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Digital Learning in Post COVID-19 Era: Policy Options and Prospects for Quality Education in Nigeria

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Abstract

Quality education, which remains the key to sustainable development globally, is under threat sequel to Covid-19 pandemic that has bedeviled the academic activities owing to its social distancing rule. Alternatively, Universities worldwide has embraced digital learning in order to sustain the academic activities. Regrettably, Nigerians' Universities are still under lock and keys in view of poor or lack of digital learning equipment and experts. This study ascertains Nigeria's readiness towards digital learning, prospects, challenges and policy options amidst Covid 19 pandemic. Evaluation theory in line with qualitative research design was used to analyze the research questions. The finding showed that though meaningful efforts has been made by few of the private universities but the public universities are not good enough for full implementation of digital learning. The study suggested a liberalization of the educational sector from the bureaucratic bottleneck that has bedeviled its transformational development over the years and concluded that education as a key to national development cannot be relegated to the background but must be fully funded and adequately equipped to face the challenges of sustainable development.

Keywords: Digital-learning, Covid-19 pandemic, Quality education

Introduction

COVID-19 is a menace that has bedeviled and ravaged the world in many ways. It has retarded the economy, ravaged health system, destroyed hospitality business, and disrupted socio-political interaction and now, inducing an unannounced shift away from the traditional classroom settings in the educational sector. Sequel to the rising concerns about the spread of COVID-19 and the need to contain the virus, a growing number of tertiary institutions have shut down in regards to conventional classroom delivery (Ali, 2020). This is courtesy of the fact that a major strategy in the containment of coronavirus was through imposition of lockdowns which automatically retrained people from partaking in social activities. This situation has particularly been of a great challenge to the education system across the world. Globally, educational sector has never witnessed such disruption in a colossal manner before (UNESCO, 2020a). COVID-19 posed serious consequences for students by depriving them of their fundamental rights to education and exposing them to risk of child labour, early marriage, exploitation, and poor academic abilities (Baytiyeh, 2018). As attested by UNESCO (2020a), more than 1.5 billion students globally which represents 87% of the global student population, were deprived of education. More worrisome is the threat of extended closures which paved way for the need to rethink traditional teaching (UNESCO, 2020b). Hence, digital learning is met with increasing attention as educational institutions alternatively resorted to various digital modalities and strategies to provide digital learning. This is connected with the benefits the practice is said to have on educational activities in the times when pandemics could strike (Chang-Richards, Vergo & Seville, 2013). Prominent among these benefits is giving students some element of control over time, place, and pace (Florida Virtual School, 2020). This is courtesy of the fact that learning is no longer restricted to the school day or the school year, walls of the classroom, pedagogy used by the teacher and to the pace of an entire classroom of students respectively.

Digital learning has quite a contentious definition due to its application in different fields and the continuous evolvement of the systems used in such learning. However, it can be generally said that digital learning is the type of learning facilitated by technology or learning through digital media. Contextually, Holzberger, Philipp and Kunter (2013) regarded digital learning as delivery with digital forms of media such texts or pictures through the internet in order to enhance learners' learning, to improve teaching effectiveness or promote personal knowledge and skills. This implies that digital learning is meant to enhance learning by exploring new technologies and applying them to learning contexts and not to totally rely on digital means of instruction delivery. Explicating further, Anttila, Valimaki, Hatonen, Luukkaala and Kaila (2012) opined that digital learning is a digital tool used to acquire digital teaching

materials for online or offline learning activity through wire or wireless networks. Therefore, digital learning is an instructional practice that ultimately helps students through various digital means such as the internet, corporate network, computers, satellite broadcasting, audiotapes, videotapes, interactive TV, compact disks, among others (Ming-Hung, Huang-Cheng, & Kuang-Sheng, 2017).These mediums are applied in a broad range of technology-enhanced educational strategies including blended learning, network-based learning, computer-based learning, virtual classrooms, digital cooperation and other strategies that rely on digital tools (Lauren, 2020). According to Bao (2020) some universities such as Harvard, MIT, Yale, Oxford, Cambridge, Tsinghua, Peking University, among others are moving in this direction.

Most educational institutions in Nigeria are currently based only on traditional methods of learning including schools, colleges and universities (Dhawan, 2020). This means that they follow the traditional set up of face-to-face lectures in a classroom. However, some academic units have introduced the use of technology to facilitate academic activities and revamp old procedures. For instance, the face of educational sector in Nigeria is changing gradually as evident in the obvious progress of the National Open University of Nigeria (NOUN), a distance learning institution whose course delivery is digitally facilitated through a combination of Web-based modules, textual materials, audio and video tapes as well as CD-ROMs (Mac-Ikemenjima, 2005). More so, so many universities now have approved Distance Learning Centres (National Universities Commission, 2020) and as well use digital learning tools for their semester exams. In addition, as reported by Ajikoba (2017), over five hundred thousand students gain admission into various tertiary institutions in Nigeria each year through computer-based exam of the Joint Admission and Matriculation Board (JAMB). These and many more are responsible for the gradual exposure of the students, academics and institutions to the digital world.

However, the level of digital learning in Nigeria is still at a low ebb due to the resistance to change from traditional pedagogical methods to more innovative, technology-based teaching and learning methods by the educational sector. Although many academic units have also started synthesizing learning but a lot of them are still stuck with old procedures (Dhawan, 2020). This is not far connected from the facts that there is inadequate ICT infrastructure, the educational sector is generally underfunded, poor and limited expertise, lacks effective co-ordination of the various ICT for education initiative and as well the overdependence of educational institutions on government (Aduke, 2008). For instance, Digital readiness indicates a nation's ability to implement digital learning and harness advantage of ICT. However, Nigeria ranks 79th out of 80 countries in the Economist Intelligence Unit's Technological Readiness Ranking for 2018

(Zubairu, Oyefolahan, Babakano, Etuk & Mohammed, 2020).From this survey, Nigeria's infrastructure is far from being adequate for digital learning. Hence, one can say that Nigeria is an ICT emerging country.

Deducing from the above, the COVID-19 pandemic in line with its social distancing status opened up wider the need for digital learning which has before now been in neglect and abandoned owing to the deplorable state of our infrastructure and educational sectors. The COVID-19 further exposed the worsening educational sector of Nigeria and provided the need to improve on the system which serves as the only panacea to the public amidst coronavirus pandemic. Therefore, there is need for educational institutions to remain resilient and find new ways to continue with teaching- learning activities (Chang-Richards et al., 2013). Hence, fully embracing digital learning is not only necessary but also a last resort.

Digital learning is an age-old pedagogical approach in Nigeria. Nigerian educational sector has been embracing changes in terms of ICT application in the learning process as far back as before the Nigerian independence in 1960 (Ajadi, Salawu. & Adeoye, 2008). Thereafter, many other digital learning programs were organized such as the English Radio programme of Nigeria Broadcasting Corporation in 1960 which was primarily targeted at primary and secondary school levels and covered core courses (learning of Science, Mathematics and English) and the University of the Air Program of the Ahmadu Bello University in 1972 (Mac-Ikemenjima, 2005). Also, there existed the Correspondence and Open Studies Unit (COSU) of University of Lagos that started in 1974 which is now known as Distance Learning Institute (Ajadi et al, 2008). According to Ajadi (2008), it initially offered programs in science education at first degree level and Postgraduate Diploma in Education (PGDE) for degree holders that did not possess teaching qualifications and thus, became the first attempt made to establish a distance education unit as part of University programs in Nigeria.

Relatively, this development led to a momentary institution of NOUN by an Act of the National Assembly in 1983 as the first National Open University (Mac-Ikemenjima, 2005). It was momentary courtesy of the fact that the continued military junta of 1984 but NOUN was however later brought back to life in 2002. NOUN over the years has proven to be of great potential and instrumental in achieving Nigeria's goal of education for all. The technological consciousness of Federal Government in the educational sector was reawakened through this progress. They came to understand that the ever growing demand for education by the people cannot be met through the traditional pedagogical delivery which actually instigated the commitment to improve the Information and Communications Technology (ICT) skills of its people, and the need to bridge the digital divide by targeting Nigerian higher institutions

(Federal Ministry of Education, 2007). Digital teaching generally aims to have students actively participate in learning activity to achieve the set learning outcome (Pai & Tu, 2011). The focus of this study is to ascertain the level of preparedness of Nigerians in digital learning amidst Covid-19 Pandemic towards attainment of quality education in Nigeria because the most important part in the future of education is the future of the younger generation.

COVID-19 pandemic and the need for digital learning in Nigeria

The sudden outbreak of the deadly and a highly contagious virus called COVID-19 overwhelmed the entire world such that World Health Organization (WHO) declared it a public health emergency of international concern (Anake, Aloye, Achuen, & Egbe, 2020). The educational sector was largely affected as the imposition of lockdown became prominent in containing the virus. Educational institutions (schools, colleges and universities) were forcefully closed which has a lot of negative effects on the students such as a detrimental effect on academic performance and the entire sector. Hence, this paved way for the need to continue education through digital modalities. According to Dhawan (2020), there was an overnight shift from conventional classrooms into digital learning in order to tackle the conditions and adapt to the changing situations (Akther, 2020). Embracing digital learning prior to the COVID-19 pandemic was more of a choice this owes to the fact that the digital world was increasingly penetrating the educational domain with technology gradually being used to teach and learn (Osuagwu & Umeh, 2020). But today, it has become a necessity. China for example swiftly and successfully adopted this courtesy of the fact that digital learning in Chinese universities has increased exponentially after the Covid-19 outbreak (Dhawan, 2020).

Nonetheless, the digital infrastructural backwardness and the unpreparedness of some educational sectors mostly in developing nations such as Nigeria to totally embrace such change have almost made continuing education through digital modalities unfeasible. With this, there is an exposition and recognition of the increasing importance of online learning in not only in this dynamic world but also in emergency. This corroborates the view John F. Kennedy that in as much as an emergency situation comes with challenges, that an inward look will present the opportunity therein (Oyedele, 2020). It has revealed the weaknesses of the Nigerian educational sector and the need to rethink and review existing education infrastructure as learning has become an activity that that can be carried out irrespective of time and places amidst the pandemic, with the support of digital tools. Now is an opportunity to improve standards, contribute to knowledge-based economies, enrich learning potentials, facilitate personalized learning and in all, transform pedagogy to make it more student-centered in line with the global standard (Fullan, 2013; Hammond, 2013). Therefore, the adoption of digital learning is very

crucial to ensuring the continuity of education in Nigeria which demands working on our digital infrastructure, up-skilling staff and expanding their capabilities.

Statement of the problem

Education has remained the bedrock of any nation being an instrument for national transformation and development. In this regard, Etejere and Ogundele (2008) asserted that a country that toys with the education of her citizens is going to experience dwindled development and will invariably be ranked low among the developed nations of the world. Issues surrounding digital learning in the educational sector have received extensive attention globally especially with the COVID-19 outbreak. This raised a global concern and necessitated the adoption of digital learning since the COVID-19 has come to stay. According to Ali (2020), educational institutions worldwide are moving more and more towards digital learning. China for instance, initiated a Suspending Classes without Stopping Learning policy to see that learning was not compromised at any time during COVID-19 pandemic lockdown (Zhang et al., 2020). Italy as well joined the league as the first EU member state to close its universities and move courses online (Ali, 2020). However, educational sectors in Nigeria can hardly follow suit due to some limitations. Most private institutions (universities) such as the American University of Nigeria (AUN), Adeleke University, Covenant University, Babcock University and among others are making progress and are ready to adopt digital alternatives for learning (Idris, 2020). For instance, Idris (2020) reported that the lockdown did not disrupt the already scheduled semester exams of the AUN was successfully held on the Canvas platform (a management system that support online learning) in April.

On the other hand, some government institutions such as National Open University of Nigeria (NOUN), University of Nigeria Nsukka (UNN), Ahmadu Bello University (ABU), etc., that are Open and Distance Learning license holders were unprepared to face the new realities of COVID-19 (Idris, 2020). They all suspended academic activities and there has been no strong effort and remarkable progress to adopt digital solutions despite this opportunity to totally embrace it. Hence, Nigerian educational sector is currently being faced with problems transitioning to a digital educational environment due to some factors revolving around digital infrastructural and accessibility issues. For instance, Onwuegbuchi (2018) has it that Nigeria was missing in the second edition of world digital competitiveness ranking report. Also, Nigeria has been rooted in the bottom quarter of global broadband speed rankings for 2019 by UK analytics firm cable which presents a problematic condition that could undermine digital learning (Kazeem, 2020). Sequel to the above, the following research questions were raised to guide this study

Research Questions

1. How ready are Nigerians towards digital learning for quality education in the post COVID-19 era?
2. What are the challenges facing Universities in Nigeria towards digital learning for quality education in the post COVID-19 era?

Theoretical framework

According to Shadish, Cook, and Leviton (1991), the fundamental purpose of evaluation theory is to specify feasible practices that evaluators can use to construct knowledge about the value of social programs. This explanation of evaluation theory consists of five main components: practice, use, knowledge, valuing, and social programming. The authors trace the evolution of evaluation theory through a critical review of the writings of seven familiar names in the field of evaluation: Michael Scriven, Donald Campbell, Carol Weiss, Joseph Wholey, Robert Stake, Lee Cronbach, and Peter Rossi. Evaluation is the structured interpretation and giving of meaning to predict or actual impacts of proposals or results. It looks at original objectives, and what is either predicted or what was accomplished and how it was accomplished. So evaluation can be formative that is taking place during the development of a concept or proposal, project or organization, with the intention of improving the value or effectiveness of the proposal, project, or organisation. It can also be summative, drawing lessons from a completed action or project or an organisation at a later point in time or circumstance. Evaluation is inherently a theoretically informed approach with the following tenets: (1) A systematic, rigorous, and meticulous application of scientific methods to assess the design, implementation, improvement, or outcomes of a program. It is a resource-intensive process, frequently requiring resources, expertise, labour, time channeled towards improving digital learning for quality education. (2) The critical assessment, in as objective manner as far as possible, of the degree to which a service or its component parts fulfils stated goals, the focus of this definition is on attaining objective knowledge, and scientifically or quantitatively measuring predetermined and external concepts. (3) The main purpose of evaluation can be to ascertain the level of preparedness of Nigerians in digital learning amidst Covid-19 pandemic towards attainment of quality education.

To meaningfully undertake the validation or otherwise of our hypotheses, this study utilizes the documentary research method using data from the 2018 The Economic Intelligence Unit. The use of documentary methods refers to the analysis of documents that contain information about the phenomenon we wish to study. For the purpose of generating data for this study, the researchers made use of secondary sources or qualitative sources including government publications, newspapers, textbooks, periodicals, journal publications and online materials.

Results and Discussion

**Hypothesis 1: Most Nigerians are not ready for digital learning in the post covid-19 era.**

To analyse this hypothesis, the researchers used the statistics from the Economic Intelligence Unit.

	2012-17			2018-22	
	Score	Ranking		Score	Ranking
Saudi Arabia	6.0625	=38	Costa Rica	6.34375	=42
South Africa	6.0625	=38	Cyprus	6.34375	=42
Ukraine	6.0625	=38	India	6.34375	=42
Costa Rica	5.78125	=45	Latvia	6.34375	=42
Kuwait	5.78125	=45	South Africa	6.34375	=42
Cyprus	5.5	=47	Brazil	6.0625	=47
India	5.5	=47	Saudi Arabia	6.0625	=47
Slovakia	5.5	=47	Croatia	5.78125	=49
Bahrain	5.21875	=50	Kuwait	5.78125	=49
Croatia	5.21875	=50	Mexico	5.78125	=49
Greece	5.21875	=50	Romania	5.78125	=49
Kazakhstan	5.21875	=50	Thailand	5.78125	=49
Thailand	5.21875	=50	Turkey	5.78125	=49
Turkey	5.21875	=50	Colombia	5.5	=55
Colombia	4.9375	=56	Jordan	5.5	=55
Mexico	4.9375	=56	Kazakhstan	5.5	=55
Romania	4.9375	=56	Philippines	5.5	=55
Tunisia	4.9375	=56	Serbia	5.5	=55
Morocco	4.65625	=60	Sri Lanka	5.5	=55
Philippines	4.65625	=60	Bahrain	5.21875	=61
Jordan	4.375	=63	Greece	5.21875	=61
Serbia	4.375	=63	Morocco	4.9375	=63
Azerbaijan	4.09375	=64	Tunisia	4.9375	=63
Iran	4.09375	=64	Azerbaijan	4.65625	=65
Sri Lanka	4.09375	=64	Vietnam	4.65625	=65
Kenya	3.53125	=67	Indonesia	4.375	=67
Vietnam	3.53125	=67	Iran	4.375	=67
Ecuador	3.25	=69	Ecuador	3.8125	=69
Egypt	3.25	=69	Peru	3.8125	=69
El Salvador	3.25	=69	Egypt	3.53125	=71
Indonesia	3.25	=69	El Salvador	3.53125	=71
Dominican Republic	2.96875	=73	Kenya	3.53125	=71
Peru	2.96875	=73	Algeria	3.25	=74
Venezuela	2.96875	=73	Cuba	3.25	=74
Algeria	2.6875	=76	Dominican Republic	2.96875	76
Cuba	2.6875	=76	Pakistan	2.6875	=77
Pakistan	2.40625	78	Venezuela	2.6875	=77
Bangladesh	2.125	=79	Bangladesh	2.40625	79
Nigeria	2.125	=79	Nigeria	2.125	80
Angola	1.28125	=81	Libya	1.84375	81
Libya	1.28125	=81	Angola	1.5635	82

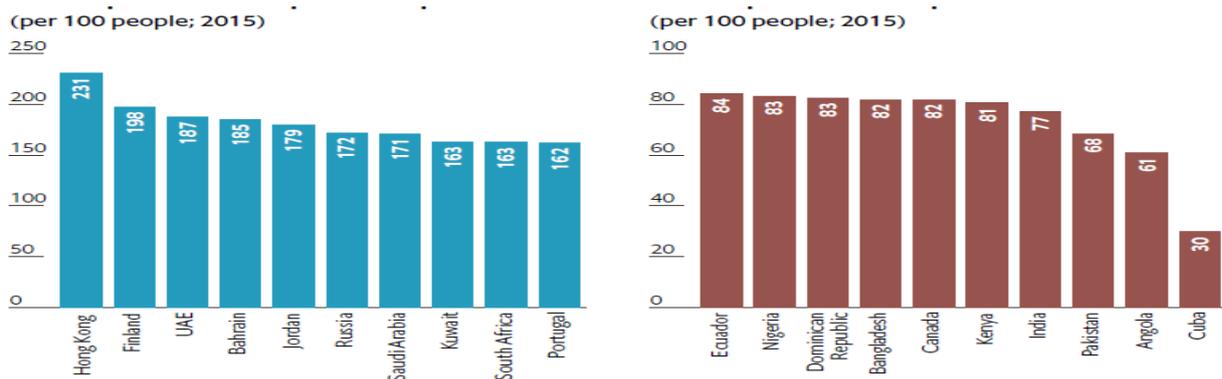Source: The Economic Intelligence Unit.

Source: The Economic Intelligence Unit, 2018

Figure 1: showing technonological readiness of Nigeria from 2012-2022
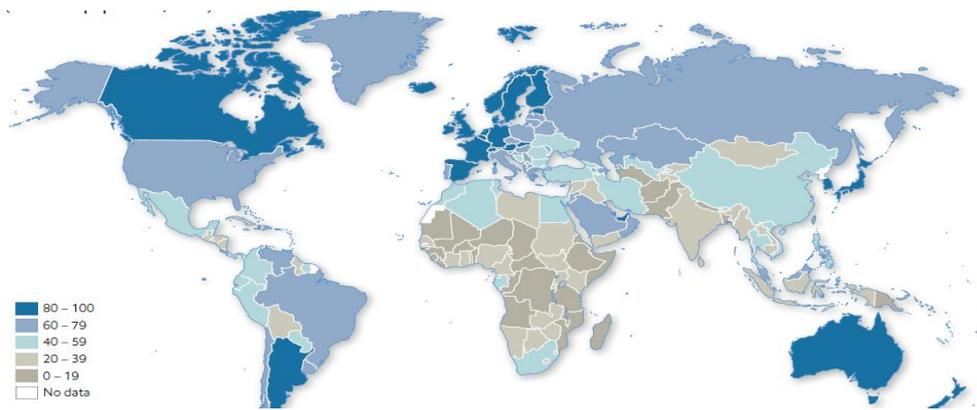
Source: Economic Intelligence Unit, 2018

Figure 2: Showing the the share of a country's population that has access to connectivity

Source: The Economic Intelligence Unit, 2018

Figure 3: showing the number of mobile phone subscriptions per head in a country

As shown in Figures 1-3, the Economist Intelligence Unit (EIU) at her technological readiness ranked 82 out of the world's largest economies, which Nigeria was included, on access to internet, (internet usage and mobile phone subscriptions)the Economic Intelligence Unit ranked Nigeria on number 79 (between 2013 and 2017) and 80 (between 2018 and 2022) in her readiness for institutional e-readiness and ability of institutions to use Information Communication and Technology (ICT) to achieve her mission and vision of digital learning for quality education. This assertion postulates that Nigeria notwithstanding the poor state of her students in the public universities who could not afford laptop, smartphone and tablets, the federal government 's attitude towards funding of the institutions is quite abyssmall and has

highly under-funded her educational sector. In view of this findings, the researchers hereby accepts the first hypothesis which submits that Most Nigerians are not ready for digital learning in the post covid-19 era.

Due to some hindrances in the Nigerian educational sector, there are obvious and reluctant attempts that encourage reliance on the traditional pedagogy in educational process despite the emergence of technology. The difficulty in fostering digital learning in Nigeria can be tied to our poor digital infrastructure. For instance, the 2020 Digital Global Overview reported that only 20 percent of Nigerians have access to smartphones while about 40 percent only, have access to the internet (Osuagwu, P. & Umeh, 2020). It has led to a significant slowdown of digital learning implementation in Nigerian educational sector. Without the necessary technology and internet accessibility, it will hardly be possible to make both the academics and the students comfortable with delivering and consuming learning content digitally.

Be that as it may, according to Olibie, Ezoem andEkene (2014), the survival of educational institutions in the 21st century and amidst pandemic will increasingly rely on various forms digital learning modalities. There is need to expand the broadband connectivity and invest handsomely in the necessary structures that will enable digital learning to thrive as seen in first world countries. This will be achieved through the adoption and the implementation of policies and programs in line with the future-oriented education (Dhawan, 2020). There is a belief that government policies and governance that enable digital learning can drive competition, engender education system sustainability and could contribute to revamping the Nigerian economy (Osuagwu, P. & Umeh, 2020). Common feature countries that have successfully introduced digital learning share is that they have invested a lot on the internet, ICT infrastructure and power and have also earmarked action programs and policies in this regard (Oye, Salleh & Iahad, 2011).

Hypothesis 2: Inadequate funding and misappropriation of funds are the major challenges of Nigeria universities towards digital learning for quality education in the post COVID-19 era.

Table 1: Federal Government of Nigeria's Bugdetary Allocation in Education from 2016-2020.

Years	Total budget in trillion	EDUCATIONAL BUDGET in billion	% of the budget	Recurrent expenditure in billion	Capital expenditure in billion	UBEC in billion
2016	₦6.06	₦480.3	7.92	₦367.7	₦35.4	₦ 77
2017	₦7.4	₦550	7.40	₦398	₦56	₦96
2018	₦8.6	₦605.8	7.04	₦435.1	₦61.73	₦109.06
2019	₦8.83	₦620.5	7.05	₦539.7	₦47.3	₦113.9
2020	₦10.33	₦691.07	6.7	₦490.2	₦50.95	₦111.79

Source: Compiled by the authors from the Budget office of the Federation 2020

Table 1 presented the budgetary allocation to education in Nigeria from 2016-2020, this budget which falls below the minimum recommendation of the United Nations Educational, Scientific and Cultural Organisations (UNESCO) recommendation of 20% to 26% allocation to Educational sector. The above budgetary allocation is meant to cater for twenty eight educational agencies, thirty Seven federal Universities, twenty seven federal polytechnic, twenty one federal colleges of Education and hundred and four unity schools which falls and draws their budget from the federal ministry of education in Nigeria. The inadequate funding of the federal universities has metamorphosed into abandoned projects, epileptic power supply, erratic internet networks, limited access and penetration of the Internet, incessant industrial action by both academic and non-academic Staff of the Universities. This has further resulted into grossly inadequate information and communication technology, infrastructure, capacity building deficit in training, teaching and technical staff to deliver online lectures in line with management of online examination. Universities being ill-equipped for online education, and poverty level of many students which up till now remain a stumbling blocks to digital learning in Nigeria owing to lack of experts and arbitrary neglect in the areas of inadequate funding. Consequent upon this, the researcher here by accepts the hypothesis state states that inadequate funding and misappropriation of funds are the major challenges of Nigeria digital learning for quality education in the post COVID-19 era.

There are innumerable challenges to digital learning in Nigeria due to poor digital infrastructure, other socio-economic factors and the poor coordination educational sector. For these reasons, Nigeria is still very far from fostering digital learning successfully alongside other developing nations of the world. One of the major problems facing the proper adoption of digital

learning in Nigerian educational institutions in general is poor technical infrastructure. The technical infrastructure in Nigeria is not highly developed, which means that phone-lines and internet connections are unreliable or slow due to narrow bandwidth (Olibie et al, 2014). Nigeria has been rooted in the bottom quarter of global broadband speed rankings for 2019 by UK analytics firm cable which presents a problematic condition that could undermine digital learning (Kazeem, 2020). In the same vein, just about 40 percent of Nigerians have access to the internet as Digital Global Overview has it (Osuagwu, P. & Umeh, 2020). Hence, the unavailability of proper digital tools, no internet connections, or Wi-Fi connections can affect internet accessibility, standards for quality and reliability; digital content delivery.

Relatively, this situation is worsened due to inadequate power supply. Epileptic power supply is a perennial issue that has been argued to be the major setback to the adoption of digital learning by the Nigerian educational sector and the technological advancement generally (Ajadi, 2008). It poses a great difficulty in accessing the internet because most rural areas are not connected to the national grid. On the other hand, both students and academics on Nigerian educational institutions have been resisting changing from the conventional pedagogical approach to digital learning modalities. Factors affecting the acceptability of digital learning are not far from the fact that there is mass unawareness of the effectiveness of digital learning, low digital literacy, cost of accessing the internet and technophobia (Folorunso, Ogunseye & Sharma, 2006; Ajadi et al, 2008). Imagine a country where the majority of her citizens are curiously contending that rolling out the fifth generation (5G) network by the Chinese and other stakeholders is the cause of COVID-19 that is ravaging the world. This surly retards the acceptability of certain technological features needed to foster digital learning in Nigeria.

Also, digital learning in Nigerian educational sector has witnessed poor co-ordination of all the various digital learning initiatives over the years. This is because it has not only been poorly funded but also records poor human resources and misappropriation of funds. In fact, the overall educational system is underfunded and thus, the available funds are used to meet survival needs of the sector rather than investing in the standard needs (Mac-Ikemenjima, 2005). For instance, National Open University of Nigeria (NOUN) is faced with lack of financial support to build the required infrastructure and to produce digital learning materials for over 9,000 students registered in each year (Omofaye, 2007). This could be a reason why they could not continue with educational service delivery amidst the pandemic even as a distant learning institute. The UNESCO recommended to the federal government to allocate at least 26% of the annual budget for education as a panacea to normalizing the issue of funding (Oye et al, 2011).

However, it is pathetic to say that just N671.07 billion which constitutes 6.7 percent of the 2020 budget was allocated to education (Utomi, 2020).

Lastly, digital learning in Nigeria is finding it difficult to proper in Nigeria due to lack of or inadequate trained personnel to manage available systems. It is a challenge for academics and students to move from traditional instructional delivery to online mode which must have a ripple effect on the teaching methodologies and time management (Dhawan, 2020). For instance,Ajadi (2008), reported that there are few technical staff at NOUN to maintain the current system. These represent the major problems faced in the adoption of digital learning for education in Nigeria and if adequately addressed, digital education will thrive in Nigeria. These will also restore the nobility of the educational sector from its defaced state. Nigeria with about 13.2 million school-age out of school, the highest in the world. Even though the basic (nine) years of education are free and compulsory, many children are not in school due to factors such as poverty, gender gaps, religion and regional factors, among others. Nigeria allocates about 7 per cent of their national budget to education, as opposed to the 15 to 20 per cent recommended by UNESCO. PPPs can do much to improve the quality of, and increase access to, education for poor children in underserved communities. More schools in such areas, especially Lagos, would go some way to start shifting the teacher/student ratio which has hit alarming lows of 1:83 at points during the past decade

Summary of Findings

➢ Universities in Nigeria, especially Government owned are not ready for digital learning in the post covid-19 era.

➢ Federal government has serially underfunded the University system in Nigeria through her budgetary allocation.

➢ Nigeria ranked 79 from 2013-2017 and 80 from 2018 -2022 in her readiness for institutional e-readiness and ability of institutions to use Information communication and technology (ICT) to achieve her mission and vision of digital learning for quality education.

➢ Mobile phone subscription and access to internet in Nigeria is abssymally low and unfit for quality digital learning in Nigeria.

➢ Lack of experts in the political administrative structures of Nigeria affects the groth of the sector.

Conclusion

Quality education as a key to National development cannot be relegated to the background but must be fully funded and adequately equipped to face the challenges of

sustainable development goal 4. The Covid 19 pandemic in line with its social distancing status created the need for digital learning which has before now been in neglect and abandoned owing to the deplorable state of our infrastructure and educational sectors. The Covid 19 further exposed our worsening educational sector and provided the need to improve on the system which serves as the only panacea to socio-economic development of any nation hence the urgent need to technologically advance the sector through adequate funding, government should invest in infrastructure, while training and retraining lecturers on new technology applications are imperative to making the switch possible if we must be like Institutions in Europe and the United States that were able to adapt because they had the funding and the basic ICT infrastructure to do so.

Recommendation and policy options

- The federal and State governments must as a matter of urgent necessary action enforce the UNESCO recommendation of 20% to 26% budgetary allocation to education in Nigeria.
- Concise efforts must be initiated inform of policy towards the liberalization of the educational sector from the bureaucratic bottle neck that has bedeviled its transformational development over the years by institutionalizing transparency and accountability in the system.
- Professors in the University system who have held some positions in the universities should be appointed into the Ministers and commissioners of education in Nigeria.
- The National Communication commission (NCC) should work hard through the Network providers to ensure at least 70% internet penetration in Nigeria.
- The federal government should introduce bursary to take care of indigent students.
- The federal government through the National Universities commission (NUC) liberalize the educational sector to accommodate digital learning.

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