



COVID-19 AND NIGERIA'S EDUCATION: EMPIRICAL INVESTIGATION OF OSUN STATE- OWNED TERTIARY INSTITUTIONS

***IJIWOLE, A. ANTHONIA (PhD), **ODEBIYI, I. PAUL, *ADEBAYO, T. OYENIKE**

**School of Vocational and technical Education, Department of General Studies in Education, Osun State Polytechnic, Iree, Nigeria **Directorate of General Studies, Languages and Humanities Unit, Osun State Polytechnic, Iree, Nigeria*

Abstract

This study examines the extent to which COVID-19 has an effect on Nigeria's education. Specifically, the study examines the level of adoption of e-learning and the factors affecting the adoption of e-learning in Nigeria. The descriptive research design was adopted for the study, while the purposive sampling technique was employed to select thirty (30) students each from all five Osun State-owned tertiary institutions totaling one hundred and twenty (120) respondents as a sample size for the study. Data was sourced through a structured closed-ended questionnaire designed by the researchers. Data were analyzed with the aid of frequency, percentage mean, standard deviation, and factor analysis. The study establishes that level of e-learning adoption very low in Nigeria. It was also established that COVID-19 has a negative effect on education, while poor funding of education was identified as a major factor affecting e-learning in Nigeria. Subsequently, the study recommends that the Federal Government should endeavor to earmark 26% of the total budget for educational development as recommended in the United Nations Organisation and more modern learning aids such as computers, internet web sites facilities, overhead projectors, and firms should be provided in schools.

Keywords: COVID-19, Pandemic, E-learning, Education, Tertiary Institution

Introduction

The importance of education has been documented in the literature and recognized by scholars, educationalists, and professionals as an alternative paradigm for economic growth and sustainable development globally.

Education is a very vital tool that is used in the contemporary world to succeed. It is important because it is used to mitigate most of the challenges faced in life. The knowledge that is attained through education helps open doors to a lot of opportunities for better prospects in career growth. This implies that education trains an individual to be useful in society and to meet up the need of society for national development. Therefore, it should be clear that without education, no positive transformation can take place.

The sudden outbreak of coronavirus disease 2019 (COVID-19) which originated from the city of Wuhan, China, has been deviled the education sector across the globe. According to UNESCO monitoring, above 191 countries implemented nationwide closures, and 5 implemented local closures, impacting about 98.4 percent of the world's student population (Adelakun, 2020). Most governments decided to temporarily close educational institutions in an attempt to reduce the spread of COVID-19. As of 12 January 2021, approximately 825 million students are currently affected due to school closures in response to the pandemic (World Bank, 2020). In Nigeria, the Federal Ministry of Education directed all educational institutions in Nigeria to shut down and allow students to go home as cases of reported COVID-19 increased in geometric progression. According to Murphy and Wyness (2020), school closures impact not only students, teachers, and families but have far-reaching economic and societal consequences. McCulloch (2020) also argues that school closures in response to the pandemic have shed light on various social and economic issues, including student debt digital learning, food insecurity, and homelessness as well as access to and disability services. The impact was more severe for disadvantaged children and their families, causing interrupted learning, compromised nutrition, childcare problems, and consequent economic cost to families who could not work (Richardson, 2020).

In response to school closures, UNESCO recommended the use of distance learning programmes and open education applications and platforms that schools and teachers can use to reach learners remotely and limit the disruption of education (World Bank, 2020). Colleges have scrambled to find creative solutions to teaching students online, in-person but socially distant, or in a hybrid format. In line with UNESCO's recommendation, many African governments implement multi-faceted strategies to ensure the continuity of learning including, radio, television, newspaper, and the distribution of printed

learning materials. In Nigeria's context, it quite unfortunate that many Nigerians are not conversant with the use of these types of virtual learning methods. For example, the electricity in Nigeria is epileptic and the cost of providing alternatives is high. It is costly to run petrol and solar-powered generators, not many houses can afford it. The cost of data for the internet is high too, not all places will have access to the internet or fast internet services. Over 70% of our students do not have access to laptops and computers. Adeoye, Adanikin and Adanikin (2020) attributed this menace to the poor budgetary allocation, corruption and unpreparedness are contributing factors to the inability of many public tertiary institutions to embrace e-learning during the global COVID- 19 pandemic in Nigeria.

The germane questions agitating the mind of researchers are; what is the level of adaption of e-learning among Nigerian students? To what extent COVID-19 have an effect on education in Nigeria? And what are the factors affecting e-learning in Nigeria?

COVID-19 Pandemic and its Effect on Education

The lethal coronavirus pandemic 2019, christened COVID-19 is a devastating worldwide pandemic that initially broke out in Wuhan, China, in December 2019. World Health Organization (WHO) proclaimed the novel coronavirus (COVID-19) episode a worldwide pandemic on March 11, 2020. Coronaviruses are a gigantic group of respiratory infections that can cause sickness in people and creatures. In remarkable cases, the coronaviruses that exist among creatures can develop and harm people. Ongoing realities confirm that as of 26th June 2020, more than 9 million cases of COVID-19 have been recorded in at least 188 nations, while, more than 489,000 deaths have occurred (World Bank, 2020). The first case of the lethal virus was identified in Lagos State by the Ministry of Health on the 27th February 2020 and from that point onward, other cases are increasingly recorded in Nigeria irrespective of the preventive and curative measures being put in place by the government via Federal Ministry of Health.

On 26 January China was the first country which instituted measures to contain the COVID-19 outbreak including extending the Spring Festival Holiday and became the first to close all universities and schools around the country (Karp, 2020). On 4 March the UNESCO released the first global numbers on school

closures and affected students on 3 March. It reported that 22 countries on three continents had enacted preventive measures including the temporary closure of schools and universities, impacting 290.5 million students around the world. In reaction, UNESCO called on countries to support affected students and families and facilitate large-scale inclusive distance learning programmes (Ávila, 2020). On 5 March, the majority of students affected by COVID-19 emergency measures were located in China, with 233 million learners affected, and followed by Japan at 16.5 million and Iran at 14.5 million (World Bank, 2020). According to UNESCO, one in five students worldwide was "staying away from school due to the COVID-19 crisis" while another one in four was barred from higher education institutions.

In Nigeria, the Federal Ministry of Education has directed all educational institutions in Nigeria to shut down and allow students to go home as cases of reported COVID-19 increased to 13. The Permanent Secretary in the Ministry of Education, Sonny Echono, told reporters on 19 March that the directive was part of the country's overall strategy to contain the spread of the virus. Nigeria joins the growing list of countries in Africa that have closed schools and universities. Recently, the federal government has been threatening to close many of the public and private schools, colleges, and universities to contain the spread of the second phase of deadly COVID-19. School closures in response to the COVID-19 pandemic have shed a light on numerous issues affecting access to education, as well as broader socio-economic issues. The closures of schools and universities have impacted over 70% of the Nigeria's inhabitants (Adelakun, 2020).

Concept of Education

There no acceptable universal definition of education. This is because it is a lifelong process, starting before we begin school and ongoing for life. Its definition may also differ depending on the perspectives of those who are trying to define it. For instance, Awolowo (1963), quoted by Gbadegesin (2010) defined education as the process of physical and mental culture whereby a man's personality is developed to the fullest as he identified literacy as the foundation on which an edifice of sound education may be built. Education is an agent of change that presents a solid vehicle for the transformation and empowerment of citizens in a country (Adebayo, 2011). British Department for

International Development (DFID) sees education as an effective tool that should be used in the present attempt to halve poverty by the year 2015. In the three-stage of education, that is, primary, secondary and tertiary levels, university education is perceived as an instrument for empowerment that seeks to provide the youths with the skills required for sound social living (Adebayo, 2011).

Nigerian education has been experiencing a geometric setback for the past two decades. One of the challenges facing Nigeria's education system is inadequately qualified manpower: This attributes to poor earnings of teachers from primary school to tertiary institutions. Most Nigerian teachers do have other jobs in which they give more concentration. This no doubt, affects the standards of education. According to Jamila (2010), there are academic staff shortages across the board particularly in the critical areas of Science and Technology; over 60% of the academic staff in the Nigerian tertiary institutions is in the category of Lecturer I and below; these shortages are compounded by inter-and intra-sectoral brain drain. Jamila (2016) also affirms that poor funding of education is a major factor affecting the educational sector. In the same vein, Ojeifo also reaffirm that the problems of the education system are inadequate basic infrastructure, over-crowded classrooms, inadequate learning, and teaching materials, and teacher incompetency, among others.

Politicizing of the educational system is also another germane factor that killing the sector. For example, governments at all levels, especially at the state level, attempt to run many institutions even when they are least prepared for such. This causes the general fall in the standard of the initially existing ones. Resources to be shared between few schools are now being shared among many. Also, appointment in the teaching profession is not based on merit, while many teachers are teaching students with methods they learned at least 15 years ago (Ola, Aremu & Lawal, 2015). A survey conducted by "United Nations Children Fund" (UNICEF) in 2011 revealed that Nigeria had the highest number of out-of-school children in the world. The survey showed that one (1) out of every three (3) school-age children was out of school. The problem was said to be more in the North and girls constituted the higher proportion of out-of-school children. In line with the UNESCO report on "Financing education in Nigeria affirms that about 8.7 million primary children are out of school in Nigeria. The percentage of budget allocation to the education sector in Nigeria is far below

UNESCO's recommendation of 26% of the national budget as indicated in Table 1. Consequently, the quality of education in Nigeria has been in disrepute. No wonder why no single Nigerian university is ranked among the best 400 universities in the world. This may be the reason why millions of our youths and a lot of graduates roam about the streets of the major cities and towns in search of white-collar jobs. To support this assertion, Nwangwu (2007) observes that youths and graduates from tertiary institutions are not well equipped with the necessary skills that will make them self-reliant. No wonder why over one million applicants applied for ten thousand jobs in Nigeria Police. This confirms that the benefits of sound education which other developing countries have been enjoying have not been felt in Nigeria.

Table 1: Percentage of budgetary allocation to education in Nigeria

Year	Nigeria	Ghana	South Africa	Uganda	Kenya
2010	6.4	30	-	-	-
2011	7.6	45	-	-	-
2012	8.4	31	25.8	27	23
2013	8.7	24	-	-	-
2014	10.6	21	-	-	-
2015	11	-	-	-	-
2016	8	-	-	-	-
2017	5.4	-	-	-	-
2018	7.03	-	-	-	-
2019	7.03	20.9	14.4	-	-
2020	6.7	-	16.0	-	-
2021	5.6	-	15	-	-

Methodology

The descriptive research design was adopted for the study, while purposive sampling technique was employed to select thirty (30) students each from all five Osun State-owned tertiary institutions, Osun State University, Osogbo, Osun State Polytechnic, Iree, Osun State College of Technology, Esa-Oke, Osun State College of Education, Ila-Orangun and Osun State College of Education Ilesa respectively, totaling on hundred and twenty (120) respondents

as a sample size for the study. The assumption is that they have the same educational policy. Data was sourced through a structured closed-ended questionnaire designed by the researchers. The reliability coefficients (Cronbach's) of the COVID-19 scale was 0.81 while the education scale yielded a reliability alpha of .84. Data were analyzed with the aid of frequency, percentage mean, standard deviation, and factor analysis.

Results and Discussion

Table 2: Level of E-Learning

Level of E-learning	Frequency	Percentage
Very High	5	4.2
High	15	12.5
Low	45	37.5
Very Low	55	45.8
Total	120	100
Mean	29.12	
Standard Deviation	8.98	

Source; Authors' computation

It is observed from Table 2, that fifty-five (45.8%) respondents agreed that the level of e-learning is very low in their tertiary institutions. Forty-five (37.5%) respondents agreed that the level of e-learning is low. Fifteen (12.5%) respondents agreed that the level of e-learning is high while only five (10.5%) respondents agreed that the level of e-learning is very high. The mean e-learning score of the respondents was 29.12 and the standard deviation was 8.98. From this, it is clear that the majority of the students had issues with the introduction of e-learning during the lockdown. This implies that during the first phase of the deadly COVID-19 many students were denied access to education. The probable cause is epileptic electricity and the cost of providing alternatives is high. Also, the cost of data for the internet is high too. While over 70% of students do not have access to laptops and computers. Adeoye, Adanikin, and Adanikin (2020) also attribute this menace to the poor budgetary allocation, corruption and unpreparedness that are contributing factors to the inability of many public tertiary institutions to embrace e-learning during the global COVID- 19 pandemic in Nigeria.

Table 2: Descriptive Statistics on COVID-19 and Education in Nigeria

S/N	Statement	N	\bar{x}	SD	Min	Max
1	Since advent of COVID-19, standard of education began to lose momentum.	120	4.289	0.679	3	5
2	Closed of schools, colleges and universities during first phase of COVID-19 has increased criminality in the country.	120	4.424	0.644	3	5
3	COVID-19 affected education system in Nigeria.	120	4.113	0.768	2	5
4	COVID-19 has caused interruption in students' learning.	120	4.127	1.033	1	5
5	Due to the fact that learning is mostly remote since the start of COVID-19, cheating has become far easier for students.	120	4.208	0.675	2	5
6	The lack of student to teacher interaction during COVID-19 has also led students to feel less passionate about the integrity of their work.	120	4.215	0.840	2	5
7	Lack of access to technology or good internet connectivity is an obstacle to continued learning.	120	3.681	1.213	1	5
8	School closures puts a strain on parents and guardians to provide childcare and manage distance learning while children are out of school.	120	4.102	0.974	1	5
9	Students gain literacy slower during school closures than in a business-as-usual academic year.	120	3.203	1.351	1	5
10	When schools are closed, many children and youth miss out on	120	4.180	0.841	1	5

social contact that is essential to learning and development.					
---	--	--	--	--	--

Source: Field Survey, 2021.

Table 2 reveals that the majority of respondents agreed that Closed of schools, colleges, and universities during the first phase of COVID-19 has increased criminality in the country with a mean value of 4.424 and standard deviation value of 0.644. Others in ranking order are; Since advent of COVID-19, standard of education began to lose momentum (mean = 4.289 and SD = 0.679); the lack of student to teacher interaction during COVID-19 has also led students to feel less passionate about the integrity of their work (mean = 4.215 and SD = 0.840); due to the fact that learning is mostly remote since the start of COVID-19, cheating has become far easier for students (mean 4.208 and SD of 0.675); when schools are closed, many children and youth miss out on social contact that is essential to learning and development (mean = 4.180 and SD = 0.841); COVID-19 has caused interruption in students' learning (mean = 4.127 and SD = 1.033); COVID-19 affected education system in Nigeria (mean = 4.113 and SD = 0.768), lack of access to technology or good internet connectivity is an obstacle to continued learning (m = 3.681 and SD = 1.213) and students gain literacy slower during school closures than in a business-as-usual academic year (mean = 3.203 and SD 1.351).

The above findings are in line with views of the World Bank (2020), and McCulloch (2020) that the COVID-19 surge has havoc on education across the globe. The implication of this finding is that investing in entrepreneurship education is a driving force of economic growth and sustainable development.

Table 3: Descriptive Statistics of the Factors affecting e-learning in Nigeria

Statement	N	Mean	Std. Deviation
Lack of infrastructural facilities		4.03	1.015
The cost of data for the internet		3.85	1.322
Lack of access to fast internet services		4.02	0.841
High level of computer illiterate		3.53	1.369
Phobia for computer		3.28	1.330
Lack of access to laptops and computers		3.68	1.168
Lack of management support		3.31	1.134

Poor funding of education	4.29	.70953
----------------------------------	------	--------

Source: Field Survey, 2021.

Table 4: Principal Component Analysis of Factors affecting e-learning in Nigeria.

Component	Initial Eigenvalues			Extraction Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.346	41.820	41.820	3.346	41.820	41.820
2	1.523	19.037	60.857	1.523	19.037	60.857
3	1.009	12.611	73.468	1.009	12.611	73.468
4	.818	10.226	83.694			
5	.614	7.674	91.369			
6	.339	4.241	95.609			
7	.202	2.528	98.137			
8	.149	1.863	100.000			

Extraction Method: Principal Component Analysis.

Source; Authors' computation

Table 3 suggests a large average of 3.80 which is over the criterion mean of 3.00. This reveals that respondents have the opinion that the above items are the factors affecting e-learning in Nigeria. In addition, results indicate that poor funding of education, lack of infrastructural facilities, and lack of access to fast internet services with mean values of 4.29, 4.03, and 4.02 respectively.

Table 4 shows the significance of every one of the eight components. Only the first three (poor funding of education, lack of infrastructural facilities, and lack of access to fast internet services) have eigenvalues over 1.00, and together this clarified 73.4 % of the total change in factor affecting e-learning in Nigeria while remaining 26.5% of the variation was explained by a few unknown factors. Table 4 depicts that poor funding of education precludes the adoption

of e-learning in Nigeria. This study conforms to Adeoye, Adanikin, and Adanikin's (2020) assertion that that poor budgetary allocation, corruption, and unpreparedness are contributing factors to the inability of many public tertiary institutions to embrace e-learning during the global COVID- 19 pandemic in Nigeria. Jamila (2016) also affirms that poor funding of education is a major factor affecting the educational sector. In the same vein, Ojeifo (2013) also reaffirm that the problems of the education system are inadequate basic infrastructure, over-crowded classrooms, inadequate learning, and teaching materials, and teacher incompetency, among others.

Conclusion and Recommendations

This study examines the extent to which COVID-19 has an effect on Nigerian education. Specifically, the study examines the level of adoption of e-learning and the factors affecting the adoption of e-learning in Nigeria. The descriptive research design was adopted for the study, while purposive sampling technique was employed to select thirty (30) students each from all five Osun State-owned tertiary institutions totaling on hundred and twenty (120) respondents as a sample size for the study. Data was sourced through a structured closed-ended questionnaire designed by the researchers. Data were analyzed with the aid of frequency, percentage mean, standard deviation, and factor analysis. The study establishes that level of e-learning adoption very low in Nigeria. It was also established that COVID-19 has a negative effect on education, while poor funding of education was identified as a major factor affecting e-learning in Nigeria.

Subsequently, the study recommends that the Federal Government should endeavor to earmark 26% of the total budget for educational development as recommended in the United Nations Organisation and more modern learning aids such as computers, internet web sites facilities, overhead projectors, and firms should be provided in schools.

References

- Adebayo, A. (2011). *Youth Unemployment and National Directorate of Employment Self Employment Programmes. Nigerian Journal of Economics and Social Studies* 41(1): 81-102.
- Adelakun I. S (2020). *Coronavirus (COVID-19) and Nigerian Education System: Impacts, Management, Responses, and Way Forward. Education Journal;* 3(4); 88-102.

- Adeoye, I.A., Adanikin, A.F & Adanikin, A. (2020). *COVID-19 and E-Learning: Nigeria Tertiary Education System Experience. International Journal of Research and Innovation in Applied Science*. 5(5); 28-32.
- Ávila E (2020). "[Escolas públicas e particulares do RJ não terão aulas a partir de segunda-feira](#)" (in Portuguese). *G1 Rio de Janeiro*.
- Jamila, S. (2010). *Higher Education Statistics: Nigeria Experience in Data Collection. A Paper Presented at the UNESCO Institute of Statistics in Anglophone Countries, Windhoek*.
- Jamil, S. (2016). *Tertiary Education and the Sustainable Development Goals: In Search of a Viable Funding Model. A paper prepared for the international commission on financing global education opportunity 9 November 2016*.
- Karp P (2020). "[Why Australia is not shutting schools to help control the spread of coronavirus](#)". *The Guardian*. ISSN 0261-3077. Retrieved 2020-03-16.
- McCulloch D (2020). "[Confusion over coronavirus school closures](#)". *The Canberra Times*. Retrieved Mar 26, 2020.
- Murphy, R & Wyness, G. (2020), "Minority Report: the impact of predicted grades on university admissions of disadvantaged groups", *CEPEO Working Paper Series No 20-07 Centre for Education Policy and Equalising Opportunities, UCL Institute of Education*.
- Nwagwu, I. O. (2007). *Higher Education for Self-Reliance: an Imperative for the Nigerian Economy, NEAP Publication*.
- Ojeifo, S.A. (2013). *Entrepreneurship Education in Nigeria. A Panacea for Youth Unemployment. Journal of Education and Practice*, Vol. 4 (6), 61 – 67.
- Ola, O.S, Aremu, A. B & Lawal, L. O. (2015). *Youth Empowerment For Sustainable Development: The Role Of Entrepreneurship Education. Paper presented at 3rd National Conference organized by Faculty of Financial Studies, Osun State Polytechnic, Iree, Nigeria. 21st – 24th July, 2015*.
- Richardson, H. (2020). "[Whose children will still be able to go to school?](#)". *BBC News*. Retrieved 2020-03-21.
- UNESCO (2020). *Financing Education in Sub-Saharan Africa: Meeting the Challenges of Expansion, Equity and Quality (Montreal: UNESCO Institute for Statistics, 2020)*.
- World Bank (2020). *Assessing the Economic Impact of COVID-19 and Policy Responses on Sub-Saharan Africa, Africa's Pulse, April 2020 (Vol 1)*.