

Improving Digital and Information Literacy Skills: The Resilience of Librarians for Effective Service Delivery in Public Libraries

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Abstract

Nations of the world require recent and quality information for continuous development and this requirement is more critical in developing nations like Nigeria where information for development is in short supply due to poorly developed digital and information literacy skills of librarians in our public libraries. The centrality of this problem is underpinned by the fact that the development of a digital environment which is yet to be fully embraced in Nigeria has made it increasingly difficult to have appropriate information to formulate sound policies for development. To address this problem, public libraries as central place institutions in the provision of information to the general populace for advancement must be repositioned through improved digital and information literacy skills for quality of living standard. To this end, the paper examined digital and information literacy skills, librarians resilience and the need to improve digital and information literacy skills of librarians and their resilience to effectively and satisfactorily service the diverse information needs of users. The various methods of developing literacy skills were mentioned. The paper concludes that Digital and information literacy skills are essential skills librarians in public libraries must acquire to effectively serve diverse users in the society.

Keywords: Digital and Information Literacy Skills, Librarians Resilience, Service Delivery, Public Libraries

Introduction

In contemporary society, it is difficult to remove or isolate ICT and its allied resources from man's activities, especially from his information handling and delivery processes. According to Inskip (2018), "as the 21st century progresses, it has become increasingly apparent that the profession's role needs to adapt continually to the dynamic context caused by the impact of digitisation." Branching off from this realisation, it becomes arguably necessary for library

and information science practitioners in public libraries to develop and prime themselves in readiness to effectively sustain the relevance and effectiveness of the information profession for the future society and the community of users. Libraries today operate in an increasingly complex, dynamic, interconnected, and competitive globalising world; to survive in such a world where the severity and frequency of socio-political, economic, technology, and insecurity induced disruptions of normal and conducive work situations to continue require deliberate and careful planning to educate and periodically train the professionals to acquire the know-how and coping skills to mitigate extremities or novelties that might be encountered in their day-to-day operations including service delivery. This is where the often talked about information resilience of librarians comes in, and unfortunately, due to lack of resilience, coping becomes so difficult for most librarians. Enhancing resilience in stressful occupational settings is of growing interest, given that these individuals may be more likely to experience adversity, increasing burnout risk.

The objectives of this paper are to examine the need to improve digital and information literacy skills of librarians in public libraries and their resilience to effectively and satisfactorily service the diverse information needs of users irrespective of the destructive crosscurrent influence that often emanates from the infusion of new technologies into libraries or from the influence of poor economic and unfettered, insecurity indices.

Benefits of ICT-based Products and Services in public Libraries

There are many benefits associated with ICT-based products and services in public libraries that require digital literacy skills for maximum exploitation. The said benefits are encapsulated with the provision of efficient and accurate service, easy control of tremendous escalation of information as a result of increase research activities, saving of time, space, energy

and resources. Besides, the following are part of the accredited benefits flowing from ICT-based products and services in public libraries:

- ✚ Provision of high quality of services and increase in the range of services,
- ✚ Origination of ways of resource sharing by co-operation and coordination, and
- ✚ enhancement of public library image by providing better services in modern ways

Librarianship and its Purpose

Librarianship is a profession or a body of knowledge that can be studied or applied to practical activities. As far back as 1970, Ronald C. Bengtson posed a generic question “what do librarians do?” Responding to the question, he observed that “if we are dealing with activity, we are discussing function.” The core functions of librarians were collection of materials appropriate for libraries, preservation of materials, organization of materials, and dissemination of materials or information. Librarians in public libraries were and are still conveniently perceived to be responsible for collecting materials appropriate for libraries in consonance with outcome of community analysis, preserving materials, organising materials, and disseminating materials or information they contained. Library operations ever since revolve around these four elements or areas to bring information-bearing materials and library users together. Education and training of professionals in librarianship have been to carry out these specified library operations to satisfy the users amidst slow and laborious processes.

Public libraries play an important role in promoting the progress of knowledge as they provide scientific services, fulfill social needs, and individual requirements as organisations flourish. With the advancement in science and technology that creates the Internet with the possibility of instant messaging, Artificial Intelligence (AI), etc., in the context of a globalising

world, library operations' landscape has significantly changed to warrant the deployment of appropriate technologies to leverage library operations efficiency and speed up their operations. Despite these, public libraries across the globe are not at par in their infusion of appropriate technologies into routine operations as well as harnessing the benefits of libraries for the users. Today, we are being confronted with a remarkable shift from traditional public libraries to their modern equivalent that are inclined to information literacy expertise. In the recent information era, a library cannot be operated without proper networking facilities and infrastructure (Dutta & Mondal, 2021). In the present dispensation, almost everything depends on technology to succeed. For example, digital literacy recognized the internet as a medium that needs specific literacies to critic the information that it provides, to separate truth from fiction and understand how hypertext and non-linear reading allows new meanings to be constructed (Secker, 2018). This is a snippet of the challenging needs of library services with the almost total migration from traditional library services to digital reference services that makes digital literacy skills imperative for librarians to acquire, and there is no going back on this if libraries must answer to their names adequately responding to their corporate objectives as service-oriented organizations.

The Role of Librarians in the Present Knowledge Era

Librarians in the the public libraries play significant roles in shaping the present information /knowledge era for the better. To achieve this all embracing objective of shaping contemporary information and knowledge era to become more availing, librarians can play such roles as digital instructors, academic consultants, web administrators, library administrators and record and data managers. In addition, they very often assume the position of e-resources

managers, dataset managers and technology specialists, scholarly publishing administrators, among others.

Digital and Information Literacy

Paul Gilster coined the term digital literacy in 1997 to mean “the ability to understand and use information in multiple formats from a wide range of sources when it is presented via the computer.” Yo (2021) describes digital literacy as a term often used interchangeably with digital fluency and digital competencies. He added that digital literacy connotes the availability of knowledge and skills necessary for the safe and effective use of digital technologies and Internet resources by students. Bawden (2008) views “digital literacy as information literacy in the digital age”. By inference, digital literacy encompasses access, use, and evaluation of information from various electronic sources. In the same vein, information literacy is seen as a rich and complex social information practice that is constructed according to specific practical understanding rules which is described by Uzuegbu (2014) as information competency that is, the ability to access, evaluate, organize, and use information from a variety of sources. It is often regarded as a “research process”; Ojedokun (2014) information literacy skills emphasizes the set of abilities requiring individuals to recognize when information is needed and have the ability to locate access, critically evaluate, communicate and use the information effectively.

Possessing digital and information literacy could mean the ability for librarians to solve the broadest range of tasks associated with using electronic information resources to enhance service delivery and research for profession's advancement. So to be ‘digitally literate’ as cited in Meyers, Erickson, and Small (2013), encompasses cognitive authority, safety and privacy, creativity, ethics, and responsible use and reuse of digital media, among others. Library and

information science professionals must necessarily remain savvy to flawlessly service the information needs of modern information seekers operating within a digital environment. Digital literacy according to the Global Alliance to Monitor Learning [GAML] (2018) is the interest, attitude and ability of persons to effectively and electively use digital technology and communication tools to locate, manage, integrate, and evaluate information, construct new knowledge, create and communicate with others. According to Shabana, Abuzar and Sadik (2014), digital literacy is “the ability to locate, organize, understand, evaluate, and create information using digital technology, i.e. the ability to understand and use digital technologies effectively for everyday tasks”. With the inclusion of the Internet and related digital tools into education, it calls for research regarding digital literacy as it is expected to impact on library service delivery positively; this is related to librarians duty in public libraries as they assist users in their information seeking process while, Janssen, Stoyanov, Ferrari, Punie, Pannekeet, and Sloep (2013) aver that:

“digital competence is a conglomerate of knowledge, skills, and attitudes connected to various purposes (communication, creative expression, information management, personal development, etc.), domains (daily life, work, privacy & security, legal aspects), ... For university students, it is necessary to have knowledge and skills in the field of digital technology to be able to use information effectively in its different forms (e-publications, online video, audio recordings, digital libraries, databases, etc.) as students need to be able to work critically with the information resources that they find for their learning activity

and have the competencies to handle independently in resolving scientific issues in projects, studies, etc.”²⁸

Digital and information literacy in the context of this paper is the capacity of librarians to be information literate, and being able to use the capability to effectively service the information needs/requirements of public library users for effect. The capacity is reflected in the five competency standards of ALA, which is when librarian can identify the need for information efficiently and effectively; access the needed information; evaluate the authenticity/accuracy of retrieved information; apply the information to meet the identified needs; and understand the economical, legal and social issues associated with the information. According to CILIP (2012), however, information literacy comprises of these elements:

- identifying an information need;
- understanding available resources and having access to resources;
- being able to search and find relevant information to meet a need;
- being able to evaluate information as reliable and fit for purpose to critically
- answer an information need;
- using information;
- organising and storing information;
- Communicating in ethically and safely.

All these underly the need for increased productivity, individual and organisational efficiency, effective governance and peaceful and harmonious coexistence.

Components of Digital Literacy

Digital literacy has identifiable components that interact to define levels of librarians' competence, literacy and skills.

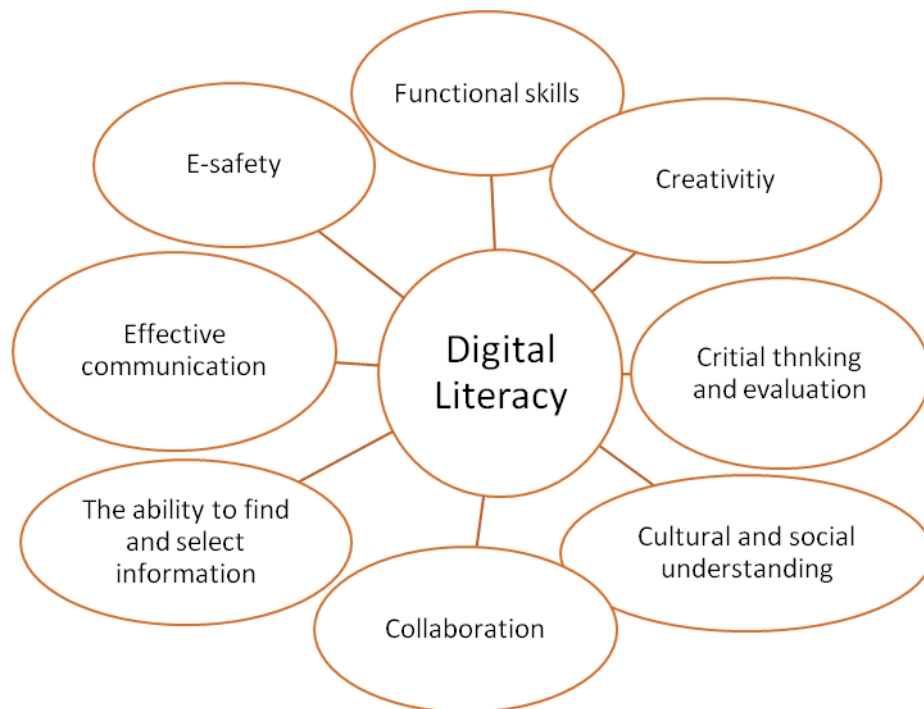


Figure 1: The Eight Components of Digital Literacy (Hague & Payton, 2010, p19)

Librarians are saddled with the social responsibility of meeting the diverse information needs of their clientele using various information resources. The acquired ability by librarians to find and select information, communicate effectively, maintain e-safety amidst functional cultural and social understanding using digital tools and knowledge, critical thinking and social engagement contributes to defining the strength and quality of librarians' digital and information literacy skills.

Figure 2: Components of Information Literacy



According to Cordell (2013), there is an interplay between information literacy (which database to search, which terms to use, which limiters to employ, how to evaluate the articles in the results, how to use the information found effectively and ethically, etc.) and digital literacy (how to navigate the library web site, how to get to a search page or find the advanced search page, how to find the help files, how to save or export the citations and full text, how to set up an account in a social media site, how to upload files to that site, how to comment on others' postings, etc.) and Information literacy requires digital literacy to access appropriate online research sources. It gives further context to the evaluation skills developed by digital literacy (Association of College and Research Libraries, 2000, p. 14). This shows the need for librarians in public libraries to develop resilience in information provision, especially in the digital era.

The Resilience Concept

Resilience is the process of adapting well in the face of adversity, trauma, tragedy, threats, or significant sources of stress such as family and relationship problems, serious health

problems, or workplace and financial stressors. As much as resilience involves “bouncing back” from these difficult experiences, it can also affect profound personal growth in developing digital and information skills. It is the capacity to recover quickly from difficulties, toughness, and the ability to withstand adversity and bounce back from complex life events such as an un-conducive working environment, thereby becoming more functional for effective service delivery in libraries. Resilience refers to the act of coping, adapting, or thriving from adverse or challenging events, where a complex and dynamic interplay exists between individual, environmental and socio-cultural factors. Thus interventions towards improving resilience should be geared towards the individual, group and organizational levels (Venegas, Nkangu, Duffy, Fergusson & Spilg, 2019).

However, most librarians in public libraries in Nigeria lack this resilience, and this is affecting service delivery in libraries. Due to this gross lack of resilience, most librarians experience stress, tragedy, trauma, all of which constitute significant sources of stress. Unfortunately, due to lack of resilience, coping become so difficult for these librarians. Librarians’ resilience in information provision has been a driving force amidst technological development in the library. The public libraries have various types of users. The primary purpose is to provide resources and services in various media is to meet the diverse and sometimes complex information needs of individuals and/or groups for education, information, personal development, leisure and recreation. It is not out of reach for librarians to be deft in the act of using AI for instance for effective delivery of library services to target groups before fullscale deployment or adaptation. To this end, it becomes expedient for librarians inclusive of those working in public libraries to have their digital and information literacy skills to be enhanced.

Need for Improving Digital and Information Literacy Skills of Librarians

It has become expedient for librarians to develop resilience by acquiring digital literacy skills to provide efficient and effective services and use technology to interact with the world around them. For the versatility of the 4th industrial revolution (4IR) that is set to impact all facets of human endeavour in terms of professionalism, librarians that must answer their names in line with the 21st efficiency and standard rating are left with no options than to key into the dictates of the new technologies to scale up their digital and information literacy skills for effect. Campbell (2006), cited by Emiri (2015), observes that “digital technology has permeated every aspect of our civilization, particularly how we store and transmit recorded knowledge, historical records and a host of other kinds of communication including how we seek and gain access to information-bearing material” under any condition be it in times of pandemic, insecurity, natural or artificial disaster.

The library and information services have witnessed many developments due to ICT application to library services and operations. As such, the pattern of information services in libraries has improved. With changing technologies and their use, to have appropriate and reliable information through face-to-face; Web-based application; Social networking sites, and Instant messaging is increasingly becoming more complex, such that scholars have opined that becoming digitally literate and acquiring ancillary skills have become crucial for those librarians that want to be successful.

Several developments such as information technology-based library services have led to librarians building up their information resilience, and such developments include:

- a. OPAC and WEBPAC
- b. Information alerting services

- c. Digital references services
- d. Library chat rooms
- e. Electronic document delivery services
- f. Library websites
- g. Web-based user education

The various services call for building digital and information literacy skills of librarians in public libraries in Nigeria toward the provision of quality services.

Various Ways of Improving Librarians' Digital Literacy Skills

There is a need for libraries and their professional organisations to lead on their advocacy to effectively match the public library's public image with its true identity (Hariff & Rowley, 2011); there is no exquisite alternative to improving librarian digital literacy skills other than through education or staff training, which we used interchangeably in this paper. Staff training is investing in employees, and it's crucial to organizational success. The national policy on education in Nigeria appeared robust to guarantee adequate workforce for the library institutions; development and capacity building of library staff should be an ongoing process in its improved form. Staff training expenditures are a strategic investment, particularly now that employees' skills, knowledge, and abilities are among the most renewable resources upon which a library can draw for continuity.

According to Giddens (2006), "many employers of labour now scout for individuals that are adaptable and can easily be train to acquire or learn new skills quickly in response to dynamic work requirements." Since introducing state-of-the-art technologies will continually be introduced into library systems to leverage quality service delivery, staff training should be a continuous exercise. The following are some of the staff training methods to improve the librarians digital and information skills in public libraries:

1. Online professional development programmes: there are numerous online programmes designed to support librarians' skill acquisition and development, such as a Wiki cohort by AFLIA geared toward editing and adding to Wikipedia online content; CORE –ALA professional development programme aim to develop librarians' skills in library operations and services etc.
2. MOOC – Mass Open Online Courses. There are a lot of these online to support librarians' skills acquisition. E.g. Coursera, EdX, and Udacity etc, provides courses for digital development.
3. Staff Exchange Programme: this involves moving librarian on exchange to another library to learn more about current happening in the field and acquire relevant digital and information skills.
4. Fellowship, e.g. OCLC, authoraid to train librarians in digital literacy and application of ICTs in library operations.
5. Youtube Professional Video Guide, e.g. Research librarian handles. They are uploaded video tutorials most especially of library management software and hands-on practicals.
6. Formal education involves schooling. Going for advanced study, most especially in the area of ICT.
7. Job Rotation: this is a process of acquiring the needed skills and updating one's knowledge to perform optimally. Training can take the form of on-job training and rotation.
8. Mentoring programme: Another way of achieving skills is through mentoring. Mentoring is to help support members of a diverse group in their jobs, socialize them. Mentoring is a tool in career development and advancement of library staff; It gives individuals the opportunity to

be mentored to develop their career and makes them feel like the organization values them.

This makes the mentees to be more involved in the job for effectiveness and efficiency.

9. Workshops, Seminars and Conferences: high-level workshops on computer applications to library services and other digital and information skills programmes.

10. Using Online Media: Usage of various online media/ social media can help librarians to increase digital and information skills.

Conclusion and Recommendations

The digital world offers tremendous benefits to librarians. It provides platforms that allow us to improve on our services and go beyond the library walls to meet user's information needs. It also opens up new avenues of service delivery and empower innovation in library operations. The librarians working in the public libraries have an important roles to play in helping communities become information literate as they serve as the life-wire of the society. It is evident that public libraries in developing countries like Nigeria face a lot of problems such as inadequate technical skills, inadequate infrastructure and unskilled workforce, to mention a few; and hence much work need to be undertaken on the part of librarians to building their resilience in digital and information literacy skills. Thus, the need to improve the digital and information literacy skills of the librarians in public libraries to provide effective and efficient information services become imperative and expedient. The paper provides the various methods by which librarians in public libraries can improve their skills and recommends adequate finances and proper library management as critical keys to the actualization of effective information provision and services delivery in the public libraries in Nigeria.

References

- Abrosimova, G. (2020). Digital literacy and digital skills in University study. *International Journal of Higher Education*, 8 (9), 51-54
- Adedokun, T. & Fawole, O. (2018). Use of electronic information resources by Undergraduates of National Open University of Nigeria in Ilorin Study Center. *Journal of Applied Information Science and Technology*, 11(1), 116-124
- Association of College & Research Libraries. (2000). *Information Literacy competency standards for higher education*. Retrieved from <http://www.ala.org/acrl/standards/informationliteracycompetency#Information Literacy>
- Balme, E., Gerada, C. & Page, L. (2015). Doctors need to be supported, not trained in resilience. *BMJ careers*. Retrieved on 22nd June 2021 from http://careers.bmj.com/careers/advice/Doctors_need_to_be_supported/
- Bawden, D. (2008). Origins and concepts of digital literacy. In Colin Lankshear and Michele Knobel. (Eds). *Digital literacies: Concepts, policies and practices*. Pp 19-35.
- Benge, R. C. (1970). *Libraries and cultural change*. London: Clive Bingley.
- CILIP (2012). Information literacy skills. Available at: <http://www.cilip.org.uk/cilip/advocacy-campaigns-awards/advocacy-campaigns/information-literacy/information-literacy> [Accessed: 4 June 2021].
- Cordell, R. M. (2013). Information literacy and digital literacy: Competing or complementary. *Communication in Information Literacy*, 7(2): 177-183.
- Dutta, S. & Mondal, D. (2021). Role of information literacy models in shaping information literacy framework at modern age. In Bhanu Partap, Priyanka Neogi and Rajinder Kumar. *Emerging trends in library and information services in digital era* (Chapter 9). Delhi: Satish Serial Publishing, Pp 107-115.
- Emiri, O. T. (2015). Digital literacy skills among librarians in university libraries in the 21st century in Edo and Delta States, Nigeria. *International Journal of Scientific & Technology Research*, 4(8). 153-159.
- Giddens, A. (2006). *Sociology*. 5th ed. Cambridge: Polity press
- Glister, P. (1997). *Digital Literacy*. New York: Wiley.
- Global Alliance to Monitor Learning [GAML] (2018). A global framework of reference on digital literacy skills for indicator 4.4.2: Percentage of youth/adults who have achieved at least a minimum level of proficiency in digital literacy skills. United Nations Educational, Scientific and Cultural Organization [UNESCO] Institute for Statistics

- Hague, C & Payton, S. (2010). Digital literacy across the curriculum. *FutureLab*. Retrieved from <http://www.nfer.ac.uk/publications/FUTL06/FUTL06.pdf>
- Inskip, C. (2018). *Developing library staff digital literacies*. In Reedy, K & Parker, J. (Eds) *Digital literacy unpacked*. London: Facet Publishing. Pp139-154.
- Isa, S. A. (2018). Digital literacy: Survival skill for librarians in the digital era. *Journal of Information and Knowledge Management*, 9 (4) 107-116 DOI: 10.4314/ijikm.v9i4.10
- Janssen, J., Stoyanov, S., Ferrari, A., Punie, Y., Pannekeet, K., & Sloep, P. (2013). Experts' views on digital competence: Commonalities and differences. *Computers & Education*, 68: 473-481.
- Meyers, E. M., Erickson, I. & Small, R. V. (2013). Digital literacy and informal learning environments: An introduction, learning, media and technology, 38:4, 355-367, DOI: 10.1080/17439884.2013.783597
- Promethean (2015). Digital literacy in the classroom: How important is it?. Retrieved from: www.resourced.prometheanworld.com
- Secker, J. (2018). The trouble with terminology: Rehabilitating and rethinking digital literacy. In Katharine Reedt and Jo Parer (eds). *Digital Library Unpacked*. London: Facet Publishing, Pp 97 -108.
- Shabana, S. Z. Abuzar, S. S. & Sadik, B. M. (2014). Digital literacy awareness among Arts and Science College students in Tiruvallur district: A study. *International Journal of Managerial Studies and Research (IJMSR)*, 2(4): 61-67.
- Simona, V. (2020). Number of universities in Nigeria by ownership. <https://statista.com/statistics/1130701/number-of-universities-in-Nigeria/>
- Venegas, C. L., Nkangu, M. N. Duffy, M. C. Fergusson, D. A. & Spilg, E. G. (2019). Interventions to improve resilience in physicians who have completed training: A systematic review. *PLoS ONE* 14(1): e0210512. <https://doi.org/10.1371/journal.pone.0210512>
- Yo, N. (2021). Digital mathematical literacy as a component of the life skills of students of modern educational institutions. *The American Journal of Social Science and Education Innovations*, 378-384