



CHALLENGES OF HIGHER INSTITUTIONS IN NIGERIA TOWARDS DIGITAL LEARNING FOR QUALITY EDUCATION IN THE POST COVID-19 PERIOD

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Abstract

Quality education which is very important for an individual's success in life, is under threat as a result of Covid-19 pandemic that has disrupted the academic activities owing to its social distancing rule. Alternatively, Universities worldwide has embraced digital learning in order to sustain the academic activities. However, Higher institutions in Nigeria were then under lock and keys in view of poor or lack of digital learning equipment and experts. This paper ascertains the challenges of higher institutions in Nigeria towards digital learning for quality education in the post covid-19 Period. Descriptive research design was used to analyze the research questions. The population of the study comprised of all the Lecturers in Public and Private Universities in Kwara State teaching Office Technology and Management Subjects i.e. 28 and 16 respectively. The sample for this study comprised of 19 OTM Lecturers from Public Universities and 12 OTM Lecturers from Private University randomly selected. A self-designed Questionnaire was administered to elicited information from the respondents. The finding showed that there are innumerable challenges to digital learning in Nigeria due to poor digital infrastructure, other socio-economic factors and the poor coordination of educational sector among others. The study suggested that higher educational institutions should provide a flexible mechanism to teach their practical and theoretical curricula; governments must provide financial grants and pour money into higher institutions of learning in the country for the purpose of procuring digital learning materials among others

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

Introduction

Education is very important for an individual's success in life. It can give a big impact on human opportunity in continuing their life quality. Education is generally seen as the foundation of society which brings economic wealth, social prosperity and political stability. Economic and social status depends on education obtained by individual since education contributes to individual capability in managing quality of life. It can help one's individual to avoid from poverty, build up harmony and democracy society. Education also capable to give power for them to voice out. Education has remained the bedrock of any nation being an instrument for national transformation and development. In this regard, Ijaiya (2014) opined that the worth of any educational system as an investment lies in its capacity to continuously serve its customers (students, parents, employers or labour, the society) better and remain relevant. It is on this basis that the quality of education will be assessed. Today, more than ever before in human history, the wealth or poverty of nations depend on the quality of their citizen's education. Those with a big repertory of accomplishments and greater learning capacity can count forward to a lifetime of unprecedented economic fulfillment.

The global health pandemic has shined a harsh light on the vulnerabilities and challenges humanity faces. It has provided a clear picture of existing inequalities and a clearer picture of what steps forward we need to take, chief among them addressing the education of more than 1.5 billion students whose learning has been hampered due to school closures. Education is the key to move in the world, seek better jobs and ultimately succeed in life. Education is the best investment for the people because well educated people have more opportunities to get a job which gives them satisfaction. Educated individuals enjoy respect among their colleagues and they can effectively contribute to the development of their country and society by inventing new devices and discoveries. Main purpose of education is to educate individuals within society, to prepare and qualify them for work in economy as well as to integrate people into society and teach them values and morals of society. Role of education is means of socializing individuals and to keep society smoothing and remain stable. Education in society prepares youngsters for adulthood so that they may form the next generation of leaders.

Higher-educational institutions include not only universities and colleges but also various professional schools that provide preparation in such fields as law, theology, medicine, business, music, and art. Higher education also includes teacher-training schools, junior colleges, and institutes of technology. Studying at university or college can help make young people more independent, as they learn to manage their own money and time much more than they might have had to previously. The social aspect of higher education is also of benefit to students, as they meet likeminded people and form new friendships. Universities and colleges also offer an array of extra-curricular activities for their students to get involved in, which is a great way to further an existing interest, or try something new in addition to meeting new people.

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.

Most educational institutions in Nigeria are currently based only on traditional methods of learning including schools, colleges and universities (Kazeem, 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. 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.

According to Kazeem, (2020), 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. 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. 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.

The Coronavirus crisis and the resulting closures affected almost every sector of the global economy, and these crises have caused some sectors to turn upside down. Perhaps one of the most directly affected by this process is the higher education sector. The outbreak of the Coronavirus epidemic has led to a major educational crisis due to the closure of schools and universities around the world and the disruption of formal education services, as more than 290 million students around the world have been directly affected Warren, (2020). Many countries have decided to close schools, colleges, universities, and all educational institutions to reduce affection rates. Here, the basic dilemma arises in the need for governments to choose between two options: either closing educational institutions, preserving lives, and limiting direct contact, or keeping them open to mitigate the devastating economic, scientific and cognitive effects resulting from their closure. It is not easy for all members and stakeholders in educational institutions to make such a decision or even transfer education to the distance education system, as it is not easy for families and students to accept that the educational process takes place entirely from home, so it is very difficult for parents and students to accept this direct transfer in the method of delivery for the education system (Holzberger, Philipp, & Kunter, 2013)..

Coronavirus also caused unprecedented shocks in the higher education system, and more clearly, not all students, not even universities, teaching and administrative bodies, were able to change and move to this completely new system, and the students' societies did not accept this change too. It is hard to request from physics professors to prepare lectures and equations using the Zoom program because this method is completely brand new to them. It is also difficult for all students to accept this shift in which, they are requested to attend a full program of study, lectures, and register attendance while they are in front of a laptop or mobile screen. This topic needs studies in behavioral psychology and restrict student distraction as much as possible. An example of this is what will the student do during a physics lecture that he attends on the Zoom program on his mobile device if his girlfriend sends him a message? What will the professor presenting this lecture do in the event of a technical error on the laptop or in the communication program? These problems are an integral part of a complex behavioral and social system that all parties to the educational process must be prepared to accept and understand.

All members and stakeholders of the educational process must be informed that we are facing an international dilemma and a catastrophic epidemic, and we must all try to participate in accepting intermediate solutions to overcome these difficulties. In this regard, we are not proposing that what is happening is not problematic, or that dealing with this new system is very simple, as this educational system represents a new challenge for all parties. We are almost certain that educational institutions are not at all happy with this new educational system. What calms us is that we cannot do anything to change this new reality. Pai, & Tu, (2011) maintained that universities must encourage and support the

teaching staff to overcome the psychological, emotional, and physical difficulties of the virus among students because for those students, the future is vague, unclear, ominous, and uncertain, and there are no good predictions at all, as these students will enter the labor market that has been almost halted and stopped mainly due to the virus.

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 (Aristovnik, Keržič, Ravšelj, Tomaževič, & Umek, 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 (Kazeem, 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 6 crucial to ensuring the continuity of education in Nigeria which demands working on our digital infrastructure, up-skilling staff and expanding their capabilities.

One positive short-term development is that universities worldwide have responded dynamically to the pandemic, generously contributing their scientific knowledge and resources to help fight COVID-19. Within weeks of the virus' initial onslaught, universities developed a faster and cheaper COVID-19 test and donated surplus equipment to hospitals. Laboratories within universities also have been busy producing medical supplies, sanitizing equipment, and medicines. Universities all over the world have helped with genome sequencing, coronavirus testing, and production of low-cost ventilators. They also have been at the forefront of epidemiological research and communication. The public information role of universities during the pandemic is all the more important as many people across the world have fallen prey to fake news disseminated in the social media, often with dangerous or even fatal consequences.

Statement of the problem

Education has remained the bedrock of any nation being an instrument for national transformation and development. In this regard, Onwuegbuchi, (2018) 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. However, educational sectors in Nigeria can hardly follow suit due to some limitations.

Purpose of the Study

The purpose of this study is to seek for the opinion of Lecturers in Public and Private Higher Institution on the challenges of Higher Institutions in Nigeria towards digital learning for quality education in the post COVID-19 period.

Research Questions

The following questions was set out to be answered in the course of this study: What are the challenges facing Higher Institutions in Nigeria towards digital learning for quality education in the post COVID-19 period?

Research Hypotheses

The following research hypothesis was tested at 0.05 level of significance:

- H₀₁:** There is no significant difference in the responses of the Lecturers in Public and Private Higher Institution regarding the challenges facing Higher Institutions in Nigeria towards digital learning for quality education in the post COVID-19 period.

Methodology

Descriptive survey design was used for the study. The population of the study comprised of all the Lecturers in Public and Private Universities in Kwara State teaching Office Technology and Management Subjects i.e. 28 and 16 respectively totally 44. The sample for this study comprised of 19 OTM Lecturers from Public Universities and 12 OTM Lecturers from Private University randomly selected. A self-designed Questionnaire tagged “Challenges of Higher Institutions in Nigeria towards Digital Learning for Quality Education in the Post Covid-19 Period (CHINDLQEPCR) was administered to elicit information from the respondents. The items of the research question were placed on a modified four-point Likert scale of Strongly Agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SD). The scales were scored with 4 points, 3 points, 2 points, and 1 point respectively.

The first author did the introduction and the literature review, the second author did the analysis and interpretation of data while the third author did the administration and collection of research instrument. All the authors participated in the conclusion and recommendations.

Results

Research Question: What are the challenges facing Higher Institutions in Nigeria towards digital learning for quality education in the post COVID-19 period?

Table 1: Mean and standard deviation of responses on the challenges facing Higher Institutions in Nigeria towards digital learning for quality education in the post COVID-19 period?

S/N	Challenges facing Higher Institutions in Nigeria towards digital learning for quality education in the post COVID-19 period	Mean	SD	Remark
1.	Epileptic power supply	3.68	0.72	Strongly Agreed
2.	Erratic internet networks	3.71	0.46	Strongly Agreed
3.	Upgrade of instructional facilities.	3.61	0.50	Strongly Agreed
4.	Limited access and penetration of the Internet,	3.32	0.48	Agreed
5.	Lack of training on the use of digital infrastructural material.	3.50	0.51	Strongly Agreed
6.	Students and lecturers positive attitudes towards digital learning.	3.43	0.50	Agreed
7.	Grossly inadequate information and communication technology.	3.71	0.46	Strongly Agreed
8.	Infrastructure decay.	3.79	0.42	Strongly Agreed
9.	Inability of Teaching and technical staff to deliver online lectures in line with management of online examination.	3.36	0.62	Agreed
10.	Universities being ill-equipped for online education.	3.64	0.68	Strongly Agreed
11.	Lack of plan for re-evaluation of the curriculum to institute changes if required.	3.50	0.58	Strongly Agreed
12.	Arbitrary neglect in the areas of inadequate funding.	3.14	0.45	Agreed
13.	poverty level of many students which up till now remain a stumbling blocks to digital learning in Nigeria.	3.86	0.36	Strongly Agreed
Weighted Average		3.56	0.52	Strongly Agreed

Source: Field Survey, 2021

Analysis from the Table above revealed that there are innumerable challenges to digital learning in Nigeria due to poor digital infrastructure, other socio-economic factors and the poor coordination of 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.

Table 2: Paired-Samples t-test result of mean difference between responses of Lecturers in Public and Private Universities regarding the Challenges facing Higher

Gender	N	Mean	SD	t-cal	Df	Sig (2tailed)	Decision
Private Uni. Lecturers	12	3.53	0.42	-3.419	30	0.009	Not Rejected
Public Uni. Lecturers	19	3.91	0.09				

Source: Field survey, 2021

Table 2 revealed that Business Education lecturers had mean and standard deviation responses of 3.53 and 0.42, respectively, while verbatim reporters had mean and standard deviation responses of 3.91 and 0.09 respectively. The calculated value of t was -3.419 ($t_{30} = -3.419$). The observed p-value was 0.009 which is less than the fixed p-value of 0.05 ($p < 0.05$). Therefore, the null hypothesis, which stated that, there is no significant difference between the mean responses of Business Education lecturers and verbatim reporters regarding the strategies for integrating verbatim reporting into Business Education curriculum in North-central Nigerian Universities, was rejected. Hence, the inference drawn was that business education lecturers and verbatim reporters did not differ significantly in their opinion on the strategies for integrating verbatim reporting into Business Education curriculum in North-Central Nigerian Universities.

Discussion of Findings

From Table 1 above, it could be seen that Epileptic power supply has a Mean of 3.71 meaning that both the Private and Public University Lecturers are greatly in support that Epileptic power supply is a major challenge to Digital Learning. Also, erratic internet networks with a Mean of 3.71 received a mass support of both the public and private lecturers as an impediment to digital learning. Limited access and penetration of the Internet, has a Mean of 3.79 meaning that both the public and private university lecturers were of the opinion that for digital learning to take place there must be unlimited access and penetration of the Internet. Students and lecturers positive attitudes towards digital

learning with Mean of 3.86 indicated that majority of the public and private university lecturers were of the opinion that for digital learning in Nigerian universities to be successful there must be Students and lecturer's positive attitudes and cooperation.

Findings in Table above, revealed that nine out of the thirteen questionnaire items were strongly agreed to with a weighted average of 3.56 while the rest four items were agreed to with a weighted average of 0.52. All things being equal, the analysis revealed that all the items were agreed to by both the Public and Private University Lecturers as challenges of higher Institutions in Nigeria towards digital learning for quality education in the post COVID-9 period.

Findings from the hypothesis proved that the observed p-value was 0.009 which is less than the fixed p-value of 0.05 ($p < 0.05$). Therefore, the null hypothesis, which stated that, there is no significant difference between the mean responses of Public and Private University lecturers regarding the challenges facing Higher Institutions in Nigeria was rejected.

Conclusion

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. 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 developed countries of the world that were able to adapt because they had the funding and the basic ICT infrastructure to do so.

Recommendations

1. Higher educational institutions should provide a flexible mechanism to teach their practical and theoretical curricula.
2. Governments must provide financial grants and pour money into higher institutions of learning in the country for the purpose of procuring digital learning materials
3. Higher institutions in the country must automate all educational resources, all documents, and supporting documents, keep backup copies of these documents and papers for reference purpose.
4. Faculties of Technology and Informatics in universities must design specialized programs to connect students with teachers and to automatically save lectures either through special Google Drive links or by direct uploading to the university's specialized channels on the Internet or on YouTube.
5. Universities must focus on information security and protecting their databases in these difficult circumstances.

6. Universities should focus on behavioral psychology to facilitate and clarify the transition to the new teaching methodology and facilitate this task for students and university faculty and administrative staff.

References

- Aduke, A. F. (2008). Usage and challenges of Information and Communication Technology (ICT) in teaching and learning in Nigerian Universities. *Asian Journal of Information Technology*, 7(7), 290-295.
- Ajadi, T. O., Salawu, I. O. & Adeoye, F. A. (2008). E-learning and distance education in Nigeria. *The Turkish Online Journal of Education Technology* 7(4) 7
- Ajikoba, D. (2017, April 15). Facesheet: Nigeria's matriculation results between 2010 & 2016.
- Africa Check* Retrieved from <https://africacheck.org/facesheets/facesheet-nigerias-matric-results-2010-2016>
- Ali, W. (2020). Online and remote learning in higher education institutes: A necessity in light of COVID-19 pandemic. *Canadian Center of Science and Education*. Vol. 10, No. 3; <https://doi.org/10.5539/hes.v10n3p16>
- Aristovnik, A., Keržič, D., Ravšelj, D., Tomaževič, N., & Umek, L. 2020. Impacts of the COVID-19 Pandemic on Life of Higher Education Students: A Global Perspective. <https://doi.org/10.20944/preprints202008.0246.v2>.
- Chang-Richards, A., Vargo, J., & Seville, E. (2013). Organisational resilience to natural disasters: New Zealand's experience (English translation). *China Policy Review*, 10, 117–119.
- Cohen, A. (2017). Analysis of student activity in web-supported courses as a tool for predicting dropout. *Educational Technology Research and Development*, 65, 1-20.
- Fullan, M. (2013). *Stratosphere: Integrating Technology, Pedagogy and Change Knowledge*. Toronto: Pearson.
- Hammond, M (2013). Introducing ICT in schools in England: Rationale and consequences. *British Journal of Educational Technology*, 45(2), 191-201. doi:10.1111/bjet.12033
- Holzberger, D., Philipp, A., & Kunter, M. (2013). How teachers' self-efficacy is related to Instructional quality: A longitudinal analysis. *Journal of Educational Psychology*, 105(3), 774-786.
- Ijaiya, N. Y..S. (2014). Re-engineering educational management for quality education in Kwara State, Nigeria. *International Journal of Educational Management*. 64-7.
- Kazeem, Y. (2020). Nigeria schools are being forced to rethink their digital limits and education models in a pandemic. *Quartz Africa*. Retrieved from <https://qz.com/africa/1882896/nigerian-schools-adopt-online-learning-amid-covid-19/>
- Mac-Ikemenjima, D. (2005). E-Education in Nigeria: Challenges and Prospects. Proceedings from the *Dublin Global Forum* of the United Nations ICT Task Force. Retrieved from <https://www.researchgate.net/publication/316915804>



- Onwuegbuchi, C. (2018). Nigeria missing in digital ranking report. *The Guardian*. Retrieved from <https://m.guardian.ng/technology/nigeria-missing-in-digital-ranking-report/amp>
- Oyedele, T. (2020, April 8). Fiscal policy responses and tax measures & survey findings. (PwC Nigeria. <https://www.pwc.com/ng/en/publications/-covid-19-economic-implications-and-policy-responses.html>)
- Pai, J. C., & Tu, F. M. (2011). The acceptance and use of customer relationship management (CRM) systems: An empirical study of distribution service industry in Taiwan. *Expert Systems with Applications*, 38(1), 579-584.
- Warren, T. (2020). "Zoom grows to 300 million meeting participants despite security backlash" The Verge. 23 April 2020. <https://www.theverge.com/2020/4/23/21232401/zoom-300-million-users-growth-coronavirus-pandemic-security-privacy-concerns-response>