

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

CHAPTER THREE (A)

THE SCHOOL MEETS THE LEARNER AND THE APPLICATION OF DIGITAL TOOLS IN COVID-19 PANDEMIC ERA

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Abstract

During the COVID-19 pandemic lock down many students in various institutions without digital applications tools were not given the opportunity to the e-teaching and learning approaches. Hence, “The School Meets the Learner and the Application of Digital Tools in COVID-19 Pandemic Era” was explored. This study explained the usefulness of digital learning tools during COVID-19 and the different instruments which could be applied in the e- teaching and learning. The research work expressed digital learning tools as a replacement of traditional methods. The chapter enlisted the following e-learning tools: Class Dojo, Edmodo, Google Classroom, Moodle, Schoology, Thing- Link, Pear Deck, Trello and Mind-Meister among others. A tabulated table showing the application of Schoology digital learning tool was applied. It was concluded that as many countries in the world suffered the effects of COVID-19 pandemic in different sectors, as such, all tiers of governments should provide a conducive learning environment for the school to meet the learners even at home.

Keywords: Covid-19, Digital-learning, Learners, Pandemic, School Meets

Introduction

Corona Virus 2019 (COVID-19) pandemic started in December 2019 from the city of Wuham, China. The virus spread very rapidly to many countries including Nigeria. This became a global challenge and many countries went into various researches to combat the disease. Uju and Olofu (2020) affirmed the aforementioned statement and wrote that COVID-19 pandemic has become a global challenge and the lockdown arising from its emergence has really impacted negatively on every sector of the Nigerian and the world

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economy. COVID-19 is caused by a new strain of coronavirus (SARS-CoV-2) that has not been previously identified in humans. It is an illness caused by a novel coronavirus now called severe acute respiratory syndrome. Hence, it is needful in devising functional means and strategies of continuing teaching and learning in schools especially in tertiary institutions. The pandemic caused government to adopt different strategies in order to save lives. Following this spread, equally, the Director General of the World Health Organization on the 30th January, 2020 declared the outbreak of the corona virus disease (COVID-19) a Public Health Emergency of International Concern (PHEIC). Due to the nature of the disease, the World Health Organization subsequently on March 11th, 2020 declared COVID-19 as a pandemic.

In Nigeria for instance, Nigeria Education Emergency Working Group (2020) reported that the Federal Ministry of Health in conjunction with the Nigeria Center for Disease Control (NCDC) confirmed the first case of COVID-19 in Nigeria on 27th February, 2020 in Lagos State. Thus, the global rapid spread of the virus coupled with the confirmed case in Lagos State led to closure of schools at all levels. Hence, for more than six months, educational system and students have remained in locked-down. Therefore, there is need to bring the schools to meet the learners wherever the learners may be. This will entail application of digital tools in order to reach out to learners.

According to the chapter researchers, the concept of School Meets the Learner Approach (SMLA) is ability to upload and share the lesson contents. This uploading and sharing is done through digital channels in order to build on and strengthen the teaching strategies to sustain responsiveness and engagement of formal and non-formal education learners at all level of education. The School Meets the Learner is a situation whereby educational digital tools are applied to favour the learner whether in the city or in local community. It involves an arrangement in applying educational digital tools to address the educational needs of the rich student and poor students as well. This explained why Uju and Agabade (2020) supported e-learning (digital learning) and wrote that it is the process of extending learning or delivering instructional resource sharing opportunities to locations away from a classroom, building site to another classroom, building or site by using video, audio, computer, multimedia communications. These e-learning tools bridges the gap between a teacher and student (s) in two different geographical locations. In addition, Wani (2013) said that digital learning comprises all forms electronically supported learning and teaching. The most attractive feature of e-learning is that, it is student-centred: as it accommodates individuals' preferences and needs. At the time, it empowers students of various backgrounds to have equal access to the best resources and referral materials,

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lecture sessions, tutoring and experienced teachers. These available digital application tools create avenues for “the school to meet the student even at home.”

Unfortunately, during the COVID-19 pandemic lock down many students in various institutions without digital applications tools were not given the opportunity to the e-teaching and learning approaches. Hence, during the COVID-19 pandemic lockdown, these students did not have lectures, no interactive classrooms where they could ask questions and get answers/clarifications from their lecturers. Students did not have continuous assessment and examination, no project defense, no result computation, students could not access the library to do assignment and term papers, no laboratory for practicals and this seems created room for social vices within the Nigerian environment. In this situation, the “school failed to meet the student”. With this ugly experienced coupled with idleness, it could be noticed that students perpetuate societal ills such as armed robbery, kidnapping, cultism rape among others.

COVID-19 Effects on the Educational System

In Nigeria, as part of the Federal Government of Nigeria’s overall strategy to contain the spread of the virus, the Federal Ministry of Education on March 19th, 2020 issued a circular letter granting an approval for the closure of all schools and institutions for a period of one month commencing from Monday 23rd, 2020, to prevent the spread of the disease (Nigeria Education in Emergency Working Group 2020). Having closed down educational institutions, there is need for government to facilitate learning opportunities for the students by deploying different digital tools for teaching the students while at home. As reasoned by UNESCO (2020) the action of governments globally to close down educational institutions in order to contain the dreaded COVID-19 pandemic is expected and needed but to mitigate its immediate impact on schools’ closure on the learners, government has not been able to device means of facilitating the continuity of education for all through digitalization of learning even in the interior environments.

COVID-19 Effects on Students Learning Activities

Due to COVID-19, it has become difficult for students to complete course outline, take examination and graduate on time from school. The long stay at home has caused students frustration and distraction for other activities that has no positive linkage with school and learning activities. In the view of Atim (2020), COVID-19 has become a catalyst for tertiary institutions in Nigeria to search for innovative approaches towards sustaining educational activities while students are at home. The digital learning remains an option whereby the government can utilize to reach out to students at their different nooks and crannies of Nigeria.

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COVID-19 Effects on Lecturers non-ICT Compliance, Buncee

Teaching involves impartation of knowledge be it by manual or through the utilization of digital tools. Some of the lecturers are used to the traditional method of chalkboard demonstration and paper work. With COVID-19 pandemic and lock down issues, they are faced with the problem of inability to utilize the available digital tools for teaching. Accordingly, Okon (2018) opined that the slow pace of digital inclusion in the Nigerian tertiary educational institutions at all levels is lamentable, as some lecturers and students still struggle to make full use of information and communication technology facilities for teaching and learning. Lecture-based approach to teaching is being highly used in most tertiary institutions in Nigeria. It is well that the different digital tools be used in teaching and learning.

Digital learning tools are the different instruments available in the internet which could be used for teaching and learning. Digital learning is replacing traditional education methods whereby the teachers and students interact in the virtual classroom and physical contact is removed. COVID-19 has brought about a drastic change in classroom and it is best for educational sector to think about newer teaching and learning techniques based on digital learning tools and technologies. The inclusion of digital learning in the classroom can vary from simply using tablets instead of paper to using elaborate software programs and equipment. Irrespective of how technology is integrated into the classroom, digital learning has come to play a crucial role in education. Digital learning empowers students by getting them to be more interested in learning and expanding their cognitive reasoning. Learning tools and technology enable students to develop effective self-directed learning skills. They are able to identify what they need to learn, find and use online resources, apply the information on the problem at hand, and evaluate resultant feedback (Panworld, 2017). In order to create convenient and conducive environment for learning during the COVID-19 pandemic, the following are the different types of digital learning tools available where the school could meet the learner; Class Dojo, Edmodo, Google Classroom, Moodle, Schoology, Seesaw, Thinglink, Buncee, Pear Deck, Trello and Mind Meister (Usoro, Usoro & Usoro, 2020)

- a. **Class Dojo:** This is a tool that connects school teachers, students and families through communication features, such as a feed for photos and videos from the school day, and messaging that can be translated into more than 35 languages and has been used in 180 countries. Accordingly, Bharti (2014) ascertained that class dojo enable teachers to note feedback on students' skills and creates a portfolio for students so that families could be aware of school activities outside of meeting with teachers. As asserted by Pierce and Seibel (2012) Class Dojo allows students, teachers and families to communicate. To use class dojo, teachers register for a free

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account and create “classes” with their students. They could give students feedback for various skills in class. There are customized and teachers could change the skills to adapt to the needs of the class or of the school (Rubin 2013). Teachers have the option to post pictures and videos in their class story, or to their school story. Bharti (2014) stated that students have opportunity to get message with families, and receiving “read recipe” to know when their message has been read. However, Sawers (2012) wrote that families could access class dojo when they are invited by their child’s teacher, and receive updates on what is happening in school, view their whole class story and see a timeline of their own child’s experience in the classroom through pictures and videos.

- b. Edmodo:** This is another tool for communication and sharing classroom content. Tools and resources to manage classrooms and engage students remotely, offering a variety of languages. As noted by Empson (2013) Edmodo is an educational technology company offering a communication, collaboration and coaching platforms to students, school and teachers. The Edmodo network enables teachers to share content distribute quizzes, assignments and manage communication with students, colleagues and parents. It is teachers-centric in their design and philosophy; students can only join if they are invited by the teacher.
- c. Google Classroom:** Helps classes connect remotely, communicate and stay organized. It is a free web service developed by Google for schools that aims to simplify creating, distributing and grading assignments. Google classroom integrates docs, sheets, slides, gmail and calendar into a cohesive platform to manage student and teacher communication. When using Google classroom students can be invited to join a class through a private code, or automatically imported from a school domain. Teachers can create, distribute and mark assignments all within the Google ecosystem. Teachers can monitor the process for each student by receiving revision history of a document, and after being graded, teachers can return work along with comments. Kerr (2014) opined that Google classroom ties Google Drive, Google docs, sheets and slides, and gmail together and help educational institutions go to paperless system. Assignments are stored and graded on Google’s suite of productivity applications that allow collaboration between the teacher and the student or student to student. To avoid sharing documents that reside on the student’s Google drive with the teacher, files are hosted on the students drive and then submitted for grading. Google classroom supports many different grading schemes.

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Teachers have the option to attach files to the assignment while student can view, edit or get an individual copy. Once, graded, assignments can only be edited by the teacher unless the teacher turns the assignment back. In Google classroom, Steele (2014) observed that announcement can be posted by teachers to the class stream which can be commented on by students allowing for two-way communication between the teacher and students.

- d. **Moodle:** This is Community-driven and globally-supported open learning platform. Costello (2013) is used for blended learning, distance education, flipped classroom and other e-learning projects in schools, universities, workplace and other sectors. With customizable management features it is used to create private websites with online courses for educators and trainer to achieve learning goals (Gavin, 2013). It allows for extending and tailoring learning environments using community-sourced plugins. Adam (2015) stated that Moodle as a learning platform can enhance existing learning environments. While Jordan (2013) noted that an e-learning tool Moodle has a wide range of standard and innovative features such as a calendar and a grade book. It is a leading virtual learning environment and can be used in many types of environment such as education, training and development and in business settings.
- e. **Schoology:** is a tool to support instruction, learning, grading, collaboration and assessment. It is a social networking service and virtual learning environment content. Also, known as a Learning Management System (LMS) or Course Management System (CMS), the clouds-based platform provides tools needed to manage an online classroom. Schoology can help teachers contact students with homework and more. Conte (2011) asserted that teachers can manage the assignments calendar and add new assignments. The service of schoology include attendance records, online grade books, tests and quizzes and homework drop boxes. The social media features facilitate collaboration among a class, group or school (Moran, 2010). The system can be integrated with existing school reporting an information system which also provides the security filters and support that schools require.
- f. **Seesaw:** This platform involves the creation of collaborative and sharable digital learning portfolio and learning recourse. Seesaw creates a powerful learning loop between students, teachers and families. According to Ashley (2020) students use built-in annotation tools to capture what they know in seesaw's digital portfolio. Teachers deeply understand student thinking and progress enabling them to teach better. Families gain a window into their student's learning and engage with school

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happenings. Students explore a variety of powerful and intuitive tools to show what they know in the way that works best for them.

- g. Thing-link:** is a tool used in creating interactive images, videos and other multimedia recourse. Thing-link is used for creating interactive images by tagging content to a photo or drawing. Tags can be link to websites, facebook or twitter pages, videos, maps, other images, audio or Google recourses. Users or thing-link can also create interactive videos with a professional or premium account. It could be useful for science, geography, history, language and visual arts. Here, Conte (2011) observed that in science, students could create an interactive image to develop or demonstrate their knowledge about a scientific concept or topic. English/Language students could make their own vocabulary mind map and tag related words and images. Geography students could pinpoint names of places and landmark using thing-link, arts students could create virtual tour by tagging paintings to artist, times and movements then business education students could use thing-link on the application of arithmetic and logical calculation. Thing-link offers an easy way to create audio-visual learning materials that are accessible as an integrated reading tool. All text descriptions in image or video hotspots could be read with immersive reader-on over 60 languages. Thing-link helps students become fluent in using multiple forms of media to express themselves in and out of the classroom.
- h. Buncee:** Supports the creation and sharing visual representations of learning content, including media-rich lessons, reports, newsletters and presentations. It is a creational presentation tool for students and educators to create interactive classroom content, allowing learners of all ages to visualize concepts and communicate creatively. Individuals, teachers, students, or schools can sign up for a free account. Here, a teacher can also get a 30-day free trial for his/her teaching and the students with the full educator dashboard. This plat form offers free weekly webinars for regular audiences and for schools and district as well. Through a virtual “Buncee” or canvas constituted of a single or multiple slide, one can integrate animation, audio, pictures and “stickers”.
- i. Pear Deck:** Facilitates the design of engaging instructional content with various integration features. It is an educational technology company offering a web-based application to K-12 schools and teaches. With Pear Deck a teacher can design a new presentation or open an existing on in the slides. Library templates are created to support learning objectives typically found at the beginning, middle and end of

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a class. Through Pear Deck one can always create his/her own custom activity or question from scratch. Use text, number response, multiple choice, and web slide questions to engage students. Root (2014) reported that with Pear Desk, the teacher can leave audio instructions descriptions, or examples for students to hear while they read and respond to interactive questions from the teacher's Pear Desk slide presentations. The teacher can make a new recording instantly or upload one from the computer. The recording inserted will play in the student view of the teacher's live presentation sessions. Pear Desk is perfect for any remote learning lesson. As an instructor, using Pear Desk you can quickly see what each individual think on the teacher's dashboard. Noticing a lot of wrong answers? Adapt, take a pause, back up, re-explain your lesson and do not forget to help the learners help each other. This will make learning easier for them.

- j. Trello:** Visual collaboration tool is used by teachers and professors for easier course work planning, faculty collaboration and classroom organization. With Trello users can create their task boards with several columns and move the tasks between them. The tool could be used for personal and business use. According Root (2014) Trello has a variety of work and personal uses including real estate management, software project management, school bulletin boards, lesson planning, accounting, web design, gaming, and law office case management.
- k. MindMeister:** This is an online mind mapping application that allows it users to visualize, share and present their thoughts through the cloud (Gina, 2008). Mind Meister provides a way to visualize information in mind maps utilizing user modeling, while also create presentation (Rhys, 2013). The aim of Mindmeister is to enable individuals to collaborate on a mind map, where everyone can share ideas, comments and plans as well as vote on ideas in real-time. MindMeister allows users to share and edit mind maps, leave comments and feedbacks, attach files, images, videos and link to external as well as internal sources through embedded Uniform Resource Locations (URLs). Mind maps could be shared with colleagues internally or externally through email invitation to collaborate, or via a hyperlink (Nikos, 2014).

Instead of writing out linear notes, students could draw a mind map to help them include more information. This is important because most lectures are not given in a truly linear manner. Many lecturers will include references to previous lectures as well as references to future lectures. When a student uses a mind map instead of traditional notes, they could demonstrate the connection between different topics. Mind map also help students capture the most important information instead of

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struggling to write down every detail. Teachers could use MindMeister to help them put together a lesson plan for a semester or even a year. Teachers could share the map with students who could use it as a basic study guide.

Record showing the use of Schoology as online learning tool with the results of students in Elements of Government Accounting (*Veritas University, Abuja, 2020*).

Session: 2019/2020

Table A: COVID-19 Lectures during Lockdown period

Course: Elements of Government Accounting

Course Code: BUE 327

Number in class 15	No. of Lecture period Attended	Continuous Assessment	Exam	Score Total	Grade	Remarks
1.	20	28	45	73	A	Pass
2.	20	20	40	60	B	Pass
3.	18	21	55	76	A	Pass
4.	17	23	39	62	B	Pass
5.	19	26	44	70	A	Pass
6.	20	20	41	61	B	Pass
7.	21	18	37	55	C	Pass
8.	22	24	48	72	A	Pass
9.	20	23	40	63	B	Pass
10.	19	28	42	70	A	Pass
11.	18	20	44	64	B	Pass
12.	20	21	45	66	B	Pass
13.	19	25	46	71	A	Pass
14.	20	26	46	72	A	Pass
15.	20	25	40	65	B	Pass

Field Work 2020

From the Table 1, the following observations were deduced:

- i. Online lectures were held.
- ii. Interactive classes between lecturers and students were possible.

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- iii. The “School meets the learner” at home through application of different digital tools.
- iv. Records of attendance could be kept.
- v. Continuous Assessment and Examination were carried out.
- vi. No examination malpractice.
- vii. Students were able to defend their projects online.
- viii. Computation of results were done.
- ix. No repletion of school session.
- x. Students have opportunity to access the online-library to do their assignment and laboratory practices.

Conclusion

Many countries of the world suffered the effects of COVID-19 pandemic in different sectors. In this pitiable condition, Nigeria as a country was not left out. Education was hit as many schools at all levels were closed. COVID-19 has brought about a drastic change in classroom and it is best for educational sector to think about newer teaching and learning techniques based on digital learning tools and technologies. Digital learning is replacing traditional education methods whereby the teachers and students interact in the virtual classroom and physical contact is removed. The inclusion of digital learning in the classroom can vary from simply using tablets instead of paper to using elaborate software programs and equipment. The only remedy to this unfortunate or prison-like situation is to apply digital platform tools where the school could meet the learners even at home.

Suggestions

1. In order to bring the school to meet the students at home, all tiers of governments (Local, State and Federal) and Proprietors of schools at all levels should ensure installations and the applications of digital tools in their schools for easy accessibility to e-learning for the benefit of the students.
2. Governments (Local, State & Federal) in Nigeria in order to help students compete adequately with students from foreign countries, in addition open e-learning centres where students can practice frequently with the available digital tools.

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3. Parents should register their wards at e-learning centres to learn more and keep them busy from indulging in societal ills like cultism, raping, kidnapping among others.

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