

THE POST COVID-19 PANDEMIC: DEFINING THE ROLE OF ACADEMIC LIBRARIES IN ONLINE TEACHING AND LEARNING METHODOLOGIES IN HIGHER EDUCATIONAL INSTITUTIONS IN NIGERIA

By

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Abstract

Though the novel Coronavirus (Covid-19) pandemic poses a serious threat to higher education, it has opened the door for online education across the globe. Consequently, universities in Nigeria have adopted the online teaching and learning. Further, University libraries in Nigeria are expected to follow this paradigm shift and contribute meaningfully and positively towards the emerging online pedagogies. This paper is an attempt to articulate the roles university libraries in Nigeria are to play in the online teaching and learning post covid-19 pandemic. This paper identified these roles as using social media platforms for service delivery, maintaining a responsive library website design, providing research guides to the online learners, providing tutorials for the learners or embedding ab librarian in the virtual classroom, and provision of electronic resources. It also highlighted the practical implementations of these roles for library managers and stakeholders. The paper concludes with a call that university libraries should rise to the challenge of covid-19 pandemic and consider open access transformation, funding, skills development and adoption of global best practices as preconditions for the actualization of their roles in the emerging online teaching and learning methodologies.

Introduction

The covid-19 pandemic that struck the world in 2019 has become an opportunity for new thinking, innovations and creativity in service delivery in public organizations including academic libraries. That is, organizations are now gradually but systematically moving away from their traditional ways of operation to the new realities or modern methods. The covid-19 pandemic is indeed a crisis of circumstance, and organizations as well as educational institutions are expected to see this global crisis as a new normal that requires a new approach, new strategies and methodologies for improved processes and delivery of services.

Internationally, educational institutions and their libraries are really adjusting to the new normal occasioned by the covid-19 pandemic. Nevertheless, this adjustment may not take a long time. The reasons are obvious. Firstly, most of the universities in developed countries have well developed ICT infrastructures for easy and smooth paradigm shifts. Though university education in some of the developed countries still rely on traditional methods involving face to face lectures and physical contacts for guidance and mentorship, the level of infrastructural development in foreign universities is high, and it can facilitate the adoption of modern instructional strategies and methods. Secondly, quite a number of universities in developed countries engage in online teaching or online education. A good example of these universities is the University of South Africa (UNISA). In such institutions, the concern should be on how to develop more innovative services and not on how to move from traditional methods to online teaching and learning methodologies.

The picture painted here reveals that online teaching is comparatively more effective and fully developed in some countries in the western world. However, the outbreak of covid-19 pandemic has necessitated the adoption of online education across the world (Czerniewicz, 2020).

It is important to note that libraries in advanced countries provided services to support the prevailing teaching approaches in their parent institutions. That is, for those universities that depend on traditional methods of learning, library services are traditionally or physically provided to the users. Also, those universities that engage in online education have their library services developed and provided online to meet the needs of the users that are geographically scattered or dispersed. Even before the covid-19 era, the call for a hybrid library system has dominated the library literature due to the changing pedagogies in Higher Educational Institutions (HELs) as well as advances in information and communication technologies (ICTs).

In Nigeria and most developing countries, university education depends on traditional method of teaching involving face-to-face contacts in the classroom. The university libraries in these countries are providing physical resources and services to meet the needs of researchers, students and lectures. The current situation described as new normal brought about by covid-19 pandemic is forcing universities in Nigeria to begin to consider other alternatives to traditional methods of teaching. These universities are now challenged to begin to explore the potentials of online teaching and learning as the new paradigm post covid-19 pandemic. It has been reported that universities in Nigeria have adopted online education in line with the global trend (Atayero, 2020). In this new paradigm, academic libraries are expected to help their parent institutions achieve their goals. This paper, therefore, aims to explore the role of academic libraries in the online teaching and learning methodologies in Nigerian universities.

Covid-19 pandemic and online education

The Corona virus is a novel disease that broke out in Wuhan, China in December 2019 (Kandola, 2020). Its widespread led to the disease being described as a pandemic. The pandemic has spread to many African countries including Nigeria. Nigeria confirmed and recorded her first case of covid-19 on February 27, 2020. This index case was an Italian who returned to Nigeria from his home country (Ifijeh and Yusuf, 2020). This was really a case of imported transmission, which has now spread to all parts of the country to the extent that Nigeria has recorded many community transmissions. The alarming rate of community transmission cases led the Nigerian government to adopt the initial response of closure of all schools, public gathering, churches, and market places. With the closure of all schools in Nigeria, students were forced to leave their campuses to stay safe from Covid-19 pandemic. This closure led to the collapse of the traditional methods of teaching. It became necessary that the students must be engaged at home to complete their academic calendar. To achieve this, some universities started to adopt online teaching and learning (University World News, 2020 cited by Ifijeh and Yusuf, 2020).

The library got its share of the covid-19 pandemic. Library services were closed down, or became redundant and may likely remain so post covid-19 (Ifijeh and Yusuf, 2020). It has, therefore, become imperative that libraries must adjust to or embrace the online delivery for their visibility, survival and relevance. This paper aims to identify specific roles Nigerian academic libraries are expected to play in the emerging online teaching and learning methodologies.

Concept of online education

Online education has a long history. This means that online education is not a recent development contrary to the claim by many scholars. The development of online education is intertwined with the history of computer networking, and it could also be seen as one of the first progeny of the invention of e-mail (Harasim, 2000). The long history of online education has been traced as depicted in Table 1. It is clear from this table that the first large-scale online education began in 1996. This is consistent with the assertion by Volery and Lord (2016) that the literature on online delivery in the field of education has flourished since the early 1990s with the rise of the internet (p.216). In view of this assertion, online education is still regarded as a new paradigm in education despite its long history. Certain terms, according to Volery and Lord (2016), have emerged in the literature for better understanding of the concept of online education. These terms include distance learning, computer-based learning, distributed learning, and lifelong learning.

The oldest of the concepts associated with online education is distance learning. This type of learning was originally designed to cater for students who were disadvantaged by their geographical location from university campuses. Distance learning could also be defined as any teaching and learning approach that replaces the face-to-face environment of traditional education that normally takes place in the classroom.

Course materials and contact with instructors may rely on traditional or newer technologies (Volery and Lord, 2016). Computer-based learning, as the name implies, is the type of learning that occurs with the help of computer systems. The computers are not necessarily linked to any network. They are mainly stand-alone computers that depend largely on the software stored in the hard disk, a floppy disk or CD. Computer-based learning helps students to become active learners rather than passive learners (Candy et al, 1994). Distributed learning is learner-centered and allows the use of technologies with aspects of computer-based delivery and distance education (Reil, 1999). Since this type of learning is learner-centered, the learner assumes the responsibility of specifying their learning needs, goals and outcomes, planning and organizing the learning task, evaluating its work and constructing meaning from it (Tuijnman and Van der kamp, 1992). One interesting feature of this type of learning is that it is self-directed.

Drawing from the definitions of the terms associated with online delivery, it is plausible to define online education as a form of distributed learning enabled by the internet (Volery and Lord, 2000). These authors summarized the practical uses of the internet for online delivery as consisting but not limited to access to learning resources, the facilitation of communication and collaborative working among students and between students and academic staff, the assessment of individual students or group of students, and the provision of administrative and student support. In other words, online teaching makes full use of the internet and digital technologies or emerging technologies such as blogs, wikis and podcasts that are primarily used to promote student collaboration and reflection (Baggaley, 2003; Lamb, 2004; Sloan, 2005).

Table 1: Computer networks and online education: history and overview of the field

1861	Telegraph is invented	
1876	Telephone is invented	
1969	ARPANET begins	
1971	e-mail is invented	
	Computer conferencing is invented	
Mid-1970s	University courses are supplemented by e-mail and computer conferencing	
1981	First totally online course (adult education)	The source
1982	First online program (executive education)	WBSI executive education (IEIS)
1983	Networked classroom model emerges (primary and secondary Education)	ICLN: research project in four countries
		RAPPI: Canada-X cultural project in 5 countries
		MS5: National Geographic Society Kids Network
		1985: AT&T Learning Network
		1988: Writers in electronic Residence (WIER)
		1989: SITPS British Columbia Canada
1984	First online undergraduate courses	Virtual classroom (NJIT)
1985	First online graduate courses	Nova southeastern university Connect-Ed (New school of research OISE (university of Toronto)
1985	First labor education network	Solienet (Canada Union of public Employees)
1986	First knowledge building network	CSILE(OISE)
1986	First knowledge building network	CSILE(OISE)
1986	Online professional development community program	OISE Ontario education online course 1990 global lab, lab net and star school, TERC 1992 Educators Network of Ontario
1986	First online degree program	Connect-ED (New School of social research 1989 university of phoenix online
1989	Internet is launched	
1989	First large-scale online course	Open university (UK)
1989	World wide web (WWW) is invented	CERN(Switzerland)
1992	First national educational networks	School Net (Canada) 1995 TL.NCE(Canada) 1998 CL.Net (Europe)
1996	First large-scale online education field trails	Virtual-U Research project

Source: Harasim, L. (2000). *Shift happens: online education as a new paradigm in learning*

The literature revealed that though the adoption of online education is not new in developed countries, it is being experimented in Nigeria (Atayero, 2020). Ifijeh and Yusuf (2020) citing Stern (n.d) outlined the advantages of online education as follow:

- Convenience: 24/7 access from any online computer; accommodates busy schedules; no commuting, on searching for parking.
- Enhanced learning: research shows increase depth of understanding and retention of course content; more meaningful discussions; emphasis on writing skills, technology skills, and life skills like time management, independence, and life-discipline.
- Leveling of the playing field: students can take more time to think and reflect before communicating; shy students tend to thrive online; anonymity is guaranteed in an online environment.
- Interaction: increased student-to-teacher and student interaction and active learning; a greater sense of connectedness, synergy.
- Innovative teaching: student approaches; increased variety and creativity of learning activities; address different leaning styles; changes and improvements can translate to on-ground courses as well.
- Improved administration: time to examine student work more thoroughly; ability to document and record online interactions, ability to manage grading online
- Savings: accommodate more students; increased student satisfaction, higher retention and fewer repeats.
- Maximize physical resources: lessen demand on limited campus infrastructure; decrease congestion on campus and parking lots.
- Outreach: gives students options; reach new student markets; appeal to current students, thus increasing enrollments.

Global trends

Overtime, libraries have been involved in distance education or learning. With the growing interest in online education, pressures are now on libraries for their resources and services. Librarians and libraries are relying on the emerging technologies to provide resources and services that can meet the needs of users. This shows that libraries have role to play in online education. Cassner and Adams (2012) provide a brief listing of these roles as helping with searching and creating resources for assignments; teaching users how to use these resources; and supporting their educational needs. According to Ifijeh and Yusuf (2020), libraries can support online education. In developed countries, librarians are embedded into the electronic classroom to provide relevant teaching and learning resources (Corbett and Brown, 2015; Hoffman, 2011).

However, it has been noted that librarians in Nigeria are yet to come to terms with embedded librarianship, or are yet to fully understand their roles in blended learning environment (Adebayo et al, 2019). Apart from embedded librarianship, many academic libraries are using social media networks to provide library and information services. These social networks include Facebook, Blogging, Widgets and Micro blogging (Allen, 2010). According to Cook (2015), the social media platforms are also used to connect online students with library resources. These platforms are useful in providing virtual library orientation, information and reference services, and library instruction. Unfortunately, and as reported in the literature, the use of social media platforms in developing countries such as Nigeria is not so profound (Adewoyin et al, 2017). It is important to note that

library websites in developed countries such as Europe and USA are user-friendly, which makes it easy for the libraries to embrace embedded librarianship and use of social media resources for information and reference services.

Role of the academic library in online teaching and learning methodologies

The new world order of teaching and learning post covid-19 implies that the roles of the librarians and libraries must be seen in the online delivery of courses and course materials. Libraries in higher educational institutions exist to help their parent institutions to realize their goals. Faced with the covid-19 pandemic, whatever affects these institutions also affects their libraries. As educational institutions are repositioning themselves to embrace online delivery and the change in pedagogies post covid-19, libraries in these institutions are expected not only to embrace this change but also to reposition themselves to meet the needs of online students and researchers. Nevertheless, the following has been suggested as the roles academic libraries are to play in the online delivery post covid-19:

Using social media platforms for service delivery

Library literature is replete with the application of social media platform in the library for service delivery including also studies on the academic use of social networking sites in the university library environment. This is the time for action or practical and academic use of these platforms to deliver library services to the user community. Some of the social media applications that have been found very useful for library and information services include blogs, wikis, podcast, twitter, and e-mail (Allen, 2010). Librarians are to ensure that these social media platforms are embedded in the library website with their appropriate links for communications, contacts and interactions with the online students and researchers.

Maintaining of responsible website:

This implies that the library website should be designed to reflect the behaviors of the online students. It is a well-known fact that students now use many types of sophisticated phones, such as android phones, blackberry, and iPhone, that are internet-enabled. A responsible library website should accommodate these devices and help students and staff to have access to library resources. Gbaje and Kotso (2014) cited by Ifijeh and Yusuf (2020) stated that for a library website to meet the information needs of visitors and conform to best practices, it should serve the following purpose:

- Provides a single point of access to library resources
- Allow teaching staff to direct students to useful resources more easily.
- Promotes the resources held by the library, including subscription.
- Improves navigation of library resources
- Improves access to scholarly and educational web-based resources.
- Provides more efficient access to e-resources
- Improves information services delivery
- Provides library services 24/7
- Facilitates access to library and information services remotely.

Providing research guides to students and researchers.

These research guides take several forms such as course guides, assignment guides or class page and subject guides. Any of these forms that the library adopts should be web-based or domiciled in the library website. This guide should be populated from time to time to keep it updated. If the library cannot provide all the guides to the students, the subject guide must be developed and provided to the user community. This guide aggregates all the library-based information resources in all subject areas as well as those that are remotely located and make them available to the online students via the website.

Tutorials for the online students

The e-learning environment has created this role for librarians. We now have embedded librarians who are attached with online courses or who interact with the lecturers and students in the virtual classroom and contribute to such interactions by providing information resources needed for courses offered by the students. Embedded librarianship involves providing library resources in the teaching –learning process on the online platform (ifijeh and Yusuf, 2020). Embedded librarians are often called librarians in the virtual classroom (electronic or virtual). In other words, when librarians are embedded in the virtual classroom, they are expected to interact with both the lecturers and the students, and the aim is often to help the students with the required information resources for their courses. This implies that the librarians are seen or regarded as co-instructors in the online course delivery. The lecturers are expected to work closely with the librarians to ensure that online courses are effectively delivered to the students. Embedded librarianship helps to showcase the relevance of the academic librarians in the teaching, learning and research processes (Dabengwa et al, 2019). This concept can be promoted in university libraries in Nigeria through the use of e-learning platforms known as Learning Management System (LMS). Examples of LMS are Blackboard, Moodle and so on. The one that is commonly used is the Modular Object-Oriented Dynamic Learning Environment (Moodle). The advantages of Moodle include; it is an open source, can facilitate embedded or blended librarianship, it is easily adapted or customizable and relatively cheap to install and maintain. It has been suggested that a librarian can be embedded in online classroom on the basis of subject specialization.

Provision of electronic resources

Electronic information resources are the backbone of online education. They fall within the web-based resources that librarians and libraries can utilize to support online teaching and learning methodologies. Though these resources are capital intensive, a good number of them are freely available online. This means that university libraries can mitigate the challenge of poor funding by adopting the open access initiatives. There are open access journals and full-text open access databases that can be maximally exploited by librarians to support online education. Librarians can also search for freely available full-text articles from the open and deep web and provide links to them on the library websites. Also, links to e-books should be provided.

Implications of this study

For the libraries in Nigeria to contribute positively to the emerging online teaching and learning methodologies, the following critical issues should be addressed:

Provision of technological infrastructure

This will help Nigerian academic libraries to begin to develop and implement ICT projects. The technological infrastructure includes hardware and software that are needed to maintain constant support for educational activities by libraries.

Adequate funding of Nigeria libraries

Deployment of ICTs in libraries is capital intensive. Libraries are subscribing to online databases and journals as well as newspapers. These resources constitute huge cost to libraries. These and other issues such as maintenance of library working tools imply that libraries in Nigeria should be adequately funded to be able to support online education effectively.

Capacity building of staff

Librarians must possess the required knowledge and skills to be able to use ICTs to support online education. In view of this fact, Ifijeh and Yusuf (2020) stated that the need for librarians in Nigeria to improve their ICT skills with the urgency it deserves cannot be over-emphasized. The acquisition of ICT skills will not only help librarians to work seamlessly in the virtual environment but also to be relevant in the emerging change in teaching and learning methodologies.

Internet connectivity

The backbone of online delivery is internet. There should be wireless and ubiquitous internet access on university campuses including the academic libraries in Nigeria. These libraries cannot effectively provide online information and reference services without a broad bandwidth of internet connectivity. Online education thrives well where libraries are committed to the provision of web-based services to meet the educational needs of the online learners and researchers.

Integrating librarians and library resources into the teaching-learning process

This usually takes the form of embedded librarianship. It should not be during accreditation exercise that librarians are considered to be relevant and strongly needed. Librarians should be brought to the classroom to interact with the instructors and the students with a view to providing information resources to facilitate the teaching and learning process. In other words, librarians should be regarded as faculties and work with the policy that allows them to be co-instructors, or place them in the classroom (electronic or virtual) with the responsibility of providing information resources that make teaching and learning more interesting and enriching.

Conclusion

The covid-19 pandemic has opened the door for online teaching and learning across the world, despite its threat to higher education. Universities in Nigeria have adopted online teaching and learning as a response to the covid-19 pandemic. University libraries are expected to align themselves with this trend and provide teaching, learning and research materials so as to remain relevant and visible. However, the success of this alignment depends on a number of factors such as the ability of university libraries in Nigeria to learn from global best practices, readiness of librarians to acquire new ICT skills, funding of university libraries and readiness of university librarians in Nigeria to implement open access initiatives. Finally, it is important that university libraries in Nigeria understand fully the roles they are expected to play in the online or blended

learning environment. This understanding will unequivocally reposition these libraries to face the challenges of online education and the threat of covid-19 pandemic.

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