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# The impact of covid-19 pandemic on the management of higher education in Nigeria

# \*Alaka Ambali Abayomi<sup>1</sup> and Amushie Joy Ugomma<sup>2</sup>

<sup>1</sup>Federal University, Dutsin-Ma, Kastina State, Nigeria <sup>2</sup>University of Lagos, Nigeria

#### ABSTRACT

The emergence of the COVID-19 pandemic resulted in a downturn in the global economy, and has had different and far-reaching effects on the higher education system. The abrupt closure of educational institutions as a measure to forestall the transmission of the coronavirus compelled the face-to-face method of teaching to transform to the virtual mode. The pandemic has uncovered the strengths and flaws of the contemporary higher education system. This study examined the impact of the pandemic on the management of higher education in Nigeria. It traced the historical development of pandemics in the world, and analysed the distinct but related areas where higher education institutions have been impacted by COVID-19: students' assessment; planning of the examination system; cost of higher education; accreditation of academic programmes; teaching and learning as well as research and organization and attendance of academic conferences. Higher education institutions need to plan education in the post-COVID-19 era as well as take on new strategies to guarantee the desired education outcomes. This could be achieved through the adoption of blended learning which emphasizes a combination of traditional face-to-face and online learning.

Keywords: COVID-19 pandemic, Higher education and COVID-19 pandemic, Higher education, Nigeria

# Introduction

Higher education worldwide is an industry where investment in human capital is developed to its full capacity. It yields economic benefits, contributes significantly to a nation's future wealth accumulation as well as enables such a nation to stand out in the comity of nations. It is at the higher education level that an individual's inherent qualities and skills are developed and brought to bear. Higher education plays an important role in human, social and economic development (Prakash, 2005). The attitudinal orientation one requires to progress in one's chosen career in life and contribute meaningfully to economic growth is acquired through education (Musibau & Festus, 2014). According to Oshokoya (1989), out of the Nigerian population of 170 million, 65% are youths requiring education. The demand for higher education in Nigeria has led to an unprecedented expansion and tremendous growth in the number of higher education institutions (HEIs), and student population has increased in the last decade.

\*Corresponding Author yomibunmi1972@gmail.com

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Higher education in Nigeria, according to the National Policy on Education (Federal Republic of Nigeria [FRN], 2014), is defined as the education given after the post basic education level. The fundamental aim of higher education in Nigeria is to impart the requisite knowledge and skills which will make it possible for an individual to function adequately in any environment he finds himself. The same document further stated that tertiary institutions shall pursue this as well as other goals of higher goals through: teaching; research and development; virile staff development programmes; and generation and dissemination of knowledge, among others.

The establishment of higher institutions in Nigeria was in pursuit of meeting the global requirement of producing high level human resources that would serve in different capacities and contribute meaningfully to the nation's socio-economic and political development (Abdulkareem, Fasasi & Akinnubi, 2011). A study conducted by Komolafe and Bello (2016) confirmed that recipients of higher education were more totally developed in different areas of their lives than non-recipients. Higher education institutions could be categorized into federal, state and privately owned. Jegede and Ali (2020) in their study categorized higher education according to university sector and non-university sector. Higher institutions in Nigeria are categorized into federal and state government owned, conventional and special universities, and polytechnics, monotechnics and colleges of education (Abdulkareem, Fasasi & Akinnubi, 2011).

# The historical development of higher education in Nigeria

The development of higher education in Nigeria can be traced to the 19th century with the establishment of Yaba Higher College (YHC) in 1932 in the form of a technical college. The college was established with the aim of producing educated assistants in teacher training, medicine, engineering and other vocations to fill the noticeable gap in the colonial administration. In view of the mandate given to Yaba Higher College to train people in specific fields, the institution could not cope with training people to fill the available gaps in this period. Consequently, the colonial government needed to widen access to higher education, and this led to the establishment of the Elliot Commission in 1945. This commission was saddled with the responsibility of looking into the organization of and the facilities available for higher education in British West African countries. The commission submitted both the majority and minority reports. The majority report recommended the establishment and upgrading of higher education in West African Countries, while the minority report recommended the establishment and upgrading of one institution. The Parliament in its wisdom at its sitting accepted the majority report, and this led to the establishment of the University College, Ibadan in 1948 as an affiliate college of University of London. The university started with the Faculties of Arts and Sciences, while the College of Medicine began in 1962.

The revolutionary transformation of higher education has expanded the frontiers of knowledge in Nigeria. Higher institutions grew from one university in 1948 to five in 1962 and expanded to 160 federal higher institutions, 185 state higher institutions, and 295 private higher institutions in 2021. This means that, currently, there are 640 higher education institutions in Nigeria. The above breakdown can be classified into universities, polytechnics, monotechnics, colleges of education and other specialized institutions such as colleges of agriculture, schools of health technology and the National Teachers' Institute. Higher institutions also include inter-university centres such as the Nigerian French Village, the Nigerian Arabic Language Village, and the National Institute of Nigerian Languages.

TYPES OF INSTITUTE	FEDERAL	STATE	PRIVATE	TOTAL	
Universities	44	48	95	187	
Polytechnics	31	48	61	140	
Colleges of Education	23	57	60	140	
Monotechnics	23	2	2	27	
Colleges of Health Technology	18	14	3	35	
Vocational Institutions	2	1	74	77	
Colleges of Agriculture	19	15	0	34	
Total	160	185	295	640	

**Table 1**: Composition of Tertiary Institutions in Nigeria as at March, 2021

Sources: NUC, NBTE and NCCE, February, 2021

# The management of higher education in Nigeria

The management of higher education in Nigeria is the responsibility of various commissions and boards set up by the Federal Government of Nigeria as well as the executive secretaries of various institutions nominated by the government. These commissions are in charge of various categories of higher institutions in Nigeria. The National Universities Commission was set up in 1962 to: oversee all the academic programmes run in Nigerian universities; grant approval for the establishment of all higher institutions that offer degree programmes in Nigerian universities; ensure the quality assurance of all academic programmes offered in Nigerian universities; and channel all external support to Nigerian universities. The arrow head in Nigerian universities is the vice chancellor, while the deputy vice chancellors (administration and academics), the provosts of various colleges, directors, deans of faculties and heads of departments assist the vice chancellor in the day to day running of the university.

Similarly, the National Board for Technical Education (NBTE) was established by the Act 9 of January 1977. In August 1985 and January 1993 respectively, the Federal Government enacted Act 16 on Education termed National Minimum Standard which led to the establishment of the institution. With these acts, the functions of the board were extended to include the accreditation of academic programmes in all technical and vocational educational institutions and the establishment of polytechnics and monotechnics in Nigeria. The board is headed by an Executive Secretary. In Polytechnics and allied institutions, the rector is the head of the administration, but is assisted by deputies as well as directors, deans of various colleges and heads of departments in the day-to-day management of the institutions.

The National Commission for Colleges of Education established by Decree (now Act) 13 of 17 January, 1989 and amended by Act 1 of 1993 was as a result of the utmost importance the Nigerian Government attached to quality education. The Commission has continuously pursued the goals of quality assurance in teacher education. The colleges of education and their affiliated institutions under this commission are headed by provosts, who are supported and assisted by deputies and directors as well as deans of various schools and faculties, and heads of departments in the day-to-day management of the institutions. The Federal Ministry of Education is the supervising ministry of the commissions and boards and is saddled with the responsibility of ensuring that the parastatals conform to the rules and regulations that set them up.

#### The historical development of pandemics in the World

As people have moved from place to place across the world, so have infectious diseases. During the fifth century, the plague of Athens decimated the Athenian population before spreading to parts of North Africa (Afari, 2020). In 6th century, the Plague of Justinian, named after the Roman Emperor, Justinian 1 under whose reign it occurred, plagued Asia, North Africa and Europe. It killed between 30 million and 50 million people. According to Afari, it originated in the Nile Delta, after which it kept depopulating cities over a period of 200 years, until it disappeared rapidly and unexplainably in 755 CE. In the 14th century, the bubonic plague, also known as Black Death, ravaged the world. It began in Asia and spread to the Mediterranean (Debanjali, 2020). In Europe, it first got to Italy through sailors who arrived at its seaports. Black Death terribly devastated Italy before making its way to other parts of the continent. The pandemic ruined about half of the population of Europe (LePan, 2020).

Another deadly pandemic is Spanish Flu, an infectious respiratory disease that broke out during the First World War. The flu was first discovered in March 1918 in United States among troops training at a camp in Kansas. The pandemic swept through the world and claimed over 50 million lives. The number of people that perished from the pandemic surpassed those that died in the war (LePAN, 2020). Other deadly pandemics that have negatively impacted humans and decimated world population are: New World Smallpox Outbreak (1520-onwards); Great Plague of London (1665); Cholera Pandemics (1817-1923); Third Plague, which began in Central Asia and exploded in China in 1855; Russian Flu (1889-1890); Spanish Flu (1918-1919); Asian Flu (1957-1958); SARS (2002-2003); Ebola (2014-2016); and HIV/AIDS pandemic (1981-present). A virus is a tiny infectious agent that has no cellular structure, and therefore cannot divide like other organisms (Myneppalli, Mumuni, Taiwo & Akinwale, 2020). According to Mynepalli et al., a virus reproduces inside a living cell, which may be of animal, plant or bacterial agent. The researchers concluded that 'virus' simply means poison. Coronaviruses have been in existence for over 50 years. The coronavirus disease with the nomenclature Covid-19 has become a household name throughout the world. It has become a health hazard ravaging the entire human population with numerous socio-economic and health implications. The World Health Organization (2020) explained that the virus 'SAR COV 2' was the main causative organism of COVID-19.

The outbreak of the disease was first reported in Wuhan, China in late 2019, and since then it has been spreading to all parts of the world. Jegede and Ali (2020) stated that Chinese health authorities were not sure of the origin of the virus, which according to them came from a seafood market in Western China, where wildlife was also traded illegally. COVID-19 is a viral infectious disease that causes a respiratory illness or disease, and is basically transmitted from person to person by contact with droplets from an infected person (World Health Organization [WHO], 2020; Ogaugwu et al., 2020). According to Ogaugwu et al., COVID-19 is not the first pandemic to afflict the human society. The COVID-19 pandemic has devastated human lives and resources, and caused governments to take stringent preventive public care measures so as to avert the spread across borders. Such precautionary measures include: the prohibition of mass gatherings and assemblies; closure of public places such as schools, churches, mosques, cinemas, theatres, clubs, and other entertainment centers; shutdown of public transport systems; stay at home orders; social distancing; personal hygiene measures; bans on international travels (Afari, 2020); and enforcement of the use of nose masks. The WHO (2020) explained that most people could easily recover from the illness without specialized treatment, while older people and those with underlying medical conditions such as cancer,

chronic respiratory infection, diabetes and cardiovascular diseases are more likely to experience severe illness and death due to Covid-19.

There are 235 countries in the world and COVID-19 has had devastating and ravaging impact on 221 countries. Globally, as at 6th March, 2021, the number of confirmed cases of COVID-19 had risen to 15, 653,459 including 2, 571,823 deaths.

Countries	Number of Confirmed Covid-19 Infections		
South Africa	1,505,586		
Morocco	481,709		
Tunisia	229,781		
Egypt	229,781		
Ethiopia	154,257		
Nigeria	153,187		
Libya	130,701		
Algeria	112,279		
Kenya	104,500		
Ghana	80,759		
Zambia	75,582		
Mozambique	56,595		
Uganda	40,243		
Namibia	37,896		

Table 2: The Impact of COVID-19 on African countries as at March 2021.

Source: www. Statisca.com

In Africa, as at February 23, 2021, the number of COVID-19 cases had reached 3,872,085. This represented 3.44% of the infection around the world. In the African continent, South Africa was the most hit, while the country that experienced the least impact was Namibia. Nigeria was the fifth country after South Africa, Morocco, Tunisia, Egypt and Ethiopia.

Table 3: Countries and	l Territories with no	Confirmed	Cases of COVID-19
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Country	Population	Continent
North Korea	25,778,816	Asia
Turkmenistan	6,031,200	Asia
Solomon Island	686,884	Oceania
Vanuatu	307,145	Oceania
Samoa	198,413	Oceania
Kiribati	119,451	Oceania
Federal States of Micronesia	115,030	Oceania
Tonga	105,695	Oceania
Marshall Islands	59,190	Oceania
Falau	18,094	Oceania
Tuvalu	11,793	Oceania
Nauru	10,823	Oceania

Source: World Health Organization, 2020

Table 3 represents the list of countries and territories with no confirmed cases of COVID-19 in order of population. As at 1st June 2020, 12 sovereign states out of the 193 United Nations member states were confirmed COVID-19 free.

## The outbreak of COVID-19 in Nigeria

The administration of the country, Nigeria, is divided into three tiers of government: federal, state and local, but the democratic governance is divided into six geo-political zones (Alaka, 2011). The zones consist of 36 states and Abuja, 774 Local Government Authorities (LGAs) with a total population likely to be 206, 139,589 million by the middle of 2020. This population estimate, according to Worldometer (2020), would be equivalent to 2.64% of the total world population. The Federal Government of Nigeria on 28th, January 2020 made a public declaration to assure its readiness to strengthen surveillance in the Lagos, Enugu, Federal Capital Territory, Port Harcourt, and Kano international airports to curtail the spread of the virus. Jegede and Ali (2020) affirmed that the first case of COVID-19 was confirmed in Nigeria on 27th February, 2020 in Lagos State in an Italian who returned to Nigeria from Milan in Italy via Muritala Muhammed International Airport.

As a result of the upsurge in the pandemic, the Federal Government of Nigeria took a lot of measures to curtail the spread of the disease. Such measures include the use of nose masks, social distancing, avoiding contact with sick persons, and avoiding overcrowded places. Some state governments also went further to shut down their states for some weeks. These measures paralyzed the economy of many of these states. After more cases were reported, the Federal Government of Nigeria directed schools and other learning spaces to close on 20th March, 2020 as a precautionary measure aimed at preventing the spread of the virus. As at 19th March, 2021, the total number of confirmed COVID-19 cases had increased to 161, 539, while the death toll had risen to 2, 027, and the total number of people discharged amounted to 147, 581.

#### The Management of higher education in Nigeria during the COVID-19 Pandemic

The COVID-19 pandemic has caused a massive disruption to the economy, resources and daily lives of humans around the globe. The pandemic caused a devastating damage to the education sector throughout the world, and higher education in particular was negatively affected in all ramifications especially in Nigeria. The degree of the impact of this pandemic indicates that higher education institutions need to put in place crises management strategies to combat the outbreak of any pandemic in the future. It is against this backdrop, therefore, that this article examined the impact of the COVID-19 pandemic on higher education in Nigeria.

#### COVID-19: Teaching and learning in higher Institutions in Nigeria

In developing countries such as Nigeria, education is a tool for economic growth, poverty reduction and social cohesion; hence the governments invest in human capital development (Amushie & Alaka, 2020). The outbreak of COVID-19 pandemic has brought another dimension to teaching and learning. The traditional face-to-face teaching is gradually giving way to e-learning which is carried out on different Learning Management System platforms such as Zoom, Mixir, WhatsApp, Google-classroom, Enterprise Resource Planning (ERP), and Starleaf Launcher, among others. The traditional face-to-face teaching that took place in higher education institutions in Nigeria before the pandemic was suspended, and management could not migrate to online teaching and learning immediately as the resources and infrastructure to do so

were partially inadequate and in some institutions not available at all. Giogio, Hilligie and Trime (2020) found that three quarters of higher education institutions were not prepared to move teaching and learning online, when they closed their campuses; they had to suspend teaching. Many institutions are now working relentlessly on developing solutions to begin online teaching, and if this is not done on time, it may impact negatively on the students' learning opportunity (Giogio et al., 2020). Where the infrastructure was available, many lecturers and students in higher education institutions were not trained on how to use the various platforms for online engagement. Adebayo and Abdulhamid (2015) submitted that other issues that are likely to affect the effective delivery of online teaching are: poor online content, unstable electricity supply, poor Internet connection and high cost of Internet service subscription. Apart from that, some students may not have reliable Internet access and ICT gadgets, and therefore would not be able to participate fully in digital learning. In order to forestall these problems, management should endeavor to put in place necessary information communication infrastructure to ensure that online education is not interrupted. In addition, hands-on training should be provided so that everyone involved will master the use of available facilities. Higher institutions should embark on proactive measures to overcome technological and communication challenges to expedite the adoption of customized online education system.

# COVID-19: The closure and reopening of educational Institutions

The outbreak of Ebola Disease, Bird Flu, Lassa Fever and other pandemics in Africa, particularly in Nigeria, did not have as much impact on education especially higher education as COVID-19 has had (Adelakun, 2020). COVID-19 has brought on another dimension to the practice of education throughout the world. It has put a sudden end to face-to-face teaching and learning, and disrupted academic calendars in higher institutions in the country. Consequently, education has been heavily impacted as all institutions were on lockdown. This is one of the measures taken by governments and heads of institutions to check the spread of the pandemic among the university community as Nigeria recorded more cases in January, 2021. The secretary to the government of the federation and chairman of the Presidential Taskforce on COVID-19, Boss Mustapha, announced on 10th December, 2020 that the second wave of the pandemic had started, following the upsurge in the number of COVID-19 cases reported in the country. However, there was a remarkable decline in the cases of coronavirus recorded in the country in September and October, 2020 and this led to the Nigerian Government's relaxations of the lockdowns and the re-opening of schools and the economy. In most countries in the world, the reopening of schools after the relaxation of restriction presented new challenges for administrators, teachers and learners as well as parents due to a new standard of procedure that was put in place (Pokhrel & Chhetri, 2021). Based on this, the Federal Ministry of Education spelt out the guidelines for the reopening of schools and learning facilities so as to curtail the spread of COVID-19 in Nigerian educational institutions. These guidelines outlined key strategies for implementing safe, efficient and equitable plans for school reopening and operations. Adelakun (2020) in his study reported that school closure had been shown to reduce morbidity of Asian flu by 90% during the 1957 to 1958 outbreak, and from 2004 to 2008, reduced the morbidity of Influenza by 50%. The researcher concluded that the closure of schools comes with attendant problems in controlling pandemics and that the process is ineffective. The successful management of any health emergency in the future should involve good leadership qualities, teamwork and coordination across professions, agencies, students' bodies and government representatives.

## **COVID-19: The assessment of students**

The conventional system of assessment of students in the traditional face-to-face teaching is pen-and-paper based. During COVID-19, there was an urgent need to find alternative methods of assessment. Some of the methods adopted by the management of higher institutions include giving assignments to students, making use of multiple-choice and subjective questions, and conducting oral examinations, among others. The assessment of students to determine their abilities and achievements is usually the concern of all educational institutions. According to Adebayo and Abdulhamid (2015), assessment is one of the ways of evaluating the knowledge and skills that an individual student has acquired. It is through this method that the academic progress of individual students throughout the academic year is measured. Osuji (2012) argued that assessment is an integral part of the teaching and learning processes as knowledge and skills cannot be said to be transmitted and imparted without proper assessment. Assessment involves the collection of data about a student's knowledge, skills and attitudes as well as his or her beliefs so as to evaluate the achievement of learning objectives (Adikwu, Obinne, & Amali, 2014). It is critical to the operations of any educational institution because it is geared towards providing information to meet two separate goals: to improve teaching and learning; and influence decisions on where scarce resources should be channeled. In other words, educational assessment helps teachers and educational managers to make decisions about an individual student's advancement through the education system, and the allocation of resources.

# COVID-19: Planning examination for the semester

The emergence of COVID-19 has brought new dimensions to the examination system. During this time, many higher institutions either postponed their examination, or put it on hold as institutions were shut down by the government to reduce the spread of the virus. Throughout the early part of the school closure during the pandemic, tertiary institutions in Nigeria were at a loss on how to plan, conduct and process examinations as many students were used mainly to the pen-and-paper method of examination. Moreover, institutions could not plan and conduct examinations online as facilities to do so were not available and where they were available, such facilities could not be used because of the large number of students. As time went by, many of the institutions employed various strategies to ensure that examinations were conducted online. Ebohon, Obienu, Irabor, Amadin and Omoreigie (2011) in their study found that many teachers believed that there was an increase in the tendency for examination malpractice when assessment was conducted virtually. The researchers also found that teachers agreed that it was difficult assessing students' abilities and performance with distance learning tools and grades were not an accurate reflection of students' skills and knowledge. Apart from the possibility of students cheating during virtual examinations, one possible reason for the teachers' opinion may be that most of the assessment was done using multiplechoice questions which were quite easy to answer. The online learning method in Nigeria, undoubtedly is plagued by poor funding, absence of existing platforms for the examination system, absence of technical knowledge and support, epileptic power supply, high cost of data bundles and computers, poor Internet connectivity, inequality and non-access issues, inadequate ICT infrastructure, ineffective monitoring as well as examination malpractice (Oladipo et al., 2020).

#### **COVID-19: The Accreditation of academic programmes**

Accreditation is a step by step procedure of examining whether an institution and its academic programmes comply with the standards set for its operations, and if otherwise, recommendations are made for improvement. It is also a process of identifying grey areas in the standards set for academic programmes or institutions with the aim of making recommendations for improvement. According to Kelum et al. (2020), accreditation is seen as a process whereby an institution's services and operations are examined by an external accreditation agency to determine if applicable standards have been met. The researchers further explained that accreditation creates confidence in the institution and its programmes as well as trust in the quality of education and certificates it offers and awards students, while giving it international recognition. Accreditation is usually carried out in Nigeria by institutions' supervising agencies or professional bodies. During the period of COVID-19, accreditation activities in all higher institutions were suspended because there was no available online mechanism to conduct accreditation.

## COVID-19: The cost of higher education to Institutions in Nigeria

The cost of education is conceptualized as direct and indirect cost. Nwadiani (2000) noted that the cost of education is the reflection of the human and material resources as well as the time used in the production of educated individuals estimated in monetary terms. The costs can either be termed recurrent or capital. In Nigeria, it has been estimated that salaries and allowances in particular, consume 80% of the recurrent items which form a large portion of educational expenses. Nwadiani further affirmed that in Ceylon and Morocco, recurrent expenditure on teachers' salaries alone gulped about 94% and 95% respectively of the total recurrent expenditure.

In Nigeria, the government is the major financier of public tertiary institutions as many public schools depend solely on government grants through statutory allocations to cater for capital and recurrent expenditure (Adie, Eteng, Ajang & Kintum, 2016). With the outbreak of COVID-19, the cost of higher education all around the world increased remarkably (World Bank, 2020). This is because expenditure on infrastructure that would boost information and communication technology would have to be provided to aid hybrid teaching method in institutions of higher learning. Hence, there is need for government to increase budgetary allocation to education to an appreciable percentage to enable all the institutions provide the needed infrastructure to boost online teaching and learning.

## COVID-19: The enrolment of students for the new academic year

The emergence of COVID-19 pandemic adversely affected students' enrolment for the new academic session as the management of higher institutions did not envisage the fallout from the pandemic. Consequently, both local and international students could not enroll for the new academic year because many institutions were closed. In some institutions, the academic year was cancelled and those who were offered provisional admission could not resume for the session.

## COVID-19: International students' mobility

Many international students studying in various higher institutions in Nigeria had to travel to their home countries due to COVID-19 as the government of the Federal Republic of Nigeria announced the closure of all institutions in Nigeria to curtail the spread of the pandemic. In like manner, many Nigerian students studying abroad had to come home for various reasons. It was during this period that more than 300 Technical Aid Corp members serving in various institutions in East African Countries were repatriated to Nigeria. Ogunode, Iroegbu, and Abashi (2020) in a survey carried out on over 2,000 students from Africa, Asia and Australia found that nearly 3 out of 10 students affirmed that their plans for school activities changed due to the pandemic. Giogio et al. (2021) found that COVID-19 increased virtual mobility and collaborative online learning as an alternative to students' physical mobility.

## **COVID-19: Research and academic conferences**

Many local and international conferences could not hold during the COVID-19 pandemic. Giogio et al. (2021) found that 83% of higher education institutions in Africa cancelled international travel, and 81% of higher institutions postponed scientific conferences. Many scientific projects embarked upon before the pandemic were not completed, while 21% of higher institutions completely stopped research activities. In Nigeria, academic conferences and research activities were not held during this period.

# Conclusion

This paper has so far identified that higher education contributes to national development through the production of high level manpower and provision of affordable quality learning opportunities. The COVID-19 pandemic has had negative effects on every sphere of human society, the education sector inclusive. To manage the higher education system at this time needs new strategies such as improved education funding by government and the adoption of technology-mediated learning rather than the old system of complete reliance on face-to-face teaching. The writers are optimistic that despite the disruptions caused by COVID-19 in the education sector, if the appropriate interventions are implemented, higher education will be well managed and yield the right results.

# Recommendations

Based on this study and the conclusions drawn therefrom, the following recommendations were made:

- 1. The government should give palliative financial backing to higher institutions in Nigeria to enable them cope with the unprecedented effects of the Covid-19 pandemic.
- There should be an increase in the global budgetary allocation to education. The budgetary allocation should be increased to 30-35% to make allowance for the effects of epidemics and pandemics. Furthermore, the yearly financial allocation to the different levels of education should be increased significantly to cope with any emergency.
- 3. All higher institutions should adopt technology-mediated learning mechanisms. More funds should be pumped into the sector to enable schools acquire and maintain the required infrastructure for blended learning technique. More computer software and hardware should be purchased in order to cope with the new normal in the education system.
- 4. There is also need for the government to put in place a joint consultative committee on education to provide the framework for a new curriculum programme which would fashion a new National Policy on Education that would incorporate the new normal for the attainment of higher education goals.
- 5. All the commissions and boards in charge of the management of tertiary institutions in Nigeria should as a matter of urgency direct the institutions under their enclave to put in place wireless communication to enhance research, teaching and community development.
- 6. The management of higher education at all levels should lay more emphasis on online engagement in all school activities. Hybrid teaching methodology, which is the combination of the traditional face-to-face teaching and online teaching, can be adopted during this period.

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