

# Information Literacy and ICT Skills of Library Staff in Selected Federal Polytechnics in Nigeria

Lateef Alhaji BELLO

Federal Polytechnic Offa  
School of Communication and Information Science  
Department of Library and Information Science

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## ABSTRACT

This study assessed the information literacy and ICT skills of library staff in Federal Polytechnics in southwest Nigeria. The study adopted a survey research design and a total population of 154 which cut across six states in the Southwest geopolitical zone with five federal polytechnic. The study adopted stratified sampling techniques from which a sample size of 136 library staff was sampled. The major instrument used for data collection was questionnaire. A total of 154 copies of questionnaires were sent out, from which 136 copies were found to be valid and found fit for analysis. The data were analyzed using descriptive frequency table and mean with the aid of Statistical Products for Service Solutions (SPSS). The study established among others, that the library staff acquired basic information literacy skills through attending workshops/seminars, trial and error, through the help of their colleagues, and through the guidance from library staff; library staff possessed high information literacy skills, which include ability to recognise a need for information resources, distinguish potential information resources, construct strategies for locating information, compare and evaluate information obtained from different sources, locate and access information resources, organise, apply and communicate information, and ability to synthesize and build on existing information among others. The study concluded that library staff possess information literacy and ICT skills and they could recognize a need for information resources, distinguish, potential information and deploy the resources appropriately. Besides, the research shows that Federal Polytechnics in Southwest have information resources. The study recommended that Federal government should continuously fund the federal polytechnic libraries to enhance productivity; Polytechnic management should

provide more computers with Internet access in their polytechnics. The bandwidth for Internet connectivity should be increased to improve the speed of accessing information from the Internet among others.

## I. INTRODUCTION

The concept of “information literacy” was first introduced in the United States by Paul Zurkowski in the early 1970’s. Information literacy involves an understanding and knowledge of the structure and sources of information. It is the ability to access and retrieve quality information independently and reflectively in order to build on a personal knowledge base. The rapid development of information technology has forced students to acquire new information skills in order to effectively use the opportunities provided for them by the advancement of information and computer technologies. The radical change in provision of information through the use of Information Communication and Technology (ICT) in this age requires a lot of skills, knowledge and strategies to ensure maximum utilization of information (Omeluzor et al., 2013).

Information literacy comprises the competencies to recognize information needs and to locate, evaluate, apply and create information within cultural and social contexts. It is important to the competitive advantage of individuals, enterprises especially small and medium enterprises, regions and nations and provides the key to effective access, use and creation of content to support economic development, education, health and human services, and all other aspects of contemporary societies, and thereby provides the vital foundation for fulfilling the goals of the Millennium Declaration and the World Summit on the Information Society. It further extends beyond

current technologies to encompass learning, critical thinking and interpretative skills across professional boundaries and empowers individuals and communities (Chanchinmawia & Verma, 2017).

Information and Communication Technology (ICT) is one of the greatest inventions of mankind which played unprecedented roles in changing the landscape of human and organization activities around the globe from which libraries are not exempted. In corroboration to that Dhanavandan, Esmail, Mohammed and Nagarajan (2012) stressed that ICT has drastically changed every facet of human endeavours of which library is not an exception, such that libraries are now deeply engaged in digitization of almost all library resources in order to provide a fast, interactive and dynamic information services to users.

Kehinde and Tella (2012) stressed that some of the valuable resources freely available on the Internet have become indispensable tools for the dissemination of information. In reflection to that, Adebisi (2009) earlier opined that ICT foster users with the opportunity to have unlimited access to information and as such enhance anytime and anywhere access to information in time and space with little or no regard to the location of such information. Information and communication technology is the modern science of gathering, storing, manipulating processing and communicating information.

### **Statement of the Problem**

Academic libraries are very positive with the integration of ICT tools into library operations such that most of them are now equipped with information infrastructure and various ICT based resources and services (even though not adequate in some cases) to cater for information need of users. Achieving the mission and vision of academic institution is the precursor behind the establishment of academic libraries. But no library can effectively deploy this information infrastructure without a competent workforce. The current scenario, library staff needs to be trained to serve the present generation of users, who desire to have access to information anytime, anywhere. In reflection to that, uncertainty still exists whether library staff possesses adequate competencies to operate ICT facilities effectively. It is in connection and based on the above gap, the study embarks on the assessment of information literacy and ICT Skills of library staff in selected Federal Polytechnic libraries in Nigeria.

### **Objectives of the Study**

The general objective of this study is to assess the information literacy and ICT skills of library staff in selected Federal Polytechnics in Southwest Nigeria. The specific objectives are to:

1. investigate the availability of information resources in Federal Polytechnic Libraries in Southwest Nigeria;
2. investigate the information literacy skills of library staff in Federal Polytechnic Libraries in Southwest Nigeria;
3. investigate the ICT skills of library staff in Federal Polytechnic Libraries in Southwest Nigeria;
4. examine the sources of Information literacy and ICT skills possessed by library staff in Federal Polytechnic libraries in Southwest Nigeria; and
5. identify the challenges faced in acquisition of Information Literacy and ICT skill among library staff in Federal Polytechnic libraries in Southwest Nigeria.

### **Research Questions**

The following research questions will assist the researcher in the course of the study:

1. What are the available information resources in Federal Polytechnic Libraries in Southwest Nigeria?
2. What are the information literacy skills of library staff in Federal Polytechnic Libraries in Southwest Nigeria?
3. What are the ICT skills of library staff in Federal Polytechnic Libraries in Southwest Nigeria?
4. What are the sources of Information literacy and ICT skills acquisitions of library staff in Federal Polytechnic libraries in Southwest Nigeria?
5. What are the challenges confronting acquisition of Information Literacy and ICT skill of library staff in Federal Polytechnic libraries in Southwest Nigeria.

## **II. METHODOLOGY**

This study adopts the descriptive survey design. The population of the study consists of 154 library officers in the 6 federal polytechnics located in Southwestern Nigeria. The study was limited to four (4) federal polytechnics in Southwestern Nigeria. This includes Yaba College of Technology, Federal Polytechnic Ilaro, Federal Polytechnic and Federal Polytechnic Ede. The sample size is therefore one hundred and thirty six (136) which was derived from the total population of the study. An adapted questionnaire was used for

the study. The data to be collected in this study would be analysed using Statistical Product and

Service Solutions (SPSS).

### III. RESULTS

**Table 1: Socio-demographic Characteristics of the Respondents**

Characteristics	Categories	Frequency	Percentage (%)
<b>Gender</b>	Female	76	55.9%
	Male	60	44.1%
<b>Marital Status</b>	Married	85	62.5%
	Single	42	30.9%
	Divorce	3	2.2%
	Widow/widower	6	4.4%
<b>Age (in years)</b>	20 – 25 years	3	2.2%
	26 – 30 years	25	18.4%
	31 – 35 years	20	14.7%
	36 – 40 years	34	25%
	41 – 45 years	29	21.3%
	46 and above	25	18.4%
<b>Years of Experience</b>	1-5yrs	15	11.0%
	6-10yrs	50	36.7%
	11-15yrs	30	22.1%
	16-20yrs	7	5.1%
	21-25yrs	25	18.4%
	26-30yrs	5	3.7%
<b>Qualification</b>	31yrs and Above	-	-
	Ph.D	5	3.7%
	MLIS/M.Sc	21	15.4%
	PGD	10	7.4%
	HND/B.Sc/BLIS/BEEd	65	47.8%
	ND	30	22.1%
	Others	5	3.7%

Source: Field Survey, 2022.

The information contained in Table 1 shows that the distribution according to gender revealed that the majority of the respondents were females (76, 55.9%) while 60 (44.1%) of the respondents were males. This result implied that there was a little disparity in gender distribution of library staff in Southwest Nigeria, as there were more female library staff than their male counterparts.

In terms of marital status, 85 (62.5%) of the respondents constituting the majority were married while the remaining were single (42, 30.9%), divorce (3, 2.2%) and widow/widower (6, 4.4%). In addition, the data revealed that the highest number of respondents (25%) was found in the age bracket of 36 to 40 years, followed by (21.3%) who were 41-45 years age bracket, 25(18.4%) were within the age of 26-30 years and 46, 20 (14.7%) respondents were found to be

between 31 and 35 years and (2.2%) were between age 20 – 25 years. The socio-demographic information of respondents showed that most of the library staff are married and are within the age bracket of 36 to 40 years.

On the years of experience of library staff in Federal Polytechnic libraries in Southwest Nigeria, 50(36.7%) of the respondents constituting the majority have 6-10 years work experience, 30(22.1%) respondents have 11-15 years work experience, 25(18.4%) of the respondents have 21-25 years work experience, 7(5.1%) respondents have 16-20 years of work experience while 5(3.7%) of the respondents have 26-30 years of work experience. Also on the qualifications of respondents, majority of the library staff have HND/BSc/BLIS/BEEd (47.8%) followed by National Diploma (22.1%), MLIS/MSc (15.4%), PGD (7.4%) and PhD (3.7%).

**Table 2: Information Resources in Federal Polytechnic Libraries in Southwest**

Response	Frequency	Percentage %
Books	90	64.3
Newspapers	80	57.2
Magazines	60	42.9
Journals	55	39.3
Novels	60	42.9
Non-printing resources	35	25.0
Others	70	50.0

Source: Field Survey, 2022.

Table 2 depicts that more than half of the respondents used books 90 (64.3%) and newspaper 80 (57.2%) while only 35 (25.0%) used non-print. Resources information resources such as Books,

Newspapers, Magazines, Journals and Novels as well as others such as References sources are provided in adequate quantity where as Non-Print resources are provided in small quantity.

**Table 3 Information Literacy Skills of Library Staff in Southwest Nigeria**

S/N	Information literacy skills	Mean	Mode	Std.D
1	Ability to recognise need for information resources.	2.93	3	0.271
2	Ability to distinguish potential information resources.	3.14	4	0.425
3	Ability to construct strategies for locating information	2.85	2	0.399
4	Ability to compare and evaluate information obtained from different sources.	2.98	3	0.467
5	Ability to locate and access information resources	3.01	3	0.463
6	Ability to organize, apply and communicate information	2.83	3	0.376
7	Ability to synthesize and build on existing information	2.98	3	0.383

Source: Field Survey, 2022.

As indicated in table 3 the response to information literacy skills shows that respondents with ability to distinguish potential information resources skill had the highest number of mean score of 3.14. This is closely followed by respondents with ability to locate and access information resources (3.01), while respondents with ability to synthesize and build on existing information obtained from

different sources have a mean score of 2.98. However, respondents with skill to organize, apply and communicate information have the lowest mean of 2.83. The finding, however, shows that the mean scores of each of the seven components tested under the information literacy skills is higher than the mid-point scores of 2.5 on a scale of five. Therefore library staff in Federal Polytechnic libraries in Southwest

Nigeria possessed high information literacy skills based on the overall mean scores.

This result shows that most of the library staff did not acquire information literacy skills through the training organized by their institution libraries. This finding is inconsistent with the position of Macgregor and McCulloch (2006) who reported in their finding that the goal of library training is to enable users' community to discriminate between useful and irrelevant information as well as engaging users with information management. In addition, the

University of Auckland Academic Plan 2005-2007 (2004) canvassed that the polytechnic (library) aims are to provide its users with key, high-level generic skills like the capacity for lifelong critical, conceptual and reflective thinking, and attributes such as creativity and originality. Thus, it is the duty of library management to constantly organize information literacy skills programme in order to develop information literate users.

**Table 4 ICT Skills of Library Staff in Federal Polytechnic Libraries**

S/No	Item	N=30	N= 29	N= 27	N= 25	AVR	DECISION
		YABA	FPI	FPA	FPE	MEA N	
		$\bar{X}$	$\bar{X}$	$\bar{X}$	$\bar{X}$		
<b>Computer Operation</b>							
1	Turning on	3.8	4.0	4.0	3.6	3.9	Accepted
2	Opening a computer file	3.6	4.0	4.0	3.2	3.7	Accepted
3	Interconnectivity	2.8	3.2	3.7	2.6	3.1	Accepted
4	Deleting a computer file	3.0	3.9	4.0	2.8	3.5	Accepted
5	Creating a directory or folder	2.9	3.2	4.0	2.8	3.2	Accepted
6	Copying a file from one disk to another	2.9	3.1	3.9	2.4	3.1	Accepted
7	Connecting to internet	2.8	2.6	3.4	2.6	2.8	Accepted
8	Installing program	2.7	2.3	3.4	3.0	3.8	Accepted
<b>Application Software</b>							
9	Ms-Word	3.1	4.0	3.7	2.8	3.4	Accepted
10	Ms-Excel	3.0	3.8	3.4	3.2	3.4	Accepted
11	Ms-Access	3.0	3.3	2.7	3.4	3.1	Accepted
12	Ms-Powerpoint	2.6	2.0	2.9	3.8	2.8	Accepted
13	Library software	3.2	2.2	3.4	3.0	3.0	Accepted
<b>Internet Skills</b>							
14	Using the world wide web (www)	3.4	3.6	3.9	3.2	3.5	Accepted
15	Sending an email message	3.2	3.8	4.0	3.6	3.7	Accepted
16	Using the www to find specific information	3.2	3.7	3.7	3.0	3.4	Accepted
17	Taking part in an online discussion or chat (video conferencing)	2.4	2.1	3.3	3.2	2.8	Accepted
18	Sending an attachment with an email message	2.6	2.8	3.7	3.0	3.0	Accepted
19	Downloading a file from internet	3.2	2.6	3.1	3.2	3.0	Accepted
20	Saving an image or graphic from a www page	2.9	2.7	3.7	3.2	3.1	Accepted
21	Using a www search engine e.g. yahoo	3.2	3.7	3.9	3.0	3.5	Accepted
22	Using keyword phrases to search for information on the www	3.1	2.4	3.6	2.8	3.0	Accepted
23	Using more advanced searching techniques than keywords	3.8	2.4	3.7	2.8	3.2	Accepted
24	Finding useful information from www searching	3.1	3.4	3.5	3.2	3.3	Accepted
25	Using information from www in projects	3.1	3.6	3.4	3.2	3.3	Accepted

	CLUSTERMEAN	3.2	3.1	3.6	3.4	Grand X3.2	Accepted
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Source: Field Survey, 2022.

The data presented in Table 4 revealed that the mean responses of all the items are very high with average means above 2.50 which is the decision mean or criterion mean. It can then be deduced from the table that the ICT literacy skills among the library staff in Southwest Geo-political zone of Nigeria are high. This is as a result of global emphasis on ICT in every area of life and library staff have also caught up with the emerging trend. The individual cluster means and the grand mean equally showed that all the library staff in these Federal Polytechnics have appreciable ICT literacy skills with cluster means of 3.2 for Yaba Tech, 3.1 for

FPI, 3.6 for FPA, 3.4 for FPE and a grand mean of 3.2 which are all above the criterion mean.

The result revealed that all the items have their average mean rating from 2.8 to 3.9. It can be concluded that they have a high level of ICT literacy. ICT has permeated every area of human endeavour, making it mandatory on the people to become computer literate through various means. Internet skills are necessary for academic librarians to provide efficient and effective online services to their patrons in this period of high cost of books and journals.

**Table 5: Sources of Information Literacy and ICT Skills acquisitions of library staff in Federal Polytechnic libraries in Southwest Nigeria**

S/N	Items	N=30	N= 29	N= 27	N= 25	AVRX	Decision
		YABA	FPI	FPA	FPE		
		X	X	X	X		
1	Formal Education	3.4	4.0	3.6	3.5	3.5	Accepted
2	Informal Education	2.9	3.8	3.1	3.1	3.2	Accepted
3	Through colleagues	3.4	3.6	3.0	3.6	3.4	Accepted
4	Self-study	3.5	3.5	3.5	3.0	3.1	Accepted
5	Training at workplace	3.5	3.9	3.2	2.8	3.4	Accepted
6	Attending IT programme	3.4	4.0	3.5	3.4	3.2	Accepted
7	Attending workshops/seminars	3.4	3.9	3.3	3.2	3.6	Accepted

Source: Field Survey, 2022.

Table 5 shows that the items received a response average mean of 3.1 and above which is greater than the criterion mean of 2.5. This indicates that all the responses are accepted or agreed with the statements as methods/means of ICT literacy skills. The cluster mean of 3.4, 3.7, 3.3, 3.2, and a grand mean of 3.4 also show that all the universities agreed with the statements on methods/means of ICT literacy acquisition.

The analysis indicated that training is very important in the acquisition of ICT literacy skills. As a result, formal education is the basic channel of acquisition of ICT literacy skills while attendance to workshops/seminars have 3.50 which is a very high level of acceptance. This is in consonance with the view of Akhigbe (1997) and Ugbokwe (1988) that training should take the form of continuing education, industrial attachment, formal education programme, on-the-job learning from experienced colleagues, seminars and others.



**Table 6: Challenges to their Acquisition of ICT Skills.**

S/N	Items	N=30	N= 29	N= 27	N= 25	AVR	DECISION
		YABA	FPI	FPA	FPE	X	
		$\bar{X}$	$\bar{X}$	$\bar{X}$	$\bar{X}$		
1	Financial problem	3.8	3.2	3.5	3.0	3.4	Accepted
2	Poor ICT Infrastructure	3.5	3.2	3.5	3.2	3.4	Accepted
3	Library professionals not interested in learning IT knowledge (conservatism)	2.1	2.3	3.1	2.8	2.6	Accepted
4	Overload of working hours	2.8	2.3	2.6	2.6	2.6	Accepted
5	Lack of interest by the library management in sending their librarians to upgrade their IT skills	2.7	3.0	3.1	3.0	3.0	Accepted
6	Lack of sufficient staff in the library	2.4	2.5	3.1	3.0	2.8	Accepted
7	Limited opportunities offered by IT (lack of training opportunities)	2.6	2.9	1.9	2.7	2.5	Accepted
8	Lack of professional recognition	2.3	1.7	3.1	2.3	2.4	Accepted
	CLUSTER MEAN	2.8	2.6	3.0	2.8	2.8	Accepted

Source: Field Survey, 2022.

The results in table 6 indicate the responses of library staff on the challenges to the acquisition of ICT literacy skills by library staff in Southwest geo-political zone of Nigeria. From the table, it is revealed that the average mean rating for all items with the exception of lack of professional recognition with average mean of 2.4 are greater than the criterion mean of 2.50. Financial problems and poor ICT infrastructure are the most challenges to the acquisition of ICT literacy skills. All other hindrances are also accepted by the librarians. The cluster means of 2.8, 2.6, 3.0, and 2.8 with the grand mean of 2.8 indicate that the responses on hindrances to ICT literacy acquisition are accepted.

It can be observed that all the items have average mean of more than 2.5 except the average mean of lack of professional recognition which has 2.4 average mean. This points to the fact that finance and poor ICT facilities were the most factors that hinder ICT literacy acquisition. However, lack of professional recognition was rejected as a contributing factor to the hindrances of ICT literacy acquisition. Chiware (2007) was of the opinion

that funding, human resources, training and retention of skills, interconnectivity and telecommunication infrastructure were the problem along the way of successful acquisition of ICT literacy skills. This agrees with the result above.

#### IV. SUMMARY OF FINDINGS

The study assessed the information literacy and ICT skills of library staff in selected Federal Polytechnics in Southwest Nigeria. From the analysis of research questions, the following findings and conclusion were reached:

1. Information resources that are available in the federal polytechnic libraries are Books, Newspapers, Magazines, Journals and Novels as well as others such as References sources are provided in adequate quantity where as Non-Print resources are provided in small quantity.
2. Library staff acquired basic information literacy skills through attending workshops/seminars, trial and error, through the help of their colleagues, and through the guidance from library staff.

3. Library staff possessed high information literacy skills, which include ability to recognise a need for information resources, distinguish potential information resources, construct strategies for locating information, compare and evaluate information obtained from different sources, locate and access information resources, organise, apply and communicate information, and ability to synthesize and build on existing information.
4. The library staff members agreed that it was not difficult to find the needed information while using electronic information resources.
5. Ability to locate and access information resources had greatly influenced the research productivity of library staff in Federal Polytechnic libraries in Southwest Nigeria
6. Financial constraint and low bandwidth (slow connectivity) were major inhibitions to academic staff members of Nigerian federal universities when embarking on research activities.

## V. CONCLUSION

From the findings of this study, it could be concluded that library staff possess information literacy and ICT skills. They could recognize a need for information resources, distinguish, potential information and deploy the resources appropriately. Besides, the research shows that Federal Polytechnics in Southwest have information resources. The predominant ones are books, journals, e-journals, internet, electronic databases, and so on.

## Recommendations

Based on the findings of this study, the following recommendations were suggested.

1. There should be organized training of the staff in the libraries on the use of information resources so as to efficiently assist academics in accessing and retrieving information for research productivity.
2. Polytechnic management should provide more computers with Internet access in their polytechnics. The bandwidth for Internet connectivity should be increased to improve the speed of accessing information from the Internet.
3. There should be constant awareness programme for library staff
4. Regular funding should be provided for library staff to attend conferences, seminars and workshops to enhance their information literacy and ICT skills.
5. Federal government should continuously fund the federal polytechnic libraries to enhance productivity.

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