

DEVELOPING ALTERNATIVE TEACHING CONTINUITY PLANS TO MOVE CLASSROOMS ONLINE AT COVID-19 ERA IN NIGERIA

CHAPTER NINETEEN

COVID-19 PANDEMIC: THE EXIGENCY OF E-LEARNING AND CHALLENGES IN NIGERIAN PUBLIC AND PRIVATE PRIMARY AND SECONDARY SCHOOLS

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Abstract

The COVID-19 pandemic took the world by surprise. What started as viral infection in Wuhan China has snowballed into a pandemic of immense proportion. All schools in Nigeria have been closed down as educational activities too have been hard hit by the lockdown. In Nigeria, the COVID-19 pandemic has forced schools into holidays with no fixed resumption dates putting students, teachers and parents in a precarious situation. But developed countries with adequate Information Communication Technology (ICT) tools are switching to online platforms to continue the learning for students in the various tiers of their education. Thus, this paper examined the possibilities and imperativeness of adopting e-learning in public and privately-owned primary and secondary schools as a form of formal classroom instruction for children to learn through e-learning. Further, the paper observed that teachers could be relieved from the old traditional method of teaching for the 21st Century method of teaching children. Nigerian children could join other children of the world in benefitting from e-learning especially with the COVID-19 outbreak. However, the paper highlighted the challenges which come with the abrogation of old traditional method of teaching in favour and embracement of e-learning in Nigerian schools. It was concluded that e-learning classroom environment could be of motivation to children to learn as it makes them develop self-confidence and self-esteem as they use the computer to make learning happens.

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Keywords: Pandemic, E-learning, Traditional method of teaching, and Online learning.

Introduction

The COVID-19 pandemic broke out in Wuhan China around middle of December, 2019. What started as viral infection in Wuhan China has snowballed into a pandemic of immense proportion prompting the authorities there to impose a lockdown. The global lockdown over the coronavirus pandemic has affected virtually all spheres of life to the extent that most nations are putting on their thinking caps to decide on how best to resume routine activities despite the apparent constraints occasioned by the ravaging pestilence. Educational activities to have been hard hit by the lockdown. Apparently, all schools in Nigeria have been closed down. However, developed countries with adequate Information Communication Technology (ICT) tools are switching to online platforms to continue the learning for students in the various tiers of their education.

Computation by United Nations Educational, Scientific and Cultural Organization (UNESCO) (2020), revealed that about 1.723 billion learners have been affected by coronavirus-induced closures that saw about 191 countries implementing nationwide closures and local closures, impacting thereby on 98.4 per cent of the world's student population. In this regard, UNESCO recommended the use of distance learning programmes and open educational applications and platforms to reach learners without much disruption of education. Correspondingly, many schools especially in Nigeria and around the world have moved to online platforms (The Guardian, 2020).

In what is increasingly becoming a copycat affair, institutions in the developing world including Africa with deficient Information and Communication Technology (ICT) tools are keying into the online learning binge without adequate preparation. For instance, Ghana, Nigeria, Zimbabwe and South Africa have all come out with proposals for online learning. Specifically, Nigeria's Federal Ministry of Education directed tertiary institutions in the country to resume online teaching (The Guardian, 2020). This became imperative because of the uncertainty over the resumption of normal academic activities amid the coronavirus pandemic. In the same vein, both primary and secondary school students are also factored into this initiative, as the Universal Basic Education Commission (UBEC) is to work out modalities on how they could learn by using radio and television stations.

However, it is not known how much thinking went into the directive because of the obvious constraints that afflict such decision from the beginning. Noteworthy, the primary and secondary schools in the country are sadly deficient in ICT infrastructure. In fact, the minimum ICT infrastructure and basic tools are not available in the country's educational

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institutions. It is imperative to state that virtual learning requires a panoply of ICT tools. These include interactive digital whiteboards, use of smartphones, laptop computers and notebooks. There is also the functionality aspect that borders on stable and affordable Internet connectivity, security measures such as filters and site blockers and constant electricity. More important, there is the skill component that includes basic ICT literacy skills, ICT use in pedagogical settings, and discipline-specific uses. In addition, there is a content component namely curriculum design per levels that include courses and loads. The researchers are of the opinion whether the minders of Nigeria's educational system thought about these accoutrements of e-learning. Many students, especially in lower-income homes and from less well-off families everywhere, do not have access to appropriate computers – and efforts to use smartphones for instruction have been challenging (Altbach & Hans de Wit, 2020;

The Guardian, 2020). To further ask some questions: How many of the teaching staff have handy personal computers? How many students have smartphones as well as laptops and tablets to hook up to online platforms? Even if a paltry few have, how could one ensure all students including those in remote villages have equitable access to ICT devices for learning? The minders of education think that teaching online is synonymous with WhatsApp conversation, Facebook interaction, Instagram views and other social platforms. These issues cannot be addressed by a brainwave or seen-to-be-do-something attitude. It requires an honest policy thrust of strategic plans and execution discipline, hence this study.

The objective of this Chapter is to analyse the trends and challenges in exigency of e-learning practice, its implementation in primary and secondary schools in Nigeria. This is with a view to enhancing and improving the process of classroom instruction as teachers could be relieved from the old traditional method of teaching for the 21st Century method of teaching children. Most importantly, this will enable the Nigerian children to join their counterparts in the world in benefiting from e-learning. In doing this, attention will be focused on e-learning and expectations in the input process and output expectations for better understanding of progress that could be made through a combination of the e-learning experiences in Nigerian schools. The study clarifies each of the concepts, identifies and discusses the prospects and challenges of e-learning implementation in the primary and secondary schools in the Nigeria. It also proffers recommendations on how the identified challenges can be met in order to assuring quality e-learning in the primary and secondary schools in Nigeria.

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Concept of e-Learning

Researchers, Educators and Psychologists in the field of Information Communication and Technology (ICT), Science Education and Educational Psychology have defined e-learning in many ways such as technology-based teaching and learning, online teaching and learning, internet teaching and learning, and virtual teaching and learning, to mention only a few (Ojerinde, 2008; Pearson, 2010; Pearson, 2010). Academic Staff Union of Universities (ASUU) (2020) defined e-learning as a type of learning that depends entirely on Internet-based resources and support system. Lawani (2011) had described e-learning as a form of formal and informal education that uses electronic delivery methods such as internet-based learning delivery packages, CD-ROM, Online Video conferencing, websites or e-mail to manage the relationship between teacher and learners.

Ojerinde (2008) used the term online learning to refer to this organized aspect of instructional delivery, and numerous other theorists have adhered to this usage. Regardless of terminology, in this Chapter, the term e-learning is used consistently to label the totality of all forms of electronically supported teaching and learning. The information and communication systems, whether networked or not, serve as specific media to implement the learning process. Therefore, the term will still be used to reference out-of-classroom and in-classroom educational experiences via technology, even as advances continue in regard to devices and curriculum (Pearson, 2010).

Media of e-Learning Teaching Process

According to Pearson (2010), e-learning process can be facilitated through the use of computers, computing laboratories, lecture theatres, video conferencing and internet access. It is revealed that one can study whenever s/he wishes irrespective of whether it is day or night or the location. Donald (2019) asserted that e-learning process includes any device available to students for use in learning in a more efficient and stimulating manner than the sole use of teacher's voice.

Akindele and Ogunlade (2011) opined that e-learning facilities are valuable tools for learning with computer technology playing a central role in the art of teaching and learning. To Olasupo (2011) e-learning resources include all media of mass communication like radio, television, computers, internet, telephone, slide projector, teleconferencing, laptop, and a host of others.

e-Learning and the Nigerian Schools

The world has become more complicated with the unexpected coronavirus pandemic. New information technologies and capacities have emerged and been adopted. Once regarded as a 'gimmick', remote education has become part of our lives with all the possibilities and impossibilities it has to offer; as primary and secondary schools are using various online

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platforms such as Zoom, Google classroom, Edmodo, and a host of others, to reach out to the pupils. In a COVID-19 era, more and more public and privately-owned primary and secondary schools are adopting Google Apps for teaching and learning. For instance, virtually all State Governments from the 36 states of the federation have adopted the use of multiple media, including radio, television and the internet to reach the students. Besides, government has worked on a technology device loaded with the primary and secondary schools' curriculums (e.g., Opon Imo by Osun State Government, the one hundred-dollar (\$100) XO Laptop Project for Primary Schools by Federal Government in 2008) that the students can use while at home. With this device, they will be able to continue learning, test themselves and send tests to their teachers who will also be equipped with the device. To kick-start the process, the State Universal Basic Education Board (SUBEB) has developed daily lesson programmes on radio and television (e.g., Nigerian Television Authority; Federal Radio Corporation of Nigeria) for senior secondary school students as, well as interactive radio instructional programmes for primary school pupils (National Information Technology Development Agency (NITDA) 2012).

Introspectively, as far back as 1977, e-learning has been introduced to children with the introduction of Universal Primary Education (UPE) in Nigeria (Lawani, 2011). For instance, a radio was distributed to each school with the advent of UPE. Children were made to listen to radio broadcast. A single radio to a whole-school was inadequate and it created some problems then. The e-learning uses electronic devices to teach children. One could wonder, can children learn through e-learning? In answering this question, Lawani (2011) reported that children can learn through electronics which include the use of educational programmes through television, an electronic medium. Thus, as children learn through play at the earliest stage of development, storytelling and other learning exercises can be packaged through e-learning such as e-learning studio, where children can interact with software that can help them solve basic problems.

In 2001, the introduction of e-learning became prominent in Nigeria and five years after, the Intel Corporation introduced the use of ratio 1:1 computing e-learning model in selected schools in the country. Thirty-six students were selected with Intel-powered classmates PCs running on windows XP. Teachers were also trained in the use of laptop to whiteboard, broadband internet access. The programme ran for three months and it was found that the selected students showed a 30% improvement in their academic performance when measured against previous performance.

Also, the computer programme as introduced by Intel was to teach teachers in schools, to effectively integrate technology into classroom to enhance student learning. It is designed

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to improve the effective use of technology in schools and train teachers on how, when and where to incorporate technology to create in-depth, personal learning experiences.

In an apparent response to the COVID-19 outbreak and aftermath effects of lockdown, technology has become a tool to use in redesigning the learning space. In this aspect, even though the traditional in-person, face-to-face teaching will be available, e-learning learning spaces are coming on board especially in libraries and other formal and informal spaces. These are in group collaboration, project-based discussions, with high use of internet connected devices (Ingawa, 2018). In the words of Akintoye (2020) on adopting the e-learning innovation in Nigeria:

“e-learning innovation in Nigeria has been quite successful so far, as the privately-owned schools are using various online platforms such as Zoom, Google classroom, to reach out to the pupils. Private schools have kept learners occupied academically. Using same platforms, Private schools were able to complete the second term examination, which had begun before the compulsory Covid-19 break. For instance, some Private schools have always been in the forefront on child protection, hence parents were carried along throughout the processes. Through the Parents’ Forum provided by some of these platforms mentioned above, parents were able to monitor the online activities and academic progress of their kids” (p.14).

Further, Akintoye (2020) reported that most pupils could however not be involved in the online learning because their parents could not afford a laptop, and have resorted to going to their neighbour’s house – whose parents could afford iPads and laptops, to borrow and copy notes. Already, few pupils are complaining to their parents because this has meant them lagging behind and playing catch-up. They have also missed out on tests, assignments and many others.

COVID-19 Era and Prospect of e-learning in Nigeria

In a COVID-19 era, e-learning is an indispensable part of the contemporary world. In fact, culture and society have to adjust to conform to the challenges of the knowledge age. The pervasiveness of e-learning has brought about rapid technological, social, political and economic transformation especially in the knowledge world in particular, which has transformed into a network society organized around e-learning. Hence, the prospect of e-

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learning are numerous but a notable few are discussed which includes improvement in quality and quantity of teaching and learning, motivation to learn, development of self-confidence and self-esteem, access to remote learning resources, and facilitating the acquisition of basic skills.

According to Ingawa (2018), the field of education has not been unaffected by the penetrating influence of e-learning, as e-learning has impacted on the quality and quantity of teaching and learning. In concrete terms, e-learning could enhance teaching and learning through its dynamic, interactive and engaging content; and it could provide real opportunities for individualized instructions. Therefore, e-learning has the potential to accelerate, enrich, and deepen skills, motivate and engage students in learning; helps to relate school experiences to work practices, strengthens teaching, and provides opportunities for connection between the school and the world (Davis & Tearle, 2019).

In the same vein, Akindede and Ogunlade (2011) in their study have shown that using e-learning could help children develop self-confidence and self-esteem. As a tool for addressing challenges in teaching and learning, e-learning technology has capabilities for delivery, management, and support for effective teaching and learning. It is equally good for geographically dispersed audiences, and it also supports diverse and process-oriented forms of writing and communication, and it broadens the scope and timeliness of information resources available in the classroom (Lemeke & Coughlin, 2018).

As a change agent, e-learning catalysis various other changes in the content, methods, and overall quality of teaching and learning, thereby ensuring constructivist inquiry-oriented classroom. Teachers and learners no longer have to rely on printed books and other materials in physical media housed in libraries (and available in limited quantities) for their educational needs. With the internet and the World Wide Web, a wealth of learning materials in almost every subject and in a variety of media can now be accessed from anywhere at any time of the day and by an unlimited number of pupils. This is particularly significant for many institutions in developing countries, and even some in developed countries, that have limited and outdated learning resources. Accordingly, e-learning media such as videos, television, and multimedia computer software that combine text, sound, and colourful, moving images can be used to provide challenging and authentic content that will engage the student in the learning process and telecollaboration (Jung, 2012). Interactive radio likewise makes use of sound effects, songs, dramatisations, comic skits, and other performance conventions to compel the students to listen and become involved in the lessons being delivered. More so than any other type of e-learning, networked computers with internet connectivity can increase learner motivation as it combines the

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media richness and interactivity of other ICTs with the opportunity to connect with teachers and to participate in real world events (Selinger & Austin, 2013).

Noteworthy, e-learning has a lot of advantages both for the learners and the educators or teachers, prominent of which is helping them to acquire some essential computer skills. Improving the quality of e-learning teaching and learning is a critical issue, particularly at a time of COVID-19 outbreak and lockdowns, hence, e-learning can enhance the quality of education in several ways by increasing learner motivation and engagement, by facilitating the acquisition of basic skills, and by enhancing teacher training (Wadi & Sonia, 2012). Likewise, Adeyanju (2020) pointed out that e-learning has increased the standard of computer literacy among children, bringing them up to par with the standard in the Western world, where it has become like the norm. E-learning has also forced parents to learn more and become more computer literate – because they want to meet up with what is being done on their children on the e-platforms (Adeyanju, 2020). Also, it has helped to create cordial relationships between parents and children, because most of the parents who never had time to go through their children’s work, ostensibly because of the nature of their job, now feel compelled be on top of it (Adeyanju, 2020).

COVID-19 Era and Challenges of e-learning in Nigeria

As more and more institutions are pushed into the online learning environment due to social distancing, new skills and methods of teaching are needed for learning to occur. One cannot just do the same as in the face-to-face environment and expect the same results in the online environment. Hence, e-learning implementation in Nigeria faces several challenges which can be broadly grouped into four categories namely: inadequate infrastructure, inadequate manpower, resistance to change, and inadequate funding.

According to Frans van Vught (2020), few institutions appeared to have a risk management strategy in place that would allow them to respond to a pandemic, particularly the capacity to offer online programmes and support when the crisis hit. Many schools gave their teachers a crash course over one week to transition to online learning (Adeyanju, 2020). Unfortunately, such practices greatly limit the amount of learning that happens during these classes. Teaching online is like asking people who know how to drive to fly a plane. Educators need additional skills and beliefs in order to teach in an online environment to enable learning.

But with uncanny foresight, there is nothing more boring than to listen or watch someone talk for 45 minutes or more in a virtual classroom. On the part of educator, it is a lot of work to prepare for such pedagogy and presentations. On the part of student, most of it

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would not be remembered. Since auditory modality of learning results in the least amount of recall, designing e-learning pedagogy that are 45 minutes long can be challenging when there is so much content. One must balance the need to cover content with how much students will remember. Break the lecture into small segments of 18 minutes or less and design some activities in between to make them more meaningful and emotionally engaging for every student. This leads to the next best practice. Akintoye (2020) words are apposite here:

“Sometimes, students are not punctual and because some of these ICT tools and e-learning platforms are relatively new to our secondary school education system, some kids tend to abuse the usage. However, most of the kids were very cooperative and used the gadgets and tools solely for academic and research purposes. However, some pupils need special attention as they are easily distracted and have a tendency to venture into areas not suitable for pupils. Also, getting the teachers to respond to each pupil takes time and as such, the kids get agitated and lose interest. The issue of epileptic power supply and cost of buying data are also major challenges. Some homes cannot afford personal computers for their wards. This has led to a situation where neighbours’ kids crowd another neighbour’s house because their parents cannot afford the basic tools. Some parents are also not literate enough to supervise their kids” (p.24).

In the case of wards whose parents cannot properly monitor them, it is an opportunity to be absent online. Chronic absenteeism is a potentially big problem, with more students - than ever before -missing classes, as the vast majority of physical schools remain closed and lessons, conducted remotely. It is either they are not logging on, not checking in or not completing assignments. This is not to mention lack of concentration. The rate of absenteeism would appear to be particularly high in schools with many low-income students, whose access to home computers and internet connections can be spotty. Some teachers report that fewer than half of their students are regularly participating. It is important to note here that online teaching/e-learning is not without a fee, as most Privately-owned Primary and Secondary Schools are billing parents for the service, failure in which their children are disengaged. For instance, In Lagos State and Federal Capital Territory (FCT), Abuja, Nigeria, parents are paying as much ₦175,000 (equivalent of \$477) for online teaching service aside the regular school fees. Also, the cost implication of data being consumed per week is a big challenge to parents. Meanwhile, jobs are being

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affected. Some parents, as a matter of fact, have lost their jobs, while some have had their income reviewed downwards. At the same time, no parent would be happy to see their children missing out on classes. Many have gone as far as borrowing. For example, on average, a parent spends at least ₦4, 500 (equivalent of \$12) on data per week for his three children to connect with their classes online. That is on the high side.

Another major challenge is that parents are now at a disadvantage, as they now share their phones and other gadgets with their children. In the process, they sometimes get spoilt or broken, – leading to another expenses. Of course, some use it as opportunities to play online games, thereby running down data unnecessarily. One cannot also foreclose the fact that some of the more mature or adventurous ones could use the opportunity to go on porn and other forbidden sites. Also, getting the teachers to respond to each pupil takes time and as such, the children get agitated and lose interest. The issue of epileptic power supply and cost of buying data are also major challenges. Some homes cannot afford personal computers for their wards. Some parents are also not literate enough to supervise their children (Akintoye, 2020; Adeyanju, 2020).

In summary, Atueyi (2020) observed that the challenges of online learning are enormous, this probably explains why some parents are unconcerned. First, the students may not be opportune to ask questions to their teachers; actual learning is hindered as there is no face-to-face interaction; also teachers cannot teach as much as they would like to because there is a limit to what the teacher can say over the internet; the comfort and relaxation at home can make students be nonchalant towards learning; parents who are on essential duty may not be able to provide an online platform their kids need for learning. Noting that teachers may also be negligent towards duty since there is no principal to supervise or monitor them, and that the issue of content is also a challenged. For instance, not all essential textbooks needed for learning can be provided online and when provided, accessibility can be a hindrance. For those who use video interaction, the network may be too slow to ensure effective communication. These researchers will also not feign ignorance about the illiteracy of most Nigerian parents and students in the area of Information and Communication Technology (ICT). For instance, not all parents have heard about Zoom and Google classroom as well as its functions. These are the challenges. The digital divide can be a great hindrance as a lot of Nigerians do not have access to Internet.

Conclusion

The COVID-19 pandemic has forced most educational institutions into using online classes. To make the adjustment, institutions have thrown a piece of technology, such as Zoom or Blackboard Collaborate, at educators. Teachers are now much expected to

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incorporate new methodologies in their teachings including new content delivery, supporting learning interaction and feedback, collaboration with colleagues, use of technology, guiding and mentoring, thus running an e-learning classroom.

Suggestions

From the discussion in the paper, the following suggestions are made:

1. It is suggested that the Federal Ministry of Education, in collaboration with the State Ministry of Education, has a very vital role to play as a stakeholder, especially as it regards to oversee, advise, and recommendations on the way forward to achieving within the shortest time the capacity to join the rest of the world on the teaching and learning with technology in Nigeria.
2. Also, there are software that can be installed on parent's phones and connected to children's to monitor their text and WhatsApp messages. Google mail opened for children must be connected to their parents' email, so that information can be through the parents to the children's mail to monitor their activities.
3. Most importantly, parents should always collect the phones from the children after each day's lessons.
4. Specifically, network providers should create special bundle for e-learning to reduce high cost rate of data.

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