



An Evaluation of staff Digital Literacy Skills in Academic Library in South-West, Nigeria

Lolade Osinulu

Olabisi Onabanjo University, Nigeria

Received: 7th March, 2022 - Revised: 30th June, 2022 - Accepted: 2nd July, 2022

DOI: <https://dx.doi.org/10.4314/gli.v27i2.10>

Abstract

As a result of fundamental changes brought about by digital information services arising from Information and Communication Technology, digital literacy is now an essential life skill required in the new library environment. These changes require digital skill in the use of technological tools. The purpose of this study is to evaluate digital literacy skills possessed by paraprofessionals in the execution of their job in academic library in South-West Nigeria. The design of the study was a descriptive survey. Data were collected using a Likert-Scale questionnaire distributed among target population consisting of paraprofessionals and analyzed using descriptive statistics. Result revealed proficiency in digital technology and use of digital devices by majority of the respondents for personal and official activities. However, the respondents were not too familiar with the use of technological tools and devices relevant to their work. The study recommended that paraprofessionals be exposed to continuous training to cope with the demands of the digital age. Library managers should have good training and development policies for staff to promote and boost quality library services and job performance.

Keywords: Digital literacy, skills evaluation, paraprofessionals, academic library.

Introduction

The increase in the Internet access and application of technologies in all sectors of the economy including education due to the rapid advancement of Information and Communication Technology (ICT) is making digital literacy becoming increasingly a sine qua non skill in the work environment to enhance communication and job performance. This trend has enabled the educational sector to integrate ICT into teaching and learning thus transiting from the traditional to e-learning. As education is witnessing a change, academic libraries are equally adapting to the change causing a new dimension in information service delivery, information acquisition and management of electronic resources as well as specialized services which require the use of computers and related technology devices in library activities. Ononogbo (2012) averred that information and communication technology (ICT) has transformed traditional practice of librarianship and has impacted on both the user and the information worker. Currently, the majority of workers use the Internet to process and disseminate information thereby changing the work patterns. According to Ascroft (2004) information professionals

are adjusting their skills and practice to cope effectively with the changing needs of users and challenges arising from the emerging technologies.

A library workforce is an asset and plays an invaluable role in the library development of any institution. According to Gaur (2003), manpower is one of the essential components in the information process of library services. In the library system, three categories of staff are involved in information services namely professional librarians, paraprofessionals and clerical support staff engaged in secretarial and other works. In the hierarchy of library personnel structure, Librarians are ranked higher because they are academically and professionally of higher qualification with a minimum of a master's degree in information science. This suggests therefore that success of a library depends basically on librarians who provide strategic management to enhance service delivery supported by paraprofessionals in the implementation of policies. It is crucial to note that globally, libraries thrive on teamwork for improved services and productivity. For the purpose of this study emphasis is on Paraprofessionals who hold Diploma certificate in librarianship and can be likened to

healthcare technicians who assist medical personnel in hospital routine activities. Basically, in Nigeria context, library paraprofessionals are the technical manpower involved in routine technical service duties as well as other housekeeping jobs in the library system. They are assigned roles often commensurate with their status and qualification.

Emerging technologies have great advantage over traditional roles and functions of academic libraries. To this end, Library professionals are embracing the change. Bitri (2014) noted that library and information professionals are keeping pace with new developments and fundamental changes in the field. The changing scenario calls for information professionals irrespective of status, to sharpen their literacy skills in the Digital Age. This is apt because staff that lack digital literacy skills and are unable to access the Internet may suffer digital divide resulting in low productivity and job stagnation. Iyang and Mngutayo (2018) expressed concern that many professionals lack the skill to use digital technology effectively and that Nigerian academic libraries do not pay much attention to developing skills and competencies of paraprofessional staff. This trend is becoming a great concern realizing the fact that professional must be proficient in the use of digital tools in the modern library. This is to prevent doing library services of today with tools of yesteryears. OEDC (2016) pointed out that it is crucial for staff to re-skill and up-skills not only to survive in the library but thrive in this millennium. It is therefore necessary to appraise the level of digital literacy skills of paraprofessionals working in 21st century libraries in Nigeria.

Background Information

Olabisi Onabanjo University (OOU) was founded on July 7, 1982 as Ogun State University by the Ogun State Government but opened her door to the pioneer students in January 1983. On May 29, 2001, the university was renamed Olabisi Onabanjo University in honor of Chief (Dr.) Olabisi Onabanjo the first civilian Governor of the State from October 1979 to December 1983 and founder of the university. It is one of the first State owned Universities in South-West, Nigeria. The university is a multi-campus institution that offers diverse programs at both undergraduates and graduate levels. The library is spread over four campuses of the university and has been growing in leaps and bounds since inception with full complement of 77 staff out of which 16 are paraprofessionals who support the academic librarians

in their quest of meeting information needs of users through provision of quality collections and access to information in all formats. The library is automated using KOHA Integrated library software. It offers electronic services with vast quantity of databases and computers.

This study aims to evaluate digital literacy skills of paraprofessionals in OOU library in South-West, Nigeria. The findings will add to the existing literature and body of knowledge.

Objectives

The objectives for the study are to:

1. find how staff acquire technology skills
2. assess the level of skills in the use of digital devices/ICT facilities
3. ascertain why they use ICT facilities
4. identify the problems encountered in deploying their digital literacy skills at work

Literature Review

The advent of the Internet and ICT have made digital literacy skill an essential requirement for the modern-day workforce especially paraprofessionals staff who want to make a difference in library service delivery. Digital literacy is the ability to use digital devices appropriately to process and retrieve information, understand how the web works, participate in social networks for creation and sharing of knowledge and surf the net (Maharana & Mishira, 2007). It is also the knowledge, skills and behaviors used in digital devices such as smartphones, tablets, laptops and desktop PCs all of which are network. According to Belshaw, (2011), digital literacy is the skill in accessing, managing, evaluating, understanding and using technology as a medium and source of information. Furthermore, Gilster, (1997) emphasized that individuals must not only acquire the skill of finding and evaluating information but must also possess skill to use the technological devices effectively in life for different purposes.

In the context of library, American Library Association (2013) sees digital literacy as the ability to use information and Communication Technology to find, evaluate, create and communicate information, requiring both cognitive and technical skills. This definition views digital literacy skills by library professionals and information workers as having required competence and being familiar with the use of the Internet and digital devices to create, retrieve and communicate information. Nawakanma (2003)

reiterated that information professionals should be aware of and capable of using emerging Information and Communication Technologies (ICTs) because it is the determinant of the future of academic libraries in developing countries such as Nigeria. A digitally literate professional is expected to possess relevant skills not only to operate computers and search the Internet, but to also create content, retrieve information for solving information problems and communicate effectively with library patrons. Digitally literate professionals should be able to carry out basic computer-based operations to access resources for daily routine tasks such as OPAC, cataloguing, create content (such as text, audio, video, photo/images and multimedia) and possess the ability to form accurate judgment/critical thinking skills (Ofilli, 2017).

Given the benefits of digital literacy skills to library professionals, ICT tools are for professional development to improve job performance and standard of living; create opportunities for efficient and improved digital library services, making work faster and less stressful (Emiri, 2017). The skills unequivocally will enable professionals to understand and confidently utilize digital communication tools. Additionally, it will enhance ability to exchange email, promote use of library-based products and services. It will improve the use of the Internet and in turn facilitate library work processes. Furthermore, proficiency in the use of digital tools could help solve communication problems, reach out to a wider library patronage with the goal of satisfying users' needs promptly as well as promote teamwork. For continued survival of the library profession, it is mandatory for staff to acquire relevant skills to enhance computer usage and other technological tools in their daily operations.

Research studies by Ezziane, (2007); Kumar, (2009) state that technology-literacy can be acquired through formal courses in relevant institutions or informal training at home, from friends or through trial and error and external courses. Dewi et al (2021) also noted that digital literacy development can be done in schools, families and communities as part of life-long learning. Meyer, et al. (2013) remarked that the place of learning and developing digital literacy is important while effective participation in the digital world is paramount.

The role of paraprofessional in library service delivery cannot be ignored. However, few empirical studies abound on computer literacy competencies of paraprofessionals in Nigeria. Earlier study by Ajidahun (2007) assessed technological skills of

306 paraprofessionals in 20 Nigerian University libraries, found that only 34 (11%) of such staff are technologically skillful. Adeyoyin (2006) conducted a survey on computer literacy competence among professionals and paraprofessionals in 18 universities in West Africa, found that 8% of paraprofessionals were ICT literate. A recent study by Oyedokun et al (2018) on assessment of library staff in selected universities in Kwara State, Nigeria, the result shows that library staff including paraprofessionals possessed high level of ICT competence in basic computer skills. Basic computer skills involve knowledge of computer hardware, understanding computer and operating systems, ability to start up, logging in and shutting down, using mouse and keyboard among others (Inyang & Mngutayo 2018). Guragi (2009) noted that there is need for professionals to have e-competencies along with other skills which are required in the library changing environment.

Many challenges revolve around possession of appropriate technological skills in Nigeria. Ayoku and Okafor, (2015), Oyedokun et al (2018) have identified inadequate funding, lack of staff training, inadequate ICT infrastructure/facilities, lack of motivation in handling the tools. Others are irregular power supply, lack of interest, phobia for technology and ignorance. Be that as it may, Martzoukou and Elliot (2016) advocated for improved education and continuous professional training for information providers.

Methodology

The descriptive survey design was employed. The study was limited to Olabisi Onabanjo University Library in South-West Nigeria. The target population comprised paraprofessionals working in the library using a complete enumeration because of the small population. The instrument for data collection was structured questionnaire based on Likert Scale. All copies of the questionnaire administered were retrieved. The statistical tools used for the study are frequency distribution, percentages, mean scores and standard deviation.

Findings

Male gender dominated the study population, 9(56.2%) were male and 7(43.8%) were females. Majority of the respondents were above 50 years old. All respondents (100%) had Diploma in library and information studies which is the basic requisite qualification to practice as paraprofessionals. Information of the respondent's status showed that out

Table 1: Sources of Digital Literacy Skills Acquisition by Respondents

S/N	Source	Strongly Disagree	Disagree	Agree	Strongly Agree	Mean	STD
1	Practical Self Teaching	2 (12.5%)	1 (6.3%)	9 (56.3%)	4 (25.0%)	2.94	0.93
2	Friends and Colleagues	2 (12.5%)	2 (12.5%)	10 (62.5%)	2 (12.5%)	2.75	0.86
3	In-House Training	2 (12.5%)	2 (12.5%)	11 (68.8%)	1 (6.3%)	2.69	0.79
4	Conference, seminar, workshop	4 (25.0%)	1 (6.3%)	9 (56.3%)	2 (12.5%)	2.56	1.03
5	Computer/IT training school	2 (12.5%)	11 (68.8%)	2 (12.5%)	1 (6.3%)	2.13	0.72
6	LIS program	4 (25.0%)	7 (43.8%)	5 (31.3%)	-	2.06	0.77

Table 2: Level of Skill possessed in the use of computer system/ICT gadgets

S/N	Digital Devices	Not Competent	Somewhat Competent	Uncertain	Competent	Highly competent	Mean	STD
1	Smartphone	-	3 (18.8%)	-	5 (31.3%)	8 (50.0%)	3.31	0.79
2	Desktop Computer	-	5 (31.3%)	-	6 (37.5%)	5 (31.3%)	3.00	0.82
3	Personal Computer	-	5 (31.3%)	-	6 (37.5%)	5 (31.3%)	3.00	0.82
4	Laptop	-	5 (31.3%)	-	7 (43.8%)	4 (25.0%)	2.94	0.77
5	Notepads	-	5 (31.3%)	-	7 (43.8%)	4 (25.0%)	2.94	0.77
6	iPad	-	5 (31.3%)	2 (12.5%)	5 (31.3%)	4 (25.0%)	2.56	1.26
7	Laser Printer	2 (12.5%)	7 (43.8%)	-	7 (43.8%)	-	2.31	0.70
8	Barcode Scanner/ Photocopier	4 (25.0%)	7 (43.8%)	2 (12.5%)	3 (18.8%)	-	1.69	0.95
9	Multimedia Projector	4 (25.0%)	7 (43.8%)	2 (12.5%)	3 (18.8%)	-	1.69	0.95

Criterion Mean = 2.50; Weighted Mean = 2.60

of 16 respondents, 6 (37.5%) were Library Officers, 4 (25%) were Senior Library officers while 3 (18.8%) were Higher Library Officers and 3 (18.8%) were Principal Library Officers. The study further showed that 7(43.8%) had 31-35 years' work experience.

Table 1 shows the sources through which the respondents acquired digital literacy skill. Majority of the respondents (Mean =2.94) acquired digital skills through practical self-teaching, closely followed by friends and colleagues (2.75), in-house training (2.69) followed by Conferences/Seminar/Workshops (2.56). Those who acquired digital literacy skills through IT and Library and Information Science program were

the least.

In Table 2 majority of the respondents affirmed their level of skill in the use of digital devices. Competency in the use of Smartphone rated highest (Mean = 3.31), followed by desktop computer (Mean = 3.00) and personal computer (Mean = 3.00) followed by laptop and notepad (Mean = 2.94). On the other hand, skill was low in the use of laser printer (2.31), barcode scanner (1.69) and multimedia projector with mean value (1.69).

Table 3 shows the purpose for and frequency with which respondents used computers for library activities. Majority (Mean = 3.00) very often used

Table 3. Purpose for and Frequency in the use of Computer for Library Activities

	Activities	Never	Occasionally	Often	Very Often	Mean	STD
1	Cataloguing based services	-	4 (25.0%)	8 (50.0)	4 (25.0)	3.00	0.73
2	Online search	-	6 (37.5%)	6 (37.5)	4 (25.0)	2.88	0.81
3	Communication	2 (12.5)	4 (25.0%)	4 (25.0)	6 (37.5)	2.88	1.09
4	Personal use	-	6 (37.5%)	6 (37.5)	4 (25.0)	2.88	0.81
5	Selection of books/Acquisition	2 (12.5)	4 (25.0%)	6 (37.5)	4 (25.0)	2.75	1.00
6	Retrieval and dissemination of information/Reference	-	6 (37.5%)	8 (50.0)	2 (12.5)	2.75	0.68
7	Circulation	4 (25.0)	1 (6.3%)	7 (43.8%)	4 (25.0)	2.69	1.14
8	Data processing	2 (12.5)	4 (25.0%)	8 (50.0)	2 (12.5)	2.63	0.89
9	Bibliography	-	8 (50.0%)	6 (37.5)	2 (12.5)	2.63	0.72
10	Web OPAC	-	12 (75.0%)	4 (25.0)	-	2.50	0.89
11	Current Awareness Services	2 (12.5)	4 (25.0%)	6 (37.5)	2 (12.5%)	2.50	0.89
12	Serials control	4 (25.0)	10 (62.5%)	-	2 (12.5)	2.00	0.89

Table 4. Problems Encountered in Deploying digital Literacy Skills

S/N	Problems	Strongly Disagree	Disagree	Agree	Strongly Agree	Mean	STD
1	Erratic power supply		4 (25.0%)	4 (25.0%)	8 (50.0%)	3.25	0.86
2	Lack of access to the internet		4 (25.0%)	8 (50.0%)	4 (25.0%)	3.00	0.73
3	Inadequate Equipment	-	6 (37.5%)	6 (37.5%)	4 (25.0%)	2.88	0.81
4	Lack of training	1 (6.3%)	5 (31.3%)	8 (50.0%)	2 (12.5%)	2.69	0.79
5	Lack of personal device		7 (43.8%)	9 (56.3%)		2.56	0.51
6	Lack of motivation		10 (62.5%)	4 (25.0%)	2 (12.5%)	2.50	0.73
7	Lack of time	2 (12.5%)	11 (68.8%)	3 (18.8%)		2.06	0.57
8	Lack of skill to use computer	6 (37.5%)	5 (31.3%)	5 (31.3%)		1.94	0.85
9	Lack of interest	6 (37.5%)	5 (31.3%)	5 (31.3%)		1.94	0.85
10	Lack of confidence	4 (25.0%)	9 (56.3%)	3 (18.8%)		1.94	0.68

computers for cataloguing-based activities, followed by online searching (Mean =2.88), communication, personal use, selection of book acquisition, circulation and data processing. In a follow up question, respondents were asked how long they have been using computers in the library. The majority (43.8%) said they have been using computers for less than 6 years while 37.5% indicated using computer for between 6-10 years, 6.3% for 11-15 years and 12.5% for 16-20 years.

The respondents were required to indicate challenges hindering acquisition of digital literacy skills. The greatest problem indicated is erratic power supply (mean scores 3.25), followed by lack of access to the internet (mean scores 3.00). Others are inadequate equipment/tools, absence of training, lack of personal device and motivation. However, a few respondents held the view that time and skill, interest and lack of confidence were their constraints.

Discussion

This study reveals that the paraprofessionals in academic Library in South-West, Nigeria made efforts to learn the skills through informal approach: practical self-learning, friends and colleagues. An indication that friendship is significant in learning. Respondents were self-motivated by engaging in unstructured training/learning realizing that digital literacy skills are key enabler of technology and that the skills are increasingly becoming indispensable for efficient and better service delivery as well as upward job movement.

Majority of respondents were digitally literate and competent in the use of computer digital devices such as smartphones, desktop computers/personal computers, laptops and tablets (including iPads) but lacked the capability to use laser printer, barcode scanner/photocopiers and multimedia projectors relevant to library activities. In sum paraprofessionals had a working knowledge of computers and other

media used for communication and personal use. This implies that respondents possessed basic skills necessary to operate computers to perform basic routine library tasks. However, the problems of erratic power supply and access to the Internet are the major limitations to skills acquisition and utilization.

Conclusion

For libraries to thrive and survive in the digital age, possession of appropriate digital skills is inevitable and non-negotiable. Based on the findings, it is concluded that library paraprofessionals possessed digital literacy skills that can use technology to perform computer operations in carrying out daily library activities. However, the study also revealed lack of capabilities to use other digital devices relevant to library tasks.

Recommendation

Digital landscape is changing at a fast speed, therefore digital literacy skill is vital to efficient and effective library service delivery as well as staff career development. It is recommended that:

- staff should have regular in-house training and retraining; good mentorship by the academic librarians is desirable to boost their digital literacy skills.
- the stakeholders should have training and development policies for staff to enable them to contribute optimally towards efficient library service.
- necessary technological infrastructures and facilities to aid training and learning should be provided within the academic library.

References

- Adam, I. A & Usman, I. (2013). Resource sharing 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*, 24(5): 694–705.
- Ajidahun, C. O. (2007) The training, development and education of library manpower in information technology in University libraries in Nigeria. *World Libraries*, 17 (1):
- American Library Association (ALA) (2013). Digital literacy. <https://literacy.ala.org/digitalliteracy/>
- Ayoku, O. A. & Okafor, V. N. (2015). ICT skills acquisition and competencies of librarians. *The Electronic Library*, 33 (3): 502-523.
- Bansode, S. Y & Viswe, R. R (2015). ICT literacy among library professionals working in the University libraries in Maharashtra, India: a study. *DESIDOC Journal of Library & Technology* 37 (5): 353.
- Belshaw, D. A. J. (2011). What is digital literacy? Dissertation. England: Durham University.
- Bitri, E. (2014, January 23-25). 21st Century library and information professional (Conference session). Ankara, Turkey. <http://bobcatss2013.bobcatss.net>
- Dewi, R. S, Fahrurrozi, U. H & Mohammad, Z. D. J. (2021). Analysis study of factors affecting students' digital literacy competency. *Ilkogretim Online- Elementary Education Online*, 20 (3): 424-431 <http://ilkogretim-online.org> doi:1017051/ilkononline.2021.03.42
- Emiri, O. T. (2017). Digital literacy skills among librarians in university libraries in the 21st century in Edo and Delta states, Nigeria. *International Journal of Science and Technology Research*, 4 (8): 153-159.
- Gaur, R. (2003). Model framework for reengineering of management libraries. *University News* 41 (4), 1-6
- Gilster P. A. (1997) *Primer on Digital Literacy*. Mississauga, Ontario: John Wiley & Sons
- Inyang, E. and Mngutayo, J. (2018). Required skills and competences of Librarians for effective software application and use in contemporary libraries in Nigeria. *Library Philosophy and Practice*
- Kumar, M (2009). Academic libraries in electronic environment: Paradigm shift. A paper presented at the International Conference on Academic Libraries (ICAL) held at the University of Delhi, India
- Maharana, B. & Misira, C. (2007). A Survey of Digital Information Literacy of Faculty at Sambalpur University, India. *Library Philosophy and Practice*, 1-10.
- Martzoukou, K. and Elliott, J. (2016). The development of digital literacy and inclusion skills of public librarians. *Communications in Information Literacy*, 10 (1): 99-115.
- Meyer, E. M, Erikson, I and Small R. U (2013). Digital literacy and informal learning environments: an introduction. *Learning, Media and Technology* 38 (4): 355-367. Retrieved from <https://DOI:10.1080/17439884.2013.783597>
- Nwakanma, C. D (2003). Information technology competencies: identifying knowledge depths for library and information science education. *Canadian Journal of Information and Library*

Science, 27 (4): 75–6

- Odu, A. O. and Omosigho, N. A (2017). Digital Literacy and the Implication on Nigerian Digital Library. *International Journal of Library and Information Science Studies*, 3 (2): 13-19.
- OECD (2016). Skills for a digital world: 2016 Ministerial meeting on the digital economy background report. OECD Digital Economy Papers, No 250 OECD Publishing Paris
- Offili, D. N (2017). Digital literacy for librarians. Paper presented in workshop on innovation in libraries by Nigerian Library Association, Delta State Chapter at Federal University of Petroleum Resources, Effurun, Delta State.
- Oyedokun, T. T., Oyewumi, F. A., Akanbi, M., Lawal P & Laaro, D. M. (2018). Assessment of ICT competencies of library staff in selected universities in Kwara State, Nigeria. *Library Philosophy and Practice* Retrieved from <https://digitalcommons.unl.edu/libphilprac/1797>

Corresponding Author

Lolade Osinulu

osinulololade@gmail.com