Library and Information Science*. Vol.3 No. 2. p.133-140.
- Allen, R.G. 2004**, Multiple Stream of Income: How to Generate a Life time of Unlimited Wealth (2nd ed). *New Jersey: John Wiley and Sons Inc.*, 335
- Anao, A. 2003**, Society, Knowledge Incubation and Management. *The Guardian*. November p.75.
- Annan, K. 2001**, Message to World Telecommunication Day. Cited by Eghodaghe S. Annan, Utsumi, others list way forward. *The Guardian*, Tuesday, May 22, 2001, p.43-44
- Antwi, I. K. 1993**, Status of Librarians in Ghanaian Universities. *Aslib Proceedings*. Vol. 45 No. 9. p. 242-246.
- Asamoah-Hassan, H.R. 2002**, The state of Information and Communication Technology (ICT) in University Libraries in the West African Sub-Region.156p.
- Banigo, E. 200**, How Nigeria can bridge digital divide in IT (1). *The Guardian*, Tuesday April 3 pp. 53&56
- Dowlin, K.E. 1994**, The Electronic Library: The Promise and the Process. Neal-Schuman, New York. 117p.
- Ifidon, B.I. 1998**, The Challenges and Frustration of Developing Research Collections in Nigerian University Libraries. *Library Bulletin: Nigerian University Library System*. Vol. 3. No. 1&2. p.115-117.
- Kadiri, J.A. 2000**, Academic Status for Librarians in Ghanaian Universities: Challenge to Stakeholders. *Gateway Library Journal*. Vol. 2&3.
- Kargbo, J.A. 2002**, African Universities and the Challenge of Knowledge Creation and Application in the Information Age. *Library Review*. p.411-416.
- Omekwu, C.O. 2005**, Management Imperatives for Libraries in the Information Age (Paper presented at the 2005 *Annual Workshop of the Nigerian Library Association* ,Lagos Chapter, Badagry, (September),4-5
- Ugah, A.D. 2001**, Library Automation: A Practical Approach. *Automation of Cataloguing Practices in Nigerian Libraries*. NLA Cataloguing, Classification and Indexing Section.
- Wolpert, A. 1998**, Services to Remote Users: Marketing the Library's Role. *Library Trends* Vol. 47 No. 1 Summer 1998. p. 23, 34.