

The Impact of the COVID-19 Pandemic on Higher Education in Nigeria: University Lecturers' Perspectives

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ABSTRACT

The entire globe is battling the novel coronavirus disease (COVID-19) outbreak, which has caused a downward spiral in many nations' economies, particularly in the higher education contexts. A growing number of universities have either postponed or cancelled academic activities. A few universities have intensified measures to prevent face-to-face interactions, intending to protect staff members and students from this highly contagious disease. This study investigates the COVID-19 impact on the higher education sector in Nigeria. Interview sessions involving seven lecturers across five universities in three geographical locations of Nigeria were conducted. The interview data were gathered using digital applications, such as Zoom cloud meetings and Skype, transcribed into a textual format, and further analysed. Six themes with corresponding sub-themes emerged from the study. In the final analysis, results revealed that COVID-19 negatively impacted several universities. This study presents opportunities for responding issues, problems and trends that are currently arising and will arise in the future due to the impact of the COVID-19 pandemic in the Nigerian higher education system.

Keywords: *Impact; Higher Education; Lecturers; COVID-19; Pandemic; Perspective; Nigeria.*

INTRODUCTION

The coronavirus pandemic has impacted the world in a lot of different ways and magnitude. Of interest is the devastating impact the new virus has had on the educational systems the world over

(Ebner et al., 2020). Part of the grim consequences includes the spontaneous shutting of schools and sudden switch to remote learning in some jurisdictions as an alternative strategy to sustain the educational process. Also, critical players in the educational milieu such as educators, lecturers, and researchers are faced with the challenges of coping within the debilitating impact of the coronavirus disease. As part of the countermeasures adopted by governments and institutions worldwide based on the health advisory by the WHO (2020 situation reports) included regular handwashing, face masks, physical, and social distancing measures.

According to Viner et al., (2020), as of the 18th of March 2020, 107 countries had closed their schools in response to the spiralling coronavirus (COVID-19) virus. Nonetheless, some countries activated the UN's charter on alternative teaching models during the crisis period. In addition, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) reported that over 800 million children and youth were affected by these countermeasures of school closures. Similarly, UNESCO (2020) noted that over 87% of the world's student population are affected by COVID-19 school closures. Recognizing the existential threat posed by the virus on the world's vulnerable children and youth's access to education, the educational spectrum is being reimagined and re-engineered using different measures and strategies to attenuate the COVID-19 impact. Among others, UNESCO floated a global coalition to promote and sustain best practices in the distance, flexible, and remote learning practices fostering children and youth's access to education who are most at risk of exclusion (UNESCO, 2020) to ensure learning never stops (#Learningneverstops).

Moreover, despite the alternative learning measures adopted by some of these countries, (Ebner et al., 2020; Huang, R. et al., 2020; Huang, R. H. et al., 2020) many students are excluded from the educational process. According to UNESCO (2020) as cited in Huang et al., 2020, as of April 2020, over 1.5 billion learners have been excluded from the normal learning process across the globe due to the school closure measures. In addition, some of these countries were only able to seamlessly change gears and transmitted to the alternative medium because they have invested and provided the necessary digital platforms and personnel skills upon which rests the remote teaching mechanisms.

In contrast, developing countries, particularly in sub-Saharan Africa, constrained by low financial muscle, poor Internet infrastructure, competing budgetary needs, and personnel skill gaps (Chitengu, n.d.) are struggling to cope with the disruptions caused by the pandemic. Despite the handful of efforts made by some state governments in Nigeria to adopt the alternative teaching model or e-Learning programs (such as television and radio school broadcasts), more than 75% of the federation states had their schools under lockdown. However, there is an apparent lack of evidence-based data on the success of the e-Learning solutions and the extent of the organizational, institutional, and digital skill readiness in delivering optimal teaching and learning outcomes using the flexible learning or remote learning medium during health emergencies. Understanding these phenomena is essential because it helps guide curriculum and instruction design that optimizes citizens' learning opportunities and provides insights into how resource-constrained communities could deal with educational challenges during health emergencies and academic disruptions.

Beyond the disparate forms in which the Coronavirus has impacted on the wider spectrum of entities in business, economy, politics and education, the pandemic offers a window of opportunities for new experiences, reimagining the educational process, and extending the frontiers of knowledge through empirical research and experimentation of different learning pedagogies and use of technology. In that sense, the objectives of this study are to: (i) present an overview of educators and scholars' experiences from the global and local perspectives in terms of the impact of COVID-19 on education, measures taken if any, to address the challenge in fostering education, and practical lessons learned from the experiences; (ii) provide the background for relevant theories to support education during emergencies such as COVID-19, and (iii) present the contextual

analysis of experts in higher education institutions (HEIs) in Nigeria regarding how COVID-19 has impacted HEI, what steps and practices are being taken to maintain continuity of learning, and what is the future outlook of education in pandemic situation based on their professional expertise. In addition, the study also aims to unravel the competences, availability, and infrastructural adequacy for remote learning within the context of Nigeria; and to identify sustainable practices that will inform curriculum planning, design, and implementation for an effective response to similar crisis and during the period post pandemic. Specifically, the present study seeks to answer the following research questions:

- (i) In what ways has the coronavirus disease impacted on the academic activities in the Nigeria universities?
- (ii) What are the measures taken by the university managements and lecturers to sustain academic activities amidst the coronavirus disease?
- (iii) What are the practices and pedagogies that were informed by the impact of the COVID-19 that might guide curriculum design and implementation?

The rest of this paper is structured as follows: literature review, theoretical underpinning of the study, and the methodology adopted to get the participants' perspectives, emergent themes from the interviews as well as the findings. The paper concludes by summarising the contributions to date and highlights potential directions for future research.

LITERATURE REVIEW

The COVID-19 pandemic has challenged the norms and the conventions of doing things at different contexts, the novelty of the disease and the limited availability of approved therapeutics in some countries to deal with the pandemic has made the non-clinical measures of social distancing, and hygiene measures the most viable options in tackling the pandemic. These measures virtually affect every aspect of human life, including education. Schools, universities, libraries, and other educational institutions were closed in compliance with the disease control protocols to reduce the disease's spread through social contact (Jandrić, 2020). According to Setiawan (2020), many difficulties were recorded that impacted teachers and learners. UNESCOa (2020) reported that over 70% of the world's student populations were affected due to the closure of educational institutions with a varying form of school closure. Meanwhile, some countries had a localized closure, while others had country-wide closure (ECW, 2020). This section reviewed relevant articles to get a sense of the education sector experiences across diverse contexts.

Teaching and learning during COVID-19: A global and local perspectives

From the global perspective, concern on how learning and teaching can be organized during the COVID-19 pandemic was raised (EAEA, 2020). Responding to this concern, a recent study by Reimers and Schleicher (2020), published by the Organisation for Economic Co-operation and Development (OECD) investigated the educational responses to COVID-19, approaches adopted by countries to provide teaching and learning to students, and instructional training and development for teachers and parents during the stay-at-home period. Therefore, countries are making paradigmatic shifts, for instance; China, Japan, Malaysia, United States of America, United Kingdom, South Africa, and South Korea and other countries who are also impacted by the COVID-19 virus switched over to remote teaching and learning medium (Ebner et al., 2020; Huang, R. et al., 2020; Huang, R. H. et al., 2020; UNICEF DATA, n.d.). Shortly after the outbreak of COVID-19 in China, the Chinese government ordered a nation-wide closure of schools and immediately implemented an emergency home-schooling plan through the Ministry of Education (Wang et al., 2020). This plan involved delivering organized courses online and through TV broadcast. In another study, Zhang et al. (2020) reported how China launched an educational emergency management policy, entitled "Suspending Classes Without Stopping Learning" (Zhang et al., 2020). The policy,

which was set up to curb the spread of the pandemic by limiting in-person teaching at schools and moving over to the online learning model, (Zhang et al., 2020), also aims to integrate China's national and local school teaching resources, provide rich, diverse, high-quality online resources for all students across the country. The policy supported teachers' online teaching and children's online learning (Ministry of Education of the People's Republic of China in 2020, as cited in Zhang et al., 2020). Nevertheless, there is a raging debate on how effectively this policy could be implemented, and the viability of online learning compared to traditional in-person learning is still being contested.

Furthermore, at the University of California USA, several models were adopted by a group of medical professionals to provide knowledge for surgical residents and mitigate the loss of in-Person academics and minimize mass casualty among surgical residents (Chick et al., 2020). According to Chick et al., their innovative model adopted for teaching and learning during the pandemic includes flipped virtual classroom, online practice questions, academic conferences via teleconference, telehealth clinics with resident involvement, and facilitated surgical use videos. A study revealed that most European countries are supporting education during the pandemic by providing digital content and educational materials to support online distance learning (Reimers & Schleicher, 2020). For example, in the Czech Republic, the Ministry of Education has launched a website¹ equipped with online education tools. A similar approach is adopted in Estonia, where the Ministry of Education and Research (MoER) partners with Foundations to provide support and guidelines on distance learning to keep academic instruction ongoing. The same approach goes for Finland students, where the Finnish National Agency for Education is guiding schools to organize different kinds of flexible learning by leveraging already established online educational platforms. In France, a free pedagogical platform tagged: "My class at home" is used to provide virtual classes, making it possible to maintain the human link between students (Reimers & Schleicher, 2020).

Elsewhere in Georgia, Basilaia & Kvavadze (2020) revealed that the government-supported online distance learning by adopting online portal, TV School, and Microsoft teams for public schools and the alternatives such as Zoom, Slack, and Google Meet in some cases, were used. Their report also shows that virtual classrooms have been created for all school classes and subjects in the Microsoft TEAMS program. As reported in a study the Georgian government agency, Education Management Information System (EMIS), carried out several activities to support ongoing education during the COVID-19 pandemic where over 600,000 students and 55,000 teachers in public schools are actively profiled on Microsoft Office 365 for online learning (Reimers & Schleicher, 2020).

From the African perspective, statistics from UNESCO on the impact of COVID-19 on education, as of the time this study was conducted, shows that all countries in Africa except Burkina Faso had a country-wide closure of educational institutions (UNESCO, 2020). This indicates that the impact is perceived to be more in those regions that had country-wide closure if alternative means of teaching and learning were not provided. For instance, in the case of South Africa, the study by Ojo & Onwuegbuzie (2020) revealed that some universities' decision to open their schools for online learning in April 2020 created mixed reactions among their students. Most of the students complained about several inconveniences they encountered by studying from home. The study revealed issues such as noise and disturbances from the home environment, limited Internet connection, and lack of consistent electricity, which affects their academic performance. In addition, the government of South Africa had directed that each university should make a mitigation plan, that is, online study delivery as an alternative method for teaching and learning to curb the spread of the disease (Chothia, 2020). While it seems that the devastation caused by COVID-19 on

¹ <https://nadalku.msmt.cz/cs>

education has pushed most nations to seek an alternative for teaching and learning, South African scholars have expressed concern over the level of training and experience of educators in the pedagogy for effective delivery of online learning (Hedding et al., 2020). As part of the effort to create more opportunities to learn during the lockdown in South Africa, a study by Mhlanga & Moloi (2020) reported the launching of "STEM Lockdown Digital School." According to Mhlanga & Moloi (2020), this an initiative where more than 34 public and private school teachers were organized to teach through a live stream on "Africa Teen Geek's" social media pages such as Facebook, Twitter, and Ms Zora. A similar experience was reported in the northern part of Africa. For example, a report from Egypt shows that most private universities in the country switched to online teaching through Moodle, Microsoft class Notes, Microsoft Teams, email, and Zoom (Crawford et al., 2020). In Nigeria, over 39 million learners including pre-primary and tertiary students were asked to stay at home during the pandemic situation (UNESCO, 2020). Consequently, students face barriers from accessing learning materials, receiving mentorship, counselling from teachers, and other supports that are easily made available in a face-to-face learning environment. Besides, teachers are not left out of the impact of school closure due to COVID-19 pandemic. Reports from some parts of the world suggest that teachers will experience temporary or permanent layoff during and post-COVID-19 (Hernandez, 2020).

Considering the problems highlighted above, it is important to examine how the situation is being handled, what are the measures taken, and what has been done in different contexts. Hence, this section reviewed related studies conducted in different context (global and local) regarding the approach governments, educators, and educational institutions have taken to ensure continuity of teaching and learning during the COVID-19 pandemic. In the next section, we present an overview of the learning theories and methods relevant to teaching and learning in situations such as a pandemic.

THEORETICAL FOUNDATIONS OF THE STUDY

Learning theories explain how people learn - and they evolve from various fields of life such as psychology, sociology, neuroscience, and education (Picciano, 2017). Over the years, several learning theories have surfaced. In this section, we discuss the relevance of two learning theories as the theoretical foundation for this study, leveraging the literature by Strauch, Jamal, & Omar, (2014).

Social Constructivism explains teaching and learning as social phenomena between teachers and learners (Taguma, Feron, & Lim, 2018). It is a clear departure from the idea that teachers are custodians of knowledge, instead the theory considers teachers as facilitators in the learning process (Isbell, 2011; Zawacki-Richter et. al., 2019). Advocates of this theory believe that learning is about finding solutions to problems and that the social construction of solutions is the essence of the learning process (Picciano, 2017). In other words, problem-solving through collaboration is the primary objective of social constructivism. Many social media solutions developed for collaborations are leveraged in this COVID-19 pandemic and social distancing era. In the view of social constructivist, teachers could develop social relationship with their students to support their remote learning during the school closure.

Connectivism is often referred to as the learning theory for the digital era, as it describes how people learn in today's "technology-driven" society (Shrivastava, 2018). The theory is based on the premise that the older learning theories – behaviourism, cognitivism, and constructivism– are inadequate to explain how learning happens in the present technology-driven era (Siemens, 2005). While the older theories are anchored on the idea that learning occurs inside a person, the connectivist metaphor presents the notion that technology has now made it possible for learning to happen outside of a person's brain and may be stored in a variety of digital formats (Kop & Hill, 2008; Shrivastava, 2018) – such as databases. According to Siemen (2005), knowledge does not only reside in the mind of a person but it in a distributed manner across a network. An information network contains several nodes - a node is a learning community that serves as a cluster of similar interests that allow for interaction, sharing, debating, and thinking together (Elmohamady & Azmy, 2016, Kop & Hill, 2008; Siemens, 2005).

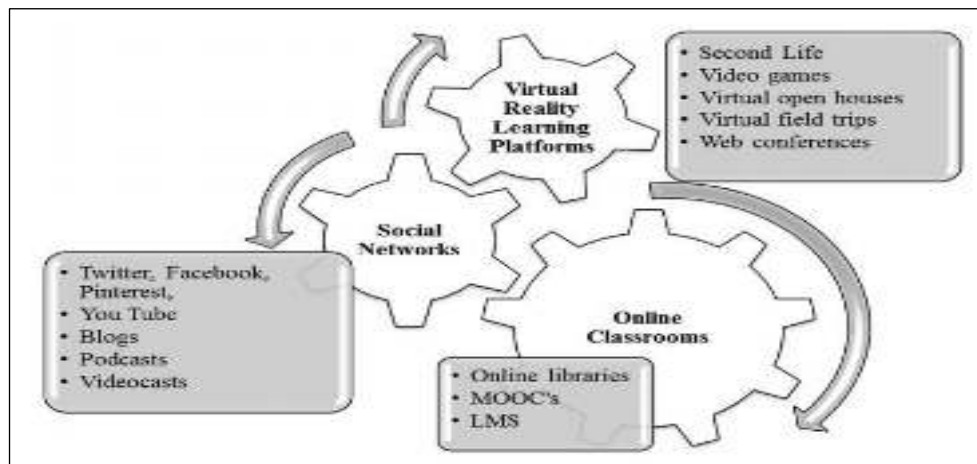


Figure 1: Connectivism learning theory for the digital learning era (Kropf 2013, pp. 15)

This study regards the connectivist viewpoint as the most relevant learning paradigm in this current situation where students are confined to learning at home due to COVID-19 pandemic. Firstly, connectivism theory captures the importance of the online collaborative learning and sharing in this age. Secondly, connectivism is the only theory that recognises the presence of the Internet and best explains how people learn in the era of ever-increasing and rapidly changing information due to technology advancement and the ubiquitous access to the Internet. Thirdly, according to Kropf (2013) connectivism fosters the "design of learning materials, resources, or situations to help learners achieve their learning outcomes and maximize their learning potential" (pp. 15). The research by Shrivastava (2018) demonstrated how connectivism fosters lifelong learning in students by conducting an exercise between student groups in two different institutions based in two different countries. Similarly, research found that the use of a web-based instructional model based on connectivism raised the level of students' problem-solving skills in ICT for daily life (Sitti, Sopeerak, & Sompong, 2013). Consequently, this study was grounded on the premise of social constructivism (Vygotsky & Cole, 2018) and the connectivism learning theory (Siemens, 2005), given that the study sought to understand how the social distancing measures, school closures and emergency remote learning, adopted to navigate the challenges posed by the COVID-19 pandemic impacted the connection with students and contemporaries. Further, the study attempts to understand the impact on continuous engagements in the education process using available digital technologies based on the experiences of lecturers. Social constructivism is central to the study because it encapsulates learning in communities, and individual construction of knowledge based on the mediation of digital collaborative technologies. Although associating a single learning theory

within an individual learning application is vital (Chen et al., 2007 as cited in Choudhury & Pattnaik, 2019), underpinning a study with more than one learning theory based on the complexity of the phenomenon may be a plausible way to better the understanding of the issues in focus. Therefore, social constructivism and connectivism was chosen to provide insightful understanding of the impact of COVID-19 on HE based on lecturers experiences in Nigeria.

TECHNOLOGY MEDIATED TEACHING AND LEARNING METHODS

Flexible learning

Flexible learning may be defined as an educational approach that uses various student-centred teaching and learning techniques, resources and flexible administrative practices that respond to the needs of diverse categories of the student population (Bridgland & Blanchard, 2013; Winnie, 1994). During the COVID-19 pandemic, various governments around the globe made efforts to facilitate flexible learning to minimize the effects of the academic disruption. In China, the “Disrupted classes, Undisrupted Learning” initiative was established. This was aimed at providing flexible online learning to over 270 million students from their homes across the country (Huang et al., 2020). Similarly, the Australian government launched an initiative titled: *The Flexible Learning Toolboxes Project*. The aim was to encourage implementation of flexible learning modes by making available a set of learning resources intended for web-based delivery in a manner which facilitates customisation and reuse of existing infrastructure in the country’s vocational education and training system (Oliver, 2001).

Remote teaching

Remote teaching is the kind of teaching that happens outside the typical classroom settings and is often facilitated using digital platforms - such as learning management systems, online classroom, online conferencing tools. Teachers and learners are usually separated by physical distance and sometimes by time (Owens, Hardcastle, & Richardson, 2009). A recent study by Trust & Whalen, (2020) investigated the ease for educators to shift from their traditional in-person to remote teaching during the COVID-19 pandemic. Trust & Whalen’s study shows that teachers who used technology frequently in their practice had a much easier transition to remote teaching, but most educators seemed to be learning about online and remote teaching for the first time while teaching remotely as a result of the school closure (Trust & Whalen, 2020). In another study, Geiger & Dawson (2020) shares how a K-12 public school in Florida, United States of America transitioned to remote teaching during the COVID-19 pandemic. One key point is that their ability to plan and execute the transition successfully was predicated on years of leadership and professional learning focused on remote teaching, blended learning, and related concepts. Similarly, an earlier study conducted in Australia to explore the experiences of students studying via remote teaching highlighted the following issues with remote teaching: a sense of isolation, the attitudes and knowledge of the teaching staff; and students’ knowledge and use of learning technologies (Owens, Hardcastle, & Richardson, 2009).

Technology-enhanced learning

The term Technology-enhanced learning (TEL) is used to generally describe the application of technology to teaching and learning. It is any technology that enhances the learning experience. The term can be used to describe both analogue and digital technologies (Cullen, 2020). In China, a nation-wide TEL platform was developed as part of the “School’s Out, But Class’s On” campaign – designed to ensure continuity in education during COVID-19. In less than two months of operation, nearly 270 million schools have conducted online studies via the platform (Zhou et al., 2020). The initiative is now considered to be not just a crisis response plan to the pandemic but as an exploration of a new type of education using modern technologies (Zhou et al., 2020). Wyres &

Taylor, (2020) gave their account of a TEL built to ensure the continuity of healthcare education in the United Kingdom during the COVID-19 pandemic. As certain critical facilities were no longer accessible to learners, TEL platforms provided simulation features such as mock wards, patient houses, and intensive care surroundings as well as 360° field-of-view cameras.

As many institutions across the world are switching to technology-enhanced learning, such transition in developing countries has been reported to be problematic (Gulati, 2008). In Nigeria, for example, the challenges that may disrupt the transition to TEL includes lack of preparedness of the institutions, lack of infrastructure, an epileptic power supply, high cost of Internet data services, paucity of funds and policies and issues in the education sector among others (Adeoye et. al., 2020).

RESEARCH METHODOLOGY

This study adopted a qualitative design method grounded in the descriptive phenomenological approach as recommended by (Neubauer et al., 2019; Tashakkori & Creswell, 2007; Creswell, 2016). The phenomenological approach was chosen based on the research objectives and the tendency of the research technique to foster the understanding of the impact of the COVID-19 phenomenon on higher education in Nigeria from the lived experiences of individuals, and to project the universal essence of the phenomenon under investigation. Also, for the ethical factor of non-interference by the interest of the researchers given that the COVID-19 pandemic and how it has impacted on university education in a developing context (Nigeria in particular), is the subject of interest. Furthermore, the methodological structure as utilized by Tavakol et al., (2012) and Kumar and Al-samarraie (2018) was also leveraged to analyse the data based on the varied perspectives of the respondents, identifying the units of meaning within the texts and drawing them into themes to form textual descriptions on the impact of the COVID-19 pandemic. In addition, synthesizing the data with the ways in which they were affected to form a common perception of the phenomenon from using the shared imagination of the authors.

Data Collection

In seeking answers to the research questions within the study, semi-structured interviews were conducted using the digital applications such as Zoom cloud meetings and Skype meetings. Seven lecturers participated in the study, selected from five universities across three geopolitical contexts in Nigeria. According to Corsello, et. al., (2020) research outputs during a pandemic should bring forth accurate answers to an appropriate exploratory question that can be applied to the specific population, and this cannot be achieved by small number studies. However, smaller sample size is intuitively more appealing in qualitative research as its concern is more about gathering in-depth information (Tovar and Piedra, 2014). The sample in this study is limited due to the COVID-19 mitigation measures of school closure and as a result, the respondents could only be reached through network sampling (Babbie, 2013), moreover, the convenience sampling technique was deemed appropriate for its simplicity (Marshall, 1996). Also, because efforts were made to ensure that all the participants were from the university setting and satisfied a range of conditions such as number of years in service, rank, discipline or specialization, and geographical location, a judgemental approach was also involved.

All the lecturers were on ground before the coronavirus disease was declared a pandemic on March 20th, 2020, by the World Health Organisation (Viner et al., 2020) and experienced the unfolding events regarding the pandemic at their different locations within Nigeria. The lecturers were informed that their participation in the study was voluntary and were also duly informed of their rights to withdraw their consent should they feel the need to do that at any point during the research. Consequently, the participants were informed of the importance of their participation and the commitment to anonymize their identity in the report as well as the recording and transformation of

the interview data into textual data. The interview was structured into sections, section one sought the socio-demographic information of the participants such as rank, years of experience teaching in their respective institutions and their areas of specialization /discipline, and the interview spanned between 20 minutes and 30 minutes. The sessions were recorded, transcribed, and reviewed based on the research objectives.

Data Analysis

To analyse the data, the quantum of the lecturers' expressed perceptions and lived experiences on the impact of the COVID-19 pandemic on university education had to be broken and reduced into smaller categories. Therefore, we adopted the analytical pattern used by Tavakol et al., (2012), hence, deploying the qualitative analysis software 'NVivo' version 12.0 to analyse the data. Each interview record was transcribed into texts, read, and reread to infer units of meanings from them regarding the impacts of the COVID-19 on university education within the contexts of the respondents. The unit of meanings were then coded into themes from the corpus of meanings extracted from the transcripts, six broad themes were then identified from the lecturers' account of their experiences with the COVID-19 pandemic and the different ways in which their universities responded to the challenges thereof, as well as the infrastructural availability, personnel skills and the strategies enacted to contain /sustain teaching and learning amidst the COVID-19 pandemic.

RESULTS

Table 1 presents the socio-demographic data of the respondents. The socio-demographic profiles of the respondents shows that 44.3% (n-3) of the respondents are within the age range of 36-40 years, 28.5% (n-2) fall within the age range of 31-35 years, while the respondents (totalling 28.6%) are within the age range of 25-30 years and above 40 years respectively. In terms of gender, 28.6% (n-2) of the respondents are female, while the other 71.4% (n-5) are male. Six of the respondents (85.5%) have teaching experiences between 2 -10 years, whereas only one of them has above ten years teaching experience, two of the respondents (28.6%) have remote teaching experiences. However, all the respondents admitted owning digital devices, as well as having access to the Internet albeit with poor quality and infrastructure. Furthermore, six of the respondents (85.8%) are affiliated to public universities with only one (14.2%) working in a private university setting.

The participants were then asked three questions related to the study objectives to elicit their perspectives on the impact of the pandemic, personnel skills for remote teaching and the strategies enacted to ensure teaching and learning within the pandemic. The unit of meanings were categorized into clusters of five themes and sub-themes as follows: *Impacts of the COVID-19*: Teaching and Learning, Students, Lecturers. *Personnel digital skills / Competences*: Remote teaching skills, pedagogical skills, digital skills. *Strategies*: Student engagement: Project supervision, remote teaching, *Social engagement*: Virtual departmental meetings, Faculty meetings and *Challenges*: Lack of skills/technology to drive the remote teaching and learning, poor internet infrastructure, and lack of remote pedagogy policy framework. The themes are discussed based on the narratives from the participants to demonstrate the ideas, illuminate their experiences, and to infer policy and future directions.

Table 1: Socio-demographic profile of the respondents

Profile	Variables	R ₁	R	R ₃	R ₄	R ₅	R ₆	R ₇	No	%
Age	25-30	*	*	√	*	*	*	*	1	14.3
	31-35	*	√	*	*	*	*	√	2	28.5
Gender	Male	√	*	√	√	√	*	√	5	71.4
	Female	*	√	*	*	*	√	*	2	28.6
Discipline / Course	Adult Education	*	√	*	*	*	*	*	1	14.3
	Architecture	*	*	*	*	*	*	√	1	14.3
Teaching Experience	Computer	*	*	*	*	√	√	*	2	28.5
	2-6 years	√	*	√	*	√	*	*	3	42.9
	7-10 years	*	√	*	√	*	√	*	3	42.9
	Above 10 years	*	*	*	*	*	*	√	1	14.2
Remote teaching experience?	Yes	*	√	*	*	*	*	√	2	28.5
	No	*	*	*	*	*	*	*	5	71.4
Accessibility, infrastructure, and quality of internet	Yes	*	√	*	*	√	*	*	2	28.5
	Somewhat	*	*	*	√	√	√	√	4	57.2
	Not available	*	*	*	*	√	*	*	1	14.3
Ownership of digital devices (Mobile & PCs)	Yes	√	√	√	√	√	√	√	7	100
	No	*	*	*	*	*	*	*	0	0.00
University setting (ownership)	Public	√	*	√	√	√	√	√	6	85.7
	Private	*	√	*	*	*	*	*	1	14.3
	Partnership	*	*	*	*	*	*	*	0	0.00

Legend: R: Respondent, *: Nil, √: ok

Figure 2 below shows the emerging themes drawn from the interviews.

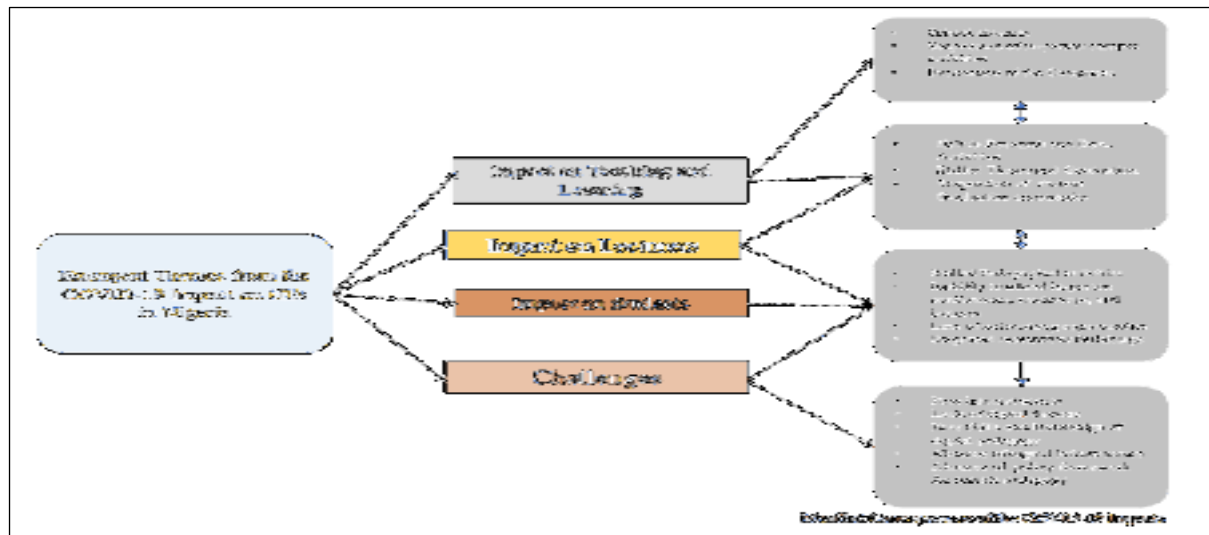


Figure 2: Emergent Themes within the study

IMPACT OF THE COVID-19 PANDEMIC: EDUCATOR INSIGHTS

Questions were posed to the interviewees regarding their academic experiences in the midst of the COVID-19 pandemic and its impact on the academic activities. The questions comprised the lecturers' perceptions on competencies in transitioning to remote teaching, institutional involvement, and readiness, as well as the technological and pedagogical strategies adopted to ensure learning never stopped due to the pandemic. The responses were captured and mapped into themes and sub-themes as follows: impact on learning, impact on students based on the lecturers' experiences, and impact on the lecturers and challenges encountered. Narratives from these themes and sub-themes are discussed in the section below.

Impact on Teaching and Learning

Most of the lecturers reported that their schools were closed, and students asked to leave the school premises, while all in-person activities within the schools were suspended. The following excerpts are from the respondents.

"Well, I think there have been negative impacts of the pandemic on education. but I would like to mention a few... the first is that it has stopped learning, I mean school is closed, and learning is not going on" [R2]

"It really affected the teaching and learning process; no form of teaching and learning is going on. Not just at the tertiary level" [R1]

"We don't have students in school.... so seriously the pandemic has affected almost everything drastically in the university" [R5]

Conversely, a few of the participants reported a positive outlook of the impact of the pandemic as they say that their institutions were not closed as such academic activities were still ongoing.

“... as for educational impacts, all our students are at home, and they are learning from home” [R3].

Another participant noted thus,

“It has affected me because right now, we are on Google Classroom on the internet, posting materials for the student group to read and maybe then maybe get feedback. I am even supervising some students online” [R7]

IMPACT ON STUDENTS

Thesis/Dissertation and Graduation

The participants also highlighted the impact of the COVID-19 school closure on the students. Some of the ways in which they said it affected the students, particularly the undergraduate students who are in their final year, and the postgraduate students who are writing their dissertations under the guidance and supervision of some lecturers including the students in graduation classes. According to these participants, the students are negatively impacted in the sense that they could not proceed with their dissertation as the physical distancing measures prohibits in-person consultations.

“... some of the students were at the verge of graduation before the pandemic, as a result of which this could not happen” [R4]

Poor reading culture among the students

A participant suggested that another way the students are negatively impacted is the deepening of their learning crisis due to the apparent bad reading culture amongst the students. They asserted that the students will not learn anything within the period of the pandemic because they are not given to independent reading. Below is an excerpt from one of the respondents.

“I would like to also mention the kind of students we have.... you know our students do not normally read as they are at home now, hardly will you find a good number reading their books” [R6]

IMPACT ON LECTURERS

Failure to attend physical Conferences and Workshops

The participants reported that some of them were also hit by the school closures in such a way that they could not participate in physical activities that promote their personal and professional development such as in-person participation at conferences and workshops. They argued that even though it has been conducted using digital technologies, they missed the opportunity to network and forge new bonds of professional friendships due to the pandemic. One of them stated that

“... for me, I was slated to attend two different conferences but could not do so due to the travel restrictions caused by the pandemic” [R4]

Another respondent reiterated thus,

“I was supposed to attend a conference in Tanzania early this year but because of the COVID 19, that couldn't happen, So physical conference attendance, of course has been affected” [R2]

Stalled research activities and graduation

A few numbers of the participants who are undertaking postgraduate courses lamented their inability to continue with their studies and research because of the impact of the pandemic. Below are the responses from some of the interviewees.

"... I am also a student; my work is now on hold due to the social distancing measures. I needed to go to the field to obtain data, things I can't do now" [R7]

"... we have some of our colleagues who supposed to have finished their program and came back to serve the university could not return because everything has stopped" [R2]

COMPETENCES AND STRATEGIES ADOPTED TO SUPPORT ACADEMIC ACTIVITIES DURING COVID-19

This subsection focuses on measures taken by university lecturers in terms of personal skills or competence possessed or acquired to sustain academic activities during the COVID-19 pandemic in Nigeria. These skills were used to engage students' virtually. The subsection is further grouped into remote teaching skills, pedagogical skills, and digital skills as reflected in the interview data.

Remote teaching skills

Most of the lecturers alluded to having the skills to teach remotely. Some mentioned that the skill was acquired based on their background while some possessed the remote teaching skills because of the training they had. The narratives below are from the respondents.

"... based on my background, I am very familiar with the use of technology tools. I have the competency to switch to virtual models, it can only affect those that are not in the ICT field" [R3]

"I am familiar with online teaching and learning before the pandemic" [R3]

Pedagogical skills

All the participants adduced to having one form of pedagogical skills or another.

"I have been teaching a distance learning course online, distance learning has been part of my specializations in Adult Education" [R6]

"With my colleagues in the computer science department ... most of us have been trained ... to ensure we have the requisite knowledge and the experience to undertake online teaching" [R1]

Technology-mediated teaching skills

Some of the respondents also declared their ability and competence in using digital technologies to facilitate teaching activities which are shown in the following statements.

"For now, we are teaching the students from home using the Google Classroom and WhatsApp applications" [R3]

"We use Telegram to teach students because of its uniqueness and flexibility of space. For instance, last session we used Moodle LMS for teaching and assessment of our courses" [R5]

From the submissions of the respondents, it can be seen that the interviewees all reported that they have the remote teaching skills, required pedagogical competences and digital skills for transitioning to alternative teaching methods during emergencies.

LECTURERS' RESPONSES TO THE COVID-19 IMPACT

This subsection highlights the strategies employed by the lecturers to engage the students during the COVID-19 pandemic and the attendant consequences. Two main sub-themes were captured in the interview data regarding lecturer's engagement with the students and faculty despite school closure, consequently we grouped these themes into two domains namely: Student engagement, which include project supervision, and remote teaching and social engagement, which comprised faculty and departmental interactions such as meetings and academic discussions.

Student engagement through:

Project supervision

Since schools were closed and teaching and learning were halted, some of the respondents continued engagement with students on virtual project supervision and transitioned to emergency remote teaching. Their narratives include:

"I engage most of my project students online. They send to me; I go through and respond to them online" [R6]

Remote teaching

Others taught their students from their homes using remote applications.

"We use Google Classroom for sharing materials with the students and get feedback from them through the same medium" [R7]

"For now, we are teaching the students from home using the Google Classroom and WhatsApp classroom" [R3]

Social engagement:

Virtual meetings

Some of the interviewees also conducted faculty-based interactions using digital platforms such as Zoom cloud meetings, Skype, Google Meet, etc.

"There is a general platform where lecturers communicate in the faculty and the department. We use Telegram and WhatsApp applications" [R6]

CHALLENGES

Some of the inhibitions were also mentioned by the participants and this included a) *lack of skills among personnel and students; b) poor or lack of digital technology infrastructure; c) lack of access to internet/digital divide; and d) poor reading culture among students*

"We couldn't switch to the remote or virtual teaching, there are no technologies to drive such platforms" [R4]

"We do not have the required infrastructures coupled with poor facilities and attitude and what I can call 'lack of tools'" [R2]

DISCUSSION

Most of the educational institutions across the world were closed, meanwhile, some institutions migrated to the emergency remote teaching medium as the 'new normal' (Rotas & Cahapay 2020). The analysis of the qualitative data obtained from some educators across universities in Nigeria confirmed the COVID-19 crisis and its negative impact on the academic activities. All institutions from K-12 to higher education were closed in compliance with the WHO (2020) protocol on the initial response to the novel virus while they ponder on the best way to deal with the pandemic. Specifically, in the universities in Nigeria, teaching and learning was completely halted, consequently, students who are in their final year were scheduled to graduate at a given date – had their graduation suspended pending the government's decision to reopen the institutions. Many lecturers were also affected as they were unable to continue with their research projects during the closure. Others who were undertaking advance study programmes in Nigeria and those booked to participate in conferences (both local and international) were also affected by the nationwide lockdown (Akinyemi et. al., 2020).

The narratives align with the experiences of other educators and students in other contexts. Researchers such as Almarzooq, Lopes, & Kochar, (2020); Megaloikonomos et. al. (2020); and Zhang, Wang, Yang, and Wang (2020) reported nationwide school closure by the Chinese government as an initial response to the outbreak of the virus. However, the Chinese Ministry of Education activated the home-schooling policy to ensure learning never stopped. The report of Khattar, Jain and Quadri (2020) confirms that COVID-19 utterly interrupted learning styles of the students. Students were affected emotionally, socially, and mentally. Pather et. al. (2020) also reported that the teaching activities of lecturers in New Zealand and Australia were adversely affected by the pandemic. Additionally, Noor et al., (2020) highlighted high cost of data, uncooperative learners, low teachers' technology self-efficacy and poor network infrastructure as major impediments to online pedagogy in Pakistan.

In contrast, most schools in Nigeria remained closed with only a handful of private institutions; secondary to higher education transitioning to emergency remote teaching measures. And the situation remained the same for the most part of the first phase of the pandemic. Nigeria recorded the first COVID-19 case on 24th February 2020, while schools were closed on 23rd March 2020 in response to the spike in the cases. This situation exposed the fragility of the education system in Nigeria as there was no clear cut policy framework to direct the institutions on the alternatives to traditional classroom practices. In addition, there are also no infrastructure to drive the activation of the remote teaching mode as well as issues around digital divide, ownership of digital devices and the skills to operate them and this applies to most of the developing countries (Rotas & Das, 2020). Despite these limitations, a few of the respondents confronted these challenges by activating and sustaining the connections, engagements with their students, and faculty, mediated by digital applications (Zoom, WhatsApp, Telegram, Skype) as the new normal. Thus, reinforcing the relevance of the connectivist learning paradigm as the theoretical foundations of the study. Cormier (2008) described connectivism as a theory associated with connections, engagement and creativity. It also underscores the need for investment in the infrastructure for preserving the model of the new normal as COVID-19 is not likely to be the end of such emergencies (Barbour, Labonte, Hodges, Barbour & Labonte 2020).

Regarding lecturers' competences and the universities' readiness for switching to remote learning, the results suggest that the lecturers possess the required competencies to facilitate remote education albeit the majority of the universities within the study lacked the necessary infrastructure and digital tools. These findings corroborated the account by Aboagye, Yawson, & Appiah, (2020) who identified accessibility issues, learner motivation, academic and generic issues as the bane of remote teaching in Ghana. In particular, they emphasized that the students within their study were not ready for online study. The few lecturers who were able to facilitate remote teaching and

learning mostly used Google Classroom, Moodle Learning Management System (LMS) and Instant Messaging apps such as WhatsApp and Telegram whose usage were accelerated during the pandemic (Utunen, George, Ndiaye, Attias & Piroux 2020).

Similarly, Gyampoh et.al., (2020) investigated the preparedness of some Ghanaian institutions for remote teaching and learning during the COVID-19 crisis. Their findings reveal that only 33.3% of the lecturers have the required competencies to facilitate remote teaching. Furthermore, none of the represented institutions had the requisite infrastructure to switch to emergency remote education. As Bhebhe and Maphosa (2016) argued, it is essential for educators to have a solid grasp of relevant educational technologies, as without these skills, the authors believe that it would be difficult to successfully integrate technology in an educational context.

Regarding the strategies adopted by the lecturers to mitigate the COVID-19 disruptions of teaching and learning, two approaches stood out. Firstly, a few lecturers used their ingenuity to sustain connection and engagement with their students through project supervision. Secondly, some of the lecturers adopted online collaboration with students and contemporaries using digital platforms such as Telegram, Skype, and WhatsApp messenger. These narratives are in tandem with strategies adopted in other contexts. For instance, in efforts to mitigate the disruption of academic activities at the Brigham and Women's Hospital Fellowship in Cardiovascular Medicine, an online platform was implemented through Microsoft Teams (Almarzooq, Lopes, & Kochar, 2020). In addition, James and Pattison (2020) described how the COVID-19 pandemic disrupted the recruitment and selection programmes for medical professionals. To mitigate the negative effects of the disruptions, they implemented video conferencing in the place of face-to-face interviews.

Implications for theory and practice

COVID-19 has unmasked substantial inequities within Nigeria's educational sector (Alonge 2020). Based on the literature reviewed in the present study, there has been a dramatic shift from the traditional pedagogical practices to technology-mediated pedagogy due to the COVID-19 pandemic. As a consequence, new concepts and terms are being added to the educational lexicon such as, 'Pandemic Pedagogy' (Barbour et al., 2020) and we are now into the new normal, and 'Technology-Mediated Pedagogies'(TMPs) (Krishnakumaryamma & Venkatasubramanian 2018). Therefore, drawing on the experiences of educators in higher education to navigate the projection into 'future normal' (EDEN, 2021), the findings of this study have opened new directions for further studies going into the future normal. Along with the difficulties that came with the pandemic are windows of opportunities for improved infrastructure, improved digital skills and competences among the educators, students, parents, institutional managers, and the other critical stakeholders across the educational spectrum globally. A common feature that was spotlighted across diverse geographical contexts was the efforts invested in the use of digital applications ranging from the mainstream media, such as radio and television, to the modern 21st century media such as Moodle LMS, and Zoom cloud and associated cloud-based technologies.

However, there were also shared challenges regarding issues of concern around the policy framework for underpinning the pandemic pedagogies. Barbour et al., (2020) noted these challenges in their literature. Though, the expertise and technologies to handle emergency remote learning are available in the developed context, the infrastructure, and policies to effectively operationalize the transition were not readily available in countries like Nigeria. In addition, the authors listed poor bandwidth, teachers' workload, skills for designing effective remote learning instructions, and facilitation as well as infrastructure to support learning from home as enormous challenges. Although, vaccine roll outs are ongoing, the current realities have challenged all stakeholders to come up with innovative ideas for living through the pandemic and beyond, given that the world may not have seen the end of such disaster of global proportion. Moreover, campuses have been closed in the past due to natural disasters (Barbour et al., 2020).

Regarding the technologies deployed for emergency remote learning, studies show that cloud-based solutions, such as Moodle, Blackboard, Sakai, Skype, Google Hangouts and Classroom, Microsoft Teams, WebEx, etc. were the most utilized. All academic conferences and workshops held within the period, adopted digital platforms to ensure safe, healthy, and positive experiences. These themes corroborate Dutta & Smita's (2020) findings in Bangladesh, in which they reported that even though COVID-19 disrupted students' learning, students' were engaged by leveraging open learning systems such as Massive Open Online Courses (MOOCs) and self-directed and social learning media such as YouTube, Facebook, and Instagram. Thus, reinforcing the adoption of Social Constructivism as a learning paradigm.

With the lingering issues of infrastructural availability, especially with the lack of Internet access that is supposed to facilitate learning, the Ministry of Education in many countries formulated policies with their local Internet service providers to ensure Internet affordability, which further aided accessibility. For example, the Ministry of Education and Culture in Indonesia formulated policies that prevailed on Internet providers, such as Telkomsel and Indosat to grant about 30 GB of data access to learners across the educational streams (Azzahra 2020). Similar interventions were enacted in the Philippines, where mobile network providers ensured students were provided with reliable connection to the Internet by subsidizing the charges to students (Rotas & Cahapay 2020). Similarly, in Southern Africa, most universities subsidized their learners by providing cheap, reliable Internet connections by formulating agreements with their local Internet providers, such as MTN, Vodacom, Cell C, and others (Mbiydzonyuy & Silungwe 2020).

CONCLUSION

The COVID-19 pandemic has tremendously impacted on every facet of the educational ecosystem across the world. Among the worst-hit are the countries in the global south such as Nigeria, who are currently faced with deficits in the technological infrastructure and personnel to adopt the swift transition to emergency remote learning. This study sheds light on the impact of the COVID-19 pandemic in higher education contexts in Nigeria. The study used university lecturers' perspectives grounded on the connectivism and social constructivism learning paradigm to understand the different ways in which the pandemic has impacted the HEIs. The academics' narratives revealed similar challenges: lack of policy framework and directions, inadequate infrastructure to support transitioning to digitally mediated pedagogy, as critical challenges.

Meanwhile, a handful of educators adduced to their skills and competences in the use of digital technologies to sustain connections and engagements with students, faculty, and contemporaries. Nevertheless, the review of related literature within the study identified windows of opportunities for improvement in that sector predicated upon the experiences of other developed and developing contexts. In dealing with the learning barriers in the pandemic, the Indonesian Policy brief seems plausible in developing contexts, such as involving local authorities to play an active role in reaching learners in underserved/remote communities whose situation have been accentuated by the pandemic, by supporting asynchronous distance learning measures, equipping teachers with hard and soft skills, devolving more powers to institutional authorities for greater autonomy and adopting the public-private partnership model in the interventions to address the budgetary and competing needs within e-Learning demands (Azzahra, 2020).

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

The following are some of the limitations of this study. Firstly, seven lecturers were interviewed, and as such the findings may not be generalizable beyond the context of the study. Secondly, the study involved the perceptions of only lecturers within the university system without considering

other stakeholders' perspectives. Thirdly, the study is qualitative only, and mixed-method research supplemented by quantitative data might cover more facets of the higher education system.

In the future, interested researchers may want to explore the following research areas: (a) Investigating students, educators and institutional leaders perceptions of the impact of the pandemic this may yield more robust insights that may be extrapolated within the general context of universities in Nigeria; (b) Investigating the plausibility of open educational resources as a supplement to emergency remote learning; as well as (c) Design and development of an alternative learning model for HEIs in uncertain times.

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