SCIREA Journal of Sociology

http://www.scirea.org/journal/Sociology

September 19, 2022

Volume 6, Issue 5, October 2022

https://doi.org/10.54647/sociology84833

A Survey of Information Communication Technology Literacy Skills Level Among Professional Librarians in Delta State University Library, Abraka, Nigeria.

J. E. Onohwakpor (Ph.D)

Senior Librarian, Delta State University Library, P.M.B. 1, Abraka, Delta State, Nigeria.

Email: ordejoe@yahoo.com

Abstract

The purpose of this study was to find out the ICT skill level among library professionals in Delta State University library. A structured questionnaire based on the objectives of the study was used to conduct the survey among 20 academic librarians, 16 senior librarians and 19 assistant librarians of the main campus library, medical and faculty of Law library where E-library had been established. Analysis of the data showed that most of the professional librarians have low level of ICT skills that enable them to function effectively and provide services to users technologically. The study also revealed that majority of the resources; services and tools that will enhance the ICT skills of the library professionals are not available to majority of them. It was recommended that, staff development on ICT skills should be priority to the University Administration for effective automation and providing of internet services.

Keywords: Technology Literacy Skills,ProfessionalLibrarians,DeeltaState University.

Introduction

Information is now digitized, the world had become networked. A technological revolution is transforming the society in a profound way (Kumar, 2012). The new technological developments have already profoundly affected libraries as noted by Uddin and Hassan (2012). With this advent of information communication technology library staff that are custodian and provider of information have to be efficiently skilled in the technical know-how of these systems for effective services. In other words, the aggregations of information in this global world need library professionals to be literate in technological skills in order to provide information to its users.

The level of ICT skills among library professionals had become a worrisome issue in the automation of libraries. Most libraries are agitating for automation but the question is "Can the level of ICTs skills among the professional librarians able to provide services to its clientele technologically?''

ICT literacy is the ability to use digital technology communication tools or networks appropriately to solve information problems including the ability to use technology as a tool to research, organize, evaluate, communicate information and the possession of fundamental understanding of ethical/legal issues surrounding the avess and use of information (Mohammed &Shukkoor, 2010). There is a growing urgent need for professional librarians to be ICT compliant for library to exist beyond the walls. ICT literacy skills, is a core skill for library professionals in provision of information in this networked information age. The urgent need for professional librarians in Delta State University Library cannot be overemphasized. The National University Commission (NUC) had it as one of the criteria of accreditation, that the University library must be automated and connected to the internet. In order words, there should be e-library. The emerging cataloguing modes of metadata and the almighty web 2.0 syndromes, calls for ICT skills. With all these challenges, the professional librarians are expected to be literate in ICT skills.

Delta State University was a campus to former Bendel State University. It became a fully fledged University in 1992 when Delta State was created in 1991. As a campus library, it faces some challenges of both human and material resources to meet the research needs of the University Community. Several attempts have been made to computerized the library but all efforts have failed. There is no section of the library that can boast of full automation. The automation of the library had passed through many stages and breaks down at certain stage.

Professional librarians on ground seem to have no answer to the failure of the library automation.The library had finally been connected to the internet and the Egranry with four databases. These services and resources can only be useful to the users if they are assessed. The accessibility of these resources and services depend largely on the ICT compliance of the professional librarians who serve the users. This was ascertained by Mohammed and Abdul (2010) that no library can render ICT detailed services without qualified and competent library professionals.

The present study attempts to investigate the ICT literacy skills among the library professionals of Delta State University Library.

Review of Related Literature

The advent of information and communication technology (ICTs) and their wide application in library services have however, tend to change the old order yielding a new library services to its users. It is therefore paramount for information providers to be literate in the skills of providing these services. Nwalo (2007) states that there is rising concern among the librarians that the new technology which is ICTs are eroding the status of librarians but is also capable of throwing them into the job market if not literate in ICTs. Based on the changing roles/services of the library, which had also called for new modes of rendering services by professional librarian, there had been studies that had focused on different aspects of ICT literacy by different researchers.

Omosor (2010) assessed the computer literacy skills of librarians in Delta State Polytechnics. The assessment revealed low computer skills among the librarians in Delta State Polytechnics. This leads to the non-usage of the available computers for library operations. In related development, Mohammed & Abdul (2010) carried a study on the ICT level among library professionals in Calicut University, Kerala. The investigation revealed that the professional Assistant librarians are more ICT literate than the junior librarians and assistant librarians. Another study was carried out by Adomi and Anie (2006) on the assessment of computer literacy skills of professionals in Nigerian University libraries. The study revealed that most of the respondents do not possess a high level of computer skills The study also revealed that the available computers are used for personal purpose than for library purpose.

Ejedafu (2009) investigated the use of internet among riverine dwellers in Warri North Local Government Area of Delta State, Nigeria. The investigation revealed that most of the riverine

dwellers do not possess ICTs skills. That this deficiency had cost them the low usage of internet in most of the cybercafés that are available.Choulhury and Sethi (2009) analysed the computer literacy of library professionals in the University of Orissa. The study showed that majority of the processionals were computer literates and majority of them opined that they should be given orientation for the use of electronic resources. In the same vein, Aminu (2009) examined the use of ICT in the use of Polytechnic Engineering Classrooms in WaziriUmaru Federal Polytechnic. The study revealed that the lecturers are facing the challenges of in proficiency in ICTs in their teaching. The study recommended the acquisition of ICT infrastructure and training for the polytechnic lecturers. Another assessment was carried out by Adeyoyin (2006) on the ICT literacy level among the staff of Anglophone (English speaking) University libraries and their counterpart in Francophone (French Speaking) University Libraries in West Africa. The result showed that out of the 370 professional librarians, only 179 were ICT literates while the remaining 191 professional librarians were ICT non-literates. The study further reported that only the 40 Senegal University Professional Librarians had ICT literacy level of 100 percent. Alakpodia (2010) surveyed internet skills among library and information science students of Delta State University, Abraka. The study revealed that the students possess various internet skills that they use in performing internet operations. In a related study, Sootpathy and Mahrarana (2011) investigated the ICT skills of Library and Information Science (LIS) professionals in relation to current job market and performance requirements. Mahmoud and Khan (2007) also examine various factors such as the ICT-focused educational backgrounds of LIS practitioners in Pakistan. It was recommended that LIS professionals should be sent for training.

The literature reviewed showed different studies on computer and ICT literacy skills among library professional in local and foreign Intuitional libraries. However, there is little research that focuses on ICT literacy among professional librarians in Delta State University library, which is struggling for automation and provision of internet services to its users. Thus, there is a still gap in this area that is open for future research. This study provides an insight into the current ICT literacy level of professional librarians in Delta State University Library. It will give an insight to the professional librarians to assess their level of ICT literacy skills which will ginger them to intensify their efforts to enhance their ICT literacy skills level.

Objectives of the Study

1. To assess the educational mode of acquiring ICT skills

2. To assess the level of usage of ICT based resources, services and tools among the library professionals.

3. To assess the level of awareness of library automation soft ware.

4. To assess the level of usage of digital library and institutional repository.

5. To assess the frequency of usage ICT soft ware.

6. To assess the frequency of usage of ICT based resources and services.

7. To assess the effectiveness of the library professionals in handling various internet tasks.

8. To assess the effectiveness in handling ICT task.

9. To identify the kind of training required by library professionals.

Methodology

The descriptive survey research design was adopted for this study. The population consisted of 55 professional librarians which were made up 20 academic librarians,16 senior library officers and 19 assistant library officers from the University main library, Medical and faculty of law libraries where E –library had been established. A structured questionnaire was designed to meet the specific objectives of the study. The questionnaire was distributed to twenty academic professional librarians, sixteen senior library professionals and 19 assistant library professionals. The response rate was encouraging as most of the library professionals were eager to know their ICT skills level of competency. The academic library professionals rated hundred percent responses. This was followed by the Senior Library professionals with 100% and Assistant library professionals with 80% response.

Results and Discussions

Rate of respondents.

Table 2: Types of Computer Education obtained by Library Professionals

Computer Courses	Academic Professional Librarian		Semi or Professional Librarian		Asst. Professional Librarian	
	No	%	No	%	No	%
Informal	10	50	5	31	3	16
Formal	3	15	2	13	3	16
Short term course	3	15	2	13	3	16
In-service training	4	20	2	13	5	26
None	-	-	5	31	3	16
Total	20	10	16	100		100

Table 2 revealed that 10(50%) academic librarians, 5(31%) senior professional librarians and 3(16%) of Assistant professional librarians, acquired ICT skills through formal training. 3(15%) academic professional librarians, 2(13%) senior professional librarians and 5(26%) Assistant professional librarians possessed their computer skills through informal training. Academic professional librarians, senior professional librarians and Assistant professional librarian that got their computer skillsfrom short-term course, rated, 15%, 13% and 26% respectively. For professional academic librarians that got their computer skills from in-service training, ranked 4(20%) senior professional librarians, 2(13%) and assistant professional librarians 4(26%).

Use of ICT Based resources, services and tools

The professional librarians were asked to indicate this extent of their effectiveness in the use of ICT resources, services and tools. Table 3 shows the respondents rate of the effectiveness in the usage of ICT based resources, services and tools.

Table 3

ICT Based Resources, Services and Tools	Very Effective		Effective		Not Effective	
	No	%	No	%	No	%

CD ROM	18	33	15	27	22	40
DVD	22	40	25	45	8	15
Printer	8	15	29	53	18	33
Scanner	8	15	18	33	29	53
Smart Card	9	16	10	18	34	61
Laptop	19	35	25	45	11	20
CD-Netserver	6	10	14	25	35	63
Bibliographic database	10	18	14	25	31	56
Full text database	8	8	16	29	31	56
e-books	17	30	14	25	23	41
e-mails	21	38	20	36	14	25
Pen-drive	11	20	12	21	32	58
Internet	25	45	21	38	9	16
FTP	11	20	14	25	30	54
Telnet	7	13	12	21	36	65
Okult	7	13	11	20	37	67
Mailing list	13	24	18	32	24	43
Search engines	18	32	16	29	21	38
e-journals	18	32	17	30	20	36
Blog	15	27	11	20	29	52
Chat	15	27	12	21	28	50
Gopher	9	16	14	25	32	58
WAIS	8	8	15	27	32	58
Video Conferencing	9	16	15	27	31	56

OPAC	14	25	14	25	21	49
Web OPAC	13	24	14	25	28	50

Table 3 shows that 67% of the professional librarians are not effective in the use of Okult. This could be as a result of non-availability of the resources in the library. The table also revealed that 53% of the respondents are effective in the use of the printer. The effectiveness of the use of the printer by the professional librarianscan be attributed to the fact that almost all the offices have printers which are used to print official and personal documents from the computer and internet. It is only 40% of the respondents that are very effective in the use of DVD.

The respondents' rate in the use of resources, services and tools by the professional librarian is low. This low knowledge or usage of these ICT based resources, services and tools by professional librarians could be attributed to non-availability of the resources in the library and lack of training.

Use of Automaton Software

The professional librarians were asked to indicate which of the automation software they are conversant with. Table 3 below revealed the respondent rate.

Table 4

Software	No	%
Libays	4	7
Sou	2	4
Kohen	1	2
WINISIS	3	5.4
LIBSOFT	4	7
CDS/ISIS	8	15
TINLIB	17	31
X-LIB	19	35
SLAM	13	24

Others	-	-

Table 4 revealed the use of automation software by the professional librarians. 35% of the professional librarians are conversant with X-lib. This highest response on the knowledge of X-lib could be attributed to the fact that, the library started automation with x-lib before shifting to SLAM which was next to X-lib with 24% respondents. The conversant rate on the use of automation software is poor among the professional librarians. This inefficiency of the use of automation software could be attributed to the failure of the University Library automation. No section of the library had been automated despite the effort of the university management in automating the library. This calls for training of professional librarians in the use of different automation software, especially on SLAM which the library is struggling with.

Use of Digital Library and Institutional Repository

The professional librarians were asked to indicate how effective they are in the digital library and institutional repository software. The response rate is shown on Table 4.

Table 5

Institutional Repository	Very Effective		Effective		Not Effective	
	No	%	No	%	No	%
Greenstone	8	15	13	24	33	60
D-space	8	15	11	20	36	65
e-print	13	24	13	24	29	52
Others	-	-	-	-	-	-

Table 5 revealed high level of ineffectiveness in the use of digital and institutional repository software among the professional librarians. From the table, 60%, 65% and 52% of the professional librarians are not effective in Greenstone, Dspace and Eprint respectively. This calls for urgent installation and use of thesesoftware by the library management and professional librarian respectively if the library is to key into the institutional repository system.

Frequency on the usage of software

The professional librarians were asked the frequency on the usage of software packages

Table 6

Software Package	Once a Month		Once a Week		Everyday		Not at all	
	No	%	No	%	No	%	No	%
Ms Word	13	24	8	15	18	33	16	29
Ms Excel	14	25	9	16	18	33	15	18
Powerpoint	16	29	11	20	6	10	23	41
Ms Access	14	25	8	15	6	10	23	41
Photoshop	12	21	10	18	6	10	27	49
CorelDraw	13	23	8	15	6	10	28	50
Anti-virus	12	21	12	21	10	18	21	38
Adobe (Acrobat)	9	16	9	16	14	25	23	41
Others								

Table 6 revealed the frequency on the usage of application software. The highly used software on daily basis is Msword and Ms Excel which rated 33%. While Anti-virus ranked the highest level of non-usage by the professional librarians. It is expected that the professional librarians should use the Anti-virus software more frequently in order to preserve the computer systems. This non-usage of the Anti-virus software could be attributed to the cause of many computers breaking down in the library.

Frequency of Usage of ICT Based Resources and Services

The professional librarians were asked to indicate how often they use the ICT based resources, services and tools. The analysis is revealed in Table 6.

Table 7

ICT Based Resources and Services	Once a Month		Once a Week		Everyday		Not at all	
	No	%	No	%	No	%	No	%
OPAC	13	24	7	13	13	24	23	42

Bibliographic database	13	24	9	16.3	8	15	26	47.2
Full text database	11	20	11	20	8	15	26	47.2
e-journals	12	22	14	25.4	15	27.2	14	25.4
Web browsing	9	16.3	13	24	22	40	12	22
e-mail	10	18.1	12	22	24	44	8	15
FTP	12	22	7	13	6	11	31	56
Telnet	15	27.2	2	4	3	5.4	35	64
Mailing list	9	16.3	11	20	7	13	28	51
Search engines	8	15	9	16.3	19	35	20	36.3
Word Processing	11	20	6	11	18	33	21	38.1
Spreadsheet	9	16.3	8	15	7	13	32	58.1
PowerPoint	14	25.4	7	13	7	13	28	51

On the frequency on the usage of ICT based resources and services, table 6 revealed poor frequency usage of ICT based resources and services by the professional librarians. The non usage of Telnet, ranked highest with 64% respondents; which was followed by spreadsheet with 58% and mailing list with 51% respondents. This is not encouraging among the professional librarians. The frequent usage of these ICTbased resources tools and services lead to more competent in one's skills.

Confidence in Handling Internet Task

Table 8 revealed the confidence of professional librarians in handling internet task.

Table 8

Internet Task	I can do very well		I can do it with the help of somebody		I know what it means but I cannot do it		I do not know what it means		I do not know what it means	
	No	%	No	%	No	%	No	%	No	%
Attach a file to an e-mail	22	40	19	35			7	13	7	13
Download music from it	20	36.3	14	26			11	20	9	16.3

Write and send e-mail	25	45.4	19	35			7	13	4	7.2
Search website	15	27.2	14	26			11	20	9	16.3
Get to internet and download file	27	49.1	14	26			6	11	8	15

Confidence is a prerequisite for effective use of ICT. Based on this, the professional librarians were asked to state their level of confidence in handling ICT tasks. The table revealed that majority of professional librarians can handle internet task on their own. These includes attachment of file to an e-mail message, download music from internet, write and send e-mail, search website and get into the internet copy and download file. The rate of confidence gives assurance that users will get automate services from the library internet.

Table 8: Confidence in handling ICT Task

High Level ICT Task	I can do very well		I can do it with the help of somebody		I know what it means but I cannot do it		I do not know what it means	
	No	%	No	%	No	%	No	%
Use of database to create a presentation	19	35	18	33	8	15	10	18
Use a spreadsheet	11	20	16	29	7	13	22	40
Use a software and get rid of computer viruses	9	16	18	32	16	29	13	24
Create Multimedia presentation	7	13	17	30	18	32	13	24
Construct a web page	2	3.6	20	36	20	36	13	24
Create a computer program	8	15	18	33	16	29	13	24

Table 8 revealed the professional librarians level of handling ICT Task. The table revealed low level of handling High ICT Task. Only 35% of the library professional can use database on their own. While majority can use database, create a presentation, use a software, get rid of computer viruses, create multimedia presentation, construct a web page and create a computer program ranked 33%, 38%, 32%, 30%, 36% and 33% respectively with the help of somebody. This is an indication that the professional librarians need training to handle high-level ICT task.

Training Required

The library professionals were asked to indicate the type of training they required to function effectively in this digital world. Table 9 showed the respondents result.

Table 9

	Training Required	Respondents	
		No	%
1.	Use of bibliographic resources	16	29.1
2.	Use of Online catalogue	19	35
3.	Use of e-journals	13	24
4.	Use of e-books and database	11	20
5.	Internet tools and techniques	16	29.1
6.	Search techniques and strategies	13	24
7.	Library management and software	19	35
8.	Digital library and institutional repository software	26	47.2
9.	Evaluation of online information resources	21	38.1

Staff development is essential task for the development of any sector. With training and re-training, staff can improve on their working skills. The professional librarians were asked to indicate the training they required. Majority of the professional librarians indicated training on digital library and institutional repository software which rated highest with 47.2% of the respondents. This was followed by evaluation of online information resources 38.1 and use of online cataloguing and library management and software training which ranked 35% each.

Conclusion/Recommendation

The study was focused on the information and communication technology literacy skills level among library professionals in Delta State University Library. The study revealed low level skills in ICT among the professional librarians. The professional librarians need to enhance their level of ICT literary skills for them to function effectively in this digital global world. This ineffectiveness of ICT skills among the professional librarians can be attributed to the University Library Administration for not providing majority of the ICT based resources and

services. The availability of these resources and services in the librarywill motivate staff to improve their skills on these areas. The present level of ICT skills among the professional librarians could also be one major cause of the unsuccessful automation of the library.

The professional librarians should be provided training opportunities, either through formal or informal training on ICT skills. Attendance at Conferences, Seminars and Workshops on ICT should not be restricted to just one or two professional librarians only, but should be opened to all. The sponsoring of professional librarians to workshops, seminars and conferences, should not be tied only to Educational Trust Fund allocations to the University. The University Library should budget for training from its allocation so that more staff will have opportunity of attending workshops, seminars and conferences on ICT skills. The success of the library automation and internet services lies on the effectiveness of ICT skills of the staff that render these services.

References

[1] Adomi, E.E. &Anie, S.O. (2006).An assessment of Computer Literacy Skills of Professionals in Nigerian University Libraries.*Lib. Hi. Tech. News,* **2**(10-14).

[2] Adoyoyin, S.O. (2006). ICT literacy among the staff of West African University Libraries.A Comparative Study of Anglophone and Francophone Countries.*The Electronic Library*, **24**(5): 694 – 705.

[3] Alakpodia, O.N. (2010). Assessment of Information Literacy Skills among Librarians in Delta State University, Abraka.*The Information Technologist*, **7**(1): 55-62.

[4] Aminu, A.M. (2009). ICT in the polytechnic Engineering Classrooms: A Case study of Lecturers' Attitudes, Beliefs and values in WaziriUmaru Federal Polytechnic. *Proceedings of Annual Conference of IRDI Science and Technology Forum*, Vol. 5(2), pp. 45 – 51.

[5] Choudhury, B.K. &Sethi, B.B. (2009). Computer literacy of library professionals in the University Libraries of Orissa: An analytical study. IASLIC Bulletin, 54(1): 15-30.

[6] Ejedafu, E.F. (2009). Use of internet among riverine dwellers in Warri North Local Government Area of Delta State.*Delta Library Journal*, **3**(1&2): 131-138.

[7] Kumar, P. (2012). Application of information and communication technology (ICT) by Medical Students: A Study of Government Medical College, Chandigarh, India.

International Journal of Library and Information Science, **4**(3): 45-51. Retrieved from http://www.academjournals.org/ IJLIS19thApril2012.

[8] Mahmood, K. & Khan, M.A. (2007).ICT training for LIS Professionals in Pakistan Assessment Program.*Electronic Library and Information Systems*, **41**(4): 418 – 427.

[9] Mahamed, K.H. &Shukkoor, C.K.A. (2010).Information and Communication Technology literacy among Library Professionals in Calicut University, Kerela.*DESIDOC Journal of Library & Information Technology*, **30**(6): 55 – 63.

[10] Omosor, U.A. (2010). Assessment of Computer Literacy skills of Librarians in Delta State Polytechnics.*Information Impact Journal of Information and Knowledge Management*, **1**(3): 20-26.

[11] Satpathy, S.K. (2011). ICT skills of LIS Professionals in Engineering Institutions of Orissa, India: A Case study. Retrieved from http://unllib.unl.edu/LPP/ LibraryPhilosophyandpractice on 19th April, 2011.

[12] Nwalo, K.I.N. (2009). The Changing Role of PAN Professional Library Staff in the ICTs Age.Proceedings of Selected Papers of the Cataloguing, Classification and Indexing Section of the Nigerian Library Association, 2007-2008. Pp. 106 – 110.