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E-Learning Platforms for COVID-19 Nigerian Academic Libraries

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Abstract

The paper discusses the concept of E-learning which is research, learning, and teaching in the digital environment and how Nigerian Academic Libraries can support it in the COVI-19 global pandemic period. It primarily focused on the transition of academic libraries from mainly analogue to hybrid. The paper traces the outbreak of Covid-19 from Wuhan to Nigeria and the subsequent disruption of academic activities in Nigerian Universities and Libraries. It went further to discuss E-learning in the Academic Library, its benefits and the expectation of the e-learner on the academic Librarian. E-learning plat forms such as CMS, MLearning, Library Websites, YouTube, Pinterest, Podcasts, Instant Messaging (IM), Rich Site Summary (RSS), LinkedIn, Skype, and Google+, MySpace, Library thing, Ning were highlighted. The paper concludes that librarians and academicians ought to work together to assess and give links to legitimate web assets identified with projects and courses of instruction, and the Library should conduct online tutorials for improving the information searching skills of the e-learners and, by so doing, contributing greatly to improving e-learning in Nigeria.
Keywords: E-learning, Nigerian Academic Libraries, Covid-19, Global Pandemic.

INTRODUCTION

The epic Coronavirus (Covid-19) pandemic is reported to have broken out in Wuhan, China, in December 2019. On March 11, the World Health Organisation (WHO) pronounced the COVID 19 outbreak as a pandemic and showed its profound concern on the disturbing degrees of spread and seriousness of spread. At the beginning of the crisis, most African countries, including Nigeria, focused on mitigating local infection through minimizing travel and contact. This response has changed, as the pandemic has since spread into African countries, including Nigeria. By February 27, 2020, Nigeria affirmed and recorded her first case of Covid-19; the index case was of an Italian who returned to Nigeria from his nation of origin. This has resulted in thousands of confirmed cases of covid-19 in the country. In a bid to reduce the spread of the infection, the initial response of the Nigerian Government was to close all schools, including universities by the beginning of March 2020. Consequently, all students ranging from undergraduate to postgraduate students had to leave their university campuses, putting a sudden end to academic activities and disrupting academic calendars across the institutions. According to figures from UNESCO, 1.2 billion children in 186 countries have been affected by school closures due to the pandemic (UNESCO Institute for Statistics, 2020).

The advancement of technologies and the explosion in available information have made the work of the Librarian more complex and dynamic. In addition, academic libraries cater to specific communities (that is, students, researchers and academics); thus, these libraries often adopt new technologies and services faster than other libraries that serve the public generally.

In the COVID-19 era, academic Library, with the avalanche of ICT's, the Library's role has been redefined. Print materials are no longer sufficient to store information. Instead, Blurays databases, electronic document delivery, automated cataloguing, circulation systems and online information retrieval (OPAC) have become the order of the day.

Information is increasingly being created, disseminated, stored, preserved, and accessed digitally, resulting in digital information resources. Digital

information resources represent an increasingly important component of the collection building activities of libraries. Collections are no longer limited to materials housed in the library building but have expanded to include "licensed electronic journals and books, journals and primary resources" Michalak, (2012). Digital resources, also referred to as "Electronic resources", refer to those materials that require computer access, whether through a personal computer, mainframe, or handheld mobile device. They may either be accessed remotely via the Internet or locally.

Universities and libraries were established to meet the needs of lecturers, students, and other members of the University communities. The Library is generally regarded as a knowledge powerhouse, and librarians play an important role in meeting the information demands of users. One of the fundamental laws of the Library is that the resources (books and non-book) must be thoroughly reviewed. The Librarian's job is to acquire and distribute information from the Library's collection. The user is vital in librarianship; that is, the library process revolves around the users. According to a "Whittaker", a user may be defined as "a person who uses one or more Library's services at least once in a year. Librarians of today spent more time at the places of their user (user approach as against system approach), that is, in the various faculties, than they did at their desks. The outward-facing Library involves the Library actively marketing its services to users. With the vast array of licensed electronic journals and digitised materials, collections move away from the physical library structure and more to where the user is. Services in the academic Library have been changing as its users have become more self-sufficient. The role of the Librarian has been affected by the changes identified above coupled with the Covid-19 pandemic.

As technologies become more apparent in libraries, it has become the responsibility of a Library to maintain proficiency in various programmes and devices to train and aid in research. Increasingly users expect the "information necessary for learning and research to be available when needed". Furthermore, with mobile devices becoming more common place amongst students, researchers and academics in Universities, users expect information services to adapt to these platforms.

User Education
According to Ogunmodede & Emeahara (2010), the essence of library user education is to furnish library users with enough knowledge and abilities to utilise library resources adequately, proficiently, and autonomously. Describing library use, Ama and Chikezie, in Maduako (2013), pointed out that it demonstrates examining the library stock, seeking and acquiring help from library staff, finding information, and borrowing a book from Library. It also includes

studying available material in the Library. Thus all the activities carried out in the Library by the user, regardless of whether helped or something else, to meet their information needs may be depicted as library use.

From inception to now, educational objectives in the Nigerian University system have been achieved through non-electronic teaching and learning methodologies with the exception of some few private Universities. Eze *et al.* (2018) posited that the traditional educational system required students to be on campus and to attend lectures, tests, seminars, and other academic assignments in physical buildings. This traditional system is supported by other activities such as library operations and services. As a result, most library services are designed in such a way that users must be on campus to use them. Asogwa *et al*. (2015) stated that most Nigerian academic libraries offered non-electronic/internet-based services. Maybe the only similarity to an online service was the availability of electronic databases. It is observed however that due to infrastructure and maintenance issues, only a few libraries could provide access to electronic databases. Traditional approaches used by universities and libraries, outdated in service as they may be, achieved such results in the accomplishment of the educational objectives of academic Institutions before the outbreak of the Covid-19 pandemic and the subsequent shutting down of universities in the country.

With disruptions on the traditional systems of education, University World News reported that Universities across Africa, including those in Nigeria, are transitioning to online teaching and learning, albeit most of these efforts are still in the planning stages. Until now, the only out-of-campus teaching and learning program that resembled it was the distance education program offered by a few institutions around the country. However, this was no true online learning because students are obliged to visit the campus regularly and are given materials to take home for further study. Atayero (2020) suggested that, following Covid-19, Nigerian universities are beginning to embrace a hybrid teaching approach similar to their counterparts in advanced countries.

As academic institurions transist to online teaching, University libraries in developed countries have also began to use online platforms to meet users' information needs, provide user education, information literacy, and conduct orientation for freshmen (Femandez-Ramos, 2016; Gonzales, 2014). During the Covid-19 pandemic, many university libraries in Europe and the United States continued to provide online services to their users. The University of Sussex, for example, offered not only essential web services throughout the shutdown but also made scholarly papers freely available from publishers (University of Sussex Library).

During the lockdown, ony few Nigerian university libraries was actively involved in providing online information resources to support their institutions educational activities. A routine and random check of some of the libraries websites revealed that nothing was being done to support users' online Education.

Multiple countries have used remote learning and E-Learning strategies to alleviate the impact of school closures on children (online learning). The World Bank has been documenting how many countries have used educational technology to support Distant learning opportunities. In Argentina, for example, educational content is broadcasted on state and private television and radio stations, with lessons led by a teacher and a topic specialist (How Countries are Using Edtech, 2020). Meanwhile, in Malaysia, publicly broadcast education television programs are supported by an online learning platform that delivers on-demand content to students.

What Is E- Learning

E-learning can be defined as "a technological infrastructure with applications and software that manages courses and users". The new developments in e-learning include people-centred learning (as opposed to content-centred learning; a bottom-up learning approach (encouraging student input in courseware creation); dynamic content publishing (creation of blogs encouraging students to publish, comment, and interact, making it a form of social networking; and, folksonomy (students can organise content according to their preferences which enable quick access to learning resources). In addition, E-learning makes use of software that can be referred to as a "Learning Management System (LMS)". To add value to e-learning, the Library can advance and promote online information literacy training through the learning management system.

E-learning has also been referred with different terminologies such as "online learning", "internet learning", "distributed learning", "networked learning", "tele learning", "virtual learning", "computer-assisted learning", "web-based learning", and "distance learning" (Sharifabadi, 2006).

Electronic learning, or e-learning, refers to computer-enhanced learning. It also refers to research, learning, and teaching in the digital environment (Tripathi 2007). It includes online courses, courses combining face-to-face and online access to course materials, and courses that allow access to online discussion forums, notes, and other course materials, according to the definition. Educational content delivered on a computer, educational websites, or computer software that allows knowledge sharing are all eLearning examples. E-learning can be a tool that can make the teaching-learning process more student-centred, innovative, and even more flexible.

E-learning encompasses all aspects of electronically supported learning (whether in networked/non-networked environments) whereby the learner is interacting with teachers, content, and other learners regardless of place and time (Kisanga & Ireson, 2015). E-learning applications and the use of a computer connected to a network allowing people to learn from anywhere, at any time, in any rhythm, and with any device. Raheem and Khan (2020) defined e-learning as the ability to offer and share materials in all kinds of formats as emails, slideshows, videos, PDFs, and Word documents. It is also enabled when conducting webinars (live online class) and communicating with teachers via message and chat forums.

Elearning is broadly classified into two categories, that is synchronous and asynchronous. Synchronous learning occurs in a virtual classroom when two or more people are communicating in real-time. Synchronous Elearning includes online chats, video conferencing, and virtual classrooms. The ability for learners and teachers to ask and answer questions promptly is a significant benefit of synchronous Elearning. Hence, learners can interact with other learners and their teachers during the lesson in the covid-19 pandemic period rather than learning independently.

Asynchronous learning takes place outside of real-time. In this type of Elearning, participants study at a convenient time, using technology such as Email, e-courses, online forums, pre-recorded audio/video uploaded on various platforms such as YouTube and Google classroom. With asynchronous learning, learners will typically complete lessons independently, using the Internet as a support tool instead of taking part in online interactive classes.

Benefits of E-learning in Academic Libraries

Academin institutions are increasingly using e-learning as their primary means of teaching, training and research (Simmons, 2002). Simultaneously, educational institutions embrace the Internet for the delivery of these mandates in the covid-19 pandemic period, both on and off-campus. However, organisations and institutions must comprehend that employing e-learning brings significant benefits to their institutions in order to make this often costly transition.

Some of the benefits for learners and instructors are:
a. E-learning knows no time zones, and location and distance are not a hindrance. In asynchronous e-learning for example, students can simultaneously access online materials, while synchronous e-

b. E-learners can use the Internet to access up-to-date and relevant learning materials and communicate with experts in the field in which they are studying.

c. Situated learning is facilitated since learners can complete online courses while working on the job or in their own space and contextualise the learning.

d. Tutoring can be done at any time and from any location by the instructor.

e. Online resources can be changed at any time, and learners can view the changes in real time.

f. It is easier for instructors to direct students to pertinent information based on their requirements when accessing materials on the Internet.

g. Online learning systems can be used to determine the needs of learners if they are appropriately constructed and provide learners with appropriate library materials from which to choose to attain the required learning goals.

h. Digitised online repository and publishing system that highlights various types of scholarship(working papers, journal articles, dissertations and theses, etc.) are equally beneficial for remote access and use by library users globally. This is part of an open-access initiative that provides open and free access to the scholarly and creative works produced by students, faculty, and staff. By doing so, we not only increase the visibility of our scholarship but also encourage collaboration and innovation to contribute to the ongoing development of knowledge

E-Learners' Expectations From Librarians
What can librarians do to help e-learners? (Cooper and Dempsey, 1998) stated that "Librarians must impose themselves as crucial players in the learning process thereby changing their roles from information providers to educators".Indeed Haricombe (1998) posited that libraries have been transformed from "information gatekeepers" to "information gateways". Lippincott (2002) advocates librarian involvement in learning communities: "In a broad information environment, the librarian can shift his or her focus from describing library resources to fulfilling the ongoing information requirements of students." Librarians have attempted to translate what they do in a traditional library into activities in the virtual or digital environments. Traditional Academic library services' has always been to provide information resources for university teaching and learning activities. It plays a similar role in supporting the virtual learning environment (VLE). To offer a meaningful relationship between learning activities and learning resources, digital libraries and virtual learning environments must be linked. The digital Library can help provide information content to teaching staff who are engaged in teaching. Traditionally, libraries offer circulation

services, interlibrary loans, course reserves, an information desk, a reference desk, and library instruction. In the E-learning environment, Librarians provide remote access to and electronic distribution of library resources to clients connected to their institutional Library largely through a computer network. Additionally, they use communication technologies to give electronic reference services and instructional support. The Library is seen as a source of training and guidance to a community of learners and researchers concerned with navigating the complexities of locating and using digital resources and services.

Moving towards a digital environment has resulted in a shift from the systematic one-to-one information flow of the past to a new model in which the users and the providers of information can relate in a many-to-many, dynamic relationship. In the traditional paradigm, a librarian, for example, acts as a link between learners and information providers by selecting and cataloguing resources and offering assistance to them. In the e-learning model, the Library serves as a facilitator by providing ongoing support that allows learners to interact and exchange knowledge with others, communicate directly with information resource publishers and vendors, and participate in a collaborative effort to make rich collections online scholarly information resources available.

E-Learning Platforms That Librarians Can Use To Provide Users Access To Online Resources
As a result of the Covid 19 lockdown, which forced all educational institutions and Libraries to close their doors, numerous e-learning platforms have been meticulously organised and implemented to provide easy access to online materials and continue academic activity. These e-learning platforms have significantly impacted the educational sector, particularly tertiary institutions and Academic Libraries. This is because it enables learners to choose the most appropriate and flexible learning mode following their preferences or commitments, or both. Rajendra (2009) gave some of the e-learning platforms which have been implemented in various academic libraries to include:

Mobile Learning can be defined as "any learning that takes place in learning environments and spaces that account for the mobility of technology, mobility of learners and mobility of learning". M-learning, is similar to e-learning but with mobile devices (primarily smartphones). According to El-Hussein and Cronje (2010), m-learning is only feasible when "the technology in use is fully mobile and when the technology users are also mobile when they learn". Mobile learning would necessitate the Library also to have mobile-friendly web interfaces. Many database aggregators have already adapted to the mobile environment. Examples are EBSCOhost (2013) and Taylor & Francis (n.d.).. The academic Library being a

critical contributor to higher education teaching and learning needs to adapt to this new environment, especially now with the covid-19 protocols.

Course Management Systems (CMS): Virtual learning systems, Content Management Systems, learning management systems, learning content management systems, and other terms are used to describe CMS technologies. Lessons/courseware, assignments, glossaries, citations to other resources, and other course materials can all be created and managed with CMS technologies. To put it another way, these tools aid in overall e-learning. Moodle, Sloddle, Lecture share, elementK, Blackboard, Author IT, digitalTthink.com India Web Developers, E-learning Solution are some of the course management tools that have become handy in the covid-19 pandemic and post-pandemic period.

Blogs: A *blog* (a truncation of "weblog") is a discussion or informational website published on the World Wide Web consisting of discrete, often informal diary-style text entries (posts). Posts are typically displayed in reverse chronological order so that the most recent post appears first, at the top of the web page; this allows precise information to be disseminated and accessed. Students and instructors can both utilise blogs to keep up with current events. In addition, they are useful to initiate discussions. In their survey, Coyle and Vaughn (2008) found out that blogs were overwhelmingly used Wikis: Wikis are pieces of software that allow users to submit or alter content under the supervision of an editorial board. A wiki is a knowledge base website on which users collaboratively modify content and structure directly from the web browser. In a typical wiki, the text is written using simplified mark-up language and often edited with the help of a rich-text editor. A wiki is run using wiki software, otherwise known as a wiki engine. Wikis are a great place to go for knowledge and links to other websites. Wikis such as Wikipedia and Knol are further examples.

Personal Librarian Services
Personalised librarian service is aimed to help researchers get the most out of the academic library.
Researchers will be assigned a librarian who will:
- Send email and SMS updates about the Library
- Answer questions about the Library
- Assist in locating library resources
- Help when they are not sure where to start with research
- Emails, as well as e-mail-based discussion forums, are useful in delivering content as well as communications about Elearning.

Google Classroom: It is a free service available to charitable organisations and anyone with a personal Google account. Google Classroom is a straightforward web program for creating, publishing, grading assignments and uploading pre-recorded videos and other instructional resources. It provides tailored learning, but it lacks collaborative learning.

Zoom: An academic library can acquire a zoom license or the educator has to sign up for an account for free. It is ideal for short scheduling meetings. Zoom offers a full-featured basic plan for free with unlimited meetings. The teacher can host a live class for 40 min for 100 participants. They can invite students to meetings through an invitation link sent to their Email. They can therefore join the meetings directly on the zoom application. However, recently few concerns have been raised regarding privacy and security.

Google Meet: Google Meet is an instrument on the web for video conferencing. It is the business arranged form of Google's Hangouts stage. It permits clients to dial in telephone numbers to get to gatherings, subsequently empowering clients with a moderate web association with bringing in. If the organisation has a G suite, Google Meet can be a decent choice as it is free. Personnel can welcome up to 250 members to join a class. The downside of utilising Google Meet is moderator has less self-governance like completion show, quiet and unmute all and controlled offer the screen.

Microsoft teams: It is a hub for teamwork in Microsoft 365. If a teacher is looking for something which a combination of Zoom and Google Classroom offers, then Microsoft Teams could be the choice. However, you need to have a paid version of office 365 and a better and faster internet connection to enjoy the live class.

GoToMeeting: It's an online meeting, desktop sharing, and video conferencing software suite that lets you meet with other computer users, consumers, clients, or co-workers in real-time over the Internet.

ResearchGate/Acdemia.edu: ResearchGate is a social networking site for scientists and researchers to share papers, ask and answer questions, and find collaborators/ academia.edu is a commercial social networking website for academics. Academia is well known among academics for spreading misleading spam emails, which falsely claim the recipient has been mentioned in research articles

Skype: Free voice conference calls allow up to 50 people to participate in a video or audio group call simultaneously.

Library Website
Library services are promoted via its website. This is the primary gateway to information about all of

the Library's collections and services. In addition, the Library website promotes access to online databases, eBooks, and other online information resources, Document delivery. Finally, off-campus users can have access to library resources via the use of Mobile Technology.

Flicker: flicker is an image and video hosting service. It was created by Ludicorp in 2004. It has changed ownership several times and is now owned by SmugMug since April 20, 2018. The Verge reported on March 20, 2013, that Flickr had a total of 87 million registered members and more than 3.5 million new images uploaded daily. On August 5, 2011, the site reported that it was hosting more than 6 billion images. Photos and videos can be accessed from Flickr without registering an account, but an account must be made to upload content to the site. Registering an account also allows users to create a profile page containing photos and videos that the user has uploaded and can add another Flickr user as a contact. For mobile users, Flickr has official mobile apps for iOS, Android, and an optimised mobile site.

Messenger: Messenger such as Yahoo Messenger, MSN Messenger can be used for synchronous interaction. Facilities like eZmeeting can also be used for real-time conferencing. The Association of College and Research Libraries (ACRL), for example, has live chat series called OnPoint. Using this tool, the ACRL organises e-learning events for various occasions. Other e-learning platforms that can facilitate access to online resources in the Covid 19 lockdown and post-lockdown period are social media tools such as Facebook, Twitter, WhatsApp, Instagram, YouTube, Pinterest, Podcasts, Instant Messaging (IM), Rich Site Summary (RSS), LinkedIn, and Google+, MySpace, Library thing, Ning, etc. In addition, educational e-learning media such as Academia.edu and researchgate can also facilitate access to online resources. These tools are seen as e-learning and web-based channel of information dissemination and learning which has to permeate all aspects of Education. Due to the outbreak of Covid 19 and the imposition of lockdown, educational institutions have started considering the long term use of teaching and adopting Elearning tools that will enable remote learners to access their online resources for effective educational service delivery.

CONCLUSION

The demand for e-learning is developing rapidly. Subsequently, library administrations have taken on another responsibility. Librarians and academicians ought to work together to assess and give links to legitimate web assets identified with projects and courses of instruction. In so doing, the academic librarian should consider stable electricity and a high-speed internet connection to support a variety of services, such as web servers, proxy servers for remote access, and FTP servers for uploading and downloading large files, as well as appropriate digital library software as a sine qua non for building a virtual library. System librarians need to be trained or employed. Finally, the Library should conduct online tutorials to improve the information searching skills of the e-learners and in so doing, contribute greatly to improving e-learning in Nigeria.

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