

VIRTUAL CLASSROOM TEACHING IN THE NIGERIA POST COVID-19 ERA: IMPLICATION FOR ACADEMIC PERFORMANCE OF BUSINESS STUDIES STUDENTS IN SECONDARY SCHOOLS

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Abstract

This paper focused on virtual classroom teaching and academic performance of business studies students in the post covid-19 era Nigeria secondary schools. The paper revealed that the covid-19 pandemic was unprecedented as a public health phenomenon due to its high level of contagion and fatality rates, and which drastic emergency governmental actions was needed to ameliorate the havoc it portended especially to academic performance of business studies students in Nigeria secondary schools. The paper established that there was a relationship between adoption of virtual classes and class attendance of students, academic performance and classroom management. The paper, among others, recommended that government could subsidize the cost of ICT facilities to educational institutions so that virtual learning could be accessible to students for effective teaching and learning; and also that government should provide training and retraining programmes for students and teachers to enable them acquire the necessary ICT skills that will enable them to use the virtual/online education system.

Keywords: Academic Performance, Business Studies, Covid-19, Secondary School, Teaching, Virtual Classroom.

Introduction

A virtual classroom is an online learning environment in which the learners and instructors interact together. The virtual class is a form of electronic learning. Electronic learning (e-learning) basically involved the use and application of information and communication technologies (ICT) such as the personal computers, tablets, cell phones, learning management systems (LMS), television, radio and other means, to improve teaching and learning process. According to Finkelstein (2016), an online learning environment locates within a computer mediated communication system for instruction to take place. Some features and compositions that make virtual classroom essential in teaching and learning processes are: Assignment Folders, Audio Features, Blog, Chat Room, Video Component, Simulation Tools, Grading Books, E-mails, online Calendars, Examinations and Quizzes. E-learning is essentially a unifying phrase to explaining the areas associated with the internet, web-based instruction and technologies. It is substantially becoming a learning strategy in the realms of teaching, practical learning, skills training and development and many corporate functions as evidenced by massive development of web technologies (Abimbade, 2017). A virtual classroom is the process of using online environments to disseminate information.

Online teaching and learning processes involve some digital technologies that permit teachers and students that are not necessarily present in the same room to interact. It is a veritable mode of teaching that can be of help in passing instructions to students in a time like when social distancing is of utmost importance. Before the advent of covid-19, digital technologies have

also allowed the world to move much in such areas as health, education, social and economic life online. According to Edun (2023), virtual environments are considered suitable in teaching and learning of business based subjects. Effective implementation of virtual classroom has great implication for teaching and learning as it promotes students' interest in learning contents and encourages teachers' efficiency. In a virtual classroom setting, the learners actively engage in synchronous instruction, meaning that the teacher and learners are logged into the classroom at the same time just like a real-world conventional classroom system. In such a learning environment, students can be at home or somewhere else and still enjoy the lesson. Online teaching and learning environment can be in two forms: the synchronous learning environment and the asynchronous learning.

The synchronous learning environment is structured in a way that students attend live lectures, there are real-time instructions between educators and learners, and there is a possibility of instant feedback. Synchronous learning can provide a lot of opportunities for social interaction (Kentnor, 2015). On the other hand, asynchronous learning environments are not properly structured as learning content is not available in the form of live lectures or classes; it is available at different learning systems and forums. Also instant feedback and immediate response are not possible under such an environment.

E-learning has played a vital role in the past as it has helped some institutions to overcome the barrier of educational continuity in the time of global crisis. For instance, the University of Camerino, Italy, used online teaching when earthquake destroyed almost all their infrastructure and face-to-face instructions were not possible. Also, the University of Canterbury made use of online education in New Zealand when she was faced with a great earthquake in 2011. The recent past covid-19 made all schools, colleges and universities to shut down so as to curb further spread of the virus, and many academic institutions, proprietors, state and federal governments, therefore, sought the help of online education so that teaching and learning processes are not further hampered. According to Arigbabu (2020), some State governments in Nigeria proffered online virtual education as the possible way out. Arigbabu further posited that, in general, a complete online education for teaching of business studies requires an elaborate lesson plan design, teaching materials such as audio and video comments, as well as technological support teams.

Business studies is one of the pre-vocational elective subjects which is offered at the upper basic level in the basic education in Nigeria. Business studies is generally composed of five components, namely: keyboarding, shorthand, office practice, commerce and book-keeping; and most of these components are taught at the upper basic level in secondary schools in Nigeria. The main objectives of business studies is to enable students appreciate the five components that make up the subject and to help to prepare students for the business world (FRN, 2012). Business studies forms the basis for other business related courses taught in senior secondary school and post-secondary schools; and its usefulness cannot be over-emphasized. Business Studies helps youth to learn career opportunities like accounting, secretarial administration, private and public office management. Inasmuch as the importance of Business Studies suffices, continuous efforts have been exerted by stakeholders to put the necessary machinery into place in order to improve students' academic performance in the subject especially in the covid-19 era. Covid-19 era was a period of pandemic which made life uneasy for many families. Covid-19 created socio-economical upheavals in the lives of so many people (Bamidele 2021), part of which was the closure of learning institutions. With the schools closure, only few parents who were wealthy arranged online education for their children at home, so that the children would not miss out too much on their education plan. A lot of pressure was put on the parents as they needed to stay with their children to provide childcare and supervise their teaching and learning

process. The resultant effect of this to the parents was wages loss, fraught with unnecessary burdens that impacted their productivity negatively. Some parents who could not absent themselves from their daily job had to leave their children alone at home and this could make them to wallow in immorality and other risky activities (Oguntimileyin, Solomon, Akpan, Akinluyi & Olaoye, 2021). On the other hand, majority of families who were less privileged abandoned their child education during the long time that schools were closed down. Disruption of education due to the pandemic caused so many risks such as child labour, early marriage or unwanted pregnancies and exploitation among others for the children. Students' dropout rates tended to increase and majority of the disadvantaged students might not return to classroom after the closures ended (Arigbabu, 2020). Moreover when pandemic, disasters or crises occur, schools and colleges need to be resilient and should find news to continue teaching and learning activities.

The outbreak of corona virus, popularly called the covid-19 virus, in Nigeria led to a total closure of schools on by March, 2020, by the Federal Ministry of Education. The outbreak brought to the knowledge of government, school owners, teachers, parents and students, the need for alternative way of teaching and learning apart from the conventional physical classroom method. Many States in Nigeria opted for on-air teaching, which is a one-way method of teaching carried on over the air either through the radio or television. While some schools, especially private schools adopted teaching through Whatsapp, Facebook and Telegram, some others which had functional website posted their lecture materials online and directed their students to access them on the site (Oguntimileyin, et al., 2021).

Studies carried out on the effectiveness of virtual environments on students achievements indicated that such environments improve students' achievements and that significant differences exist between the achievement of student taught using virtual environments and those taught using conventional method of teaching (Arkorful & Abaidoo, 2014; Edun, 2023). Hence this paper focused to unravel the role of virtual classroom teaching on academic performance of business studies students in Nigerian secondary schools in the post covid-19 era.

Concept of Business Studies

Business education is described as education for and about business which enables a person to acquire skills for social and economic transformation. With the introduction of 6-3-3-4 system of education, business studies (business education) at the junior secondary school gain prominence. Business studies may be defined as a combination of interrelated business subjects which leads to learning of basic knowledge and skills. Business studies is such a course that is designed to cover basic elementary knowledge and skills in organizing business enterprises as well as general office administration. It is aimed at making education more functional. At the junior secondary school level, business studies includes the following subjects: typewriting, shorthand, book-keeping, office practice and commerce (FRN, 2012). These business subjects consist of skill and non-skill business subjects. The FRN further listed the importance of business studies in the secondary to include: (a) acquisition of basic knowledge of business studies; (b) the development of basic skills in office practice; (c) the preparation of students for further learning business studies; (d) the provision of orientation and skills for those who undergo further training in order to enable them start a life of work; (e) provision of basic skills for personal use in the future; (f) relating the knowledge and skills to the national economy; and (g) updating knowledge on current information technology e.g. internet, e-mail, fax and computer communication.

Concept of Secondary School

The secondary school is the level of educational system which accommodates the successful pupils at the primary school level – those in possession of First School Leaving Certificate – and who have passed the entrance examination to secondary schools. Secondary school education takes six years to complete. The language of instruction at this level of education is English. Like primary and nursery school pupils, secondary school students have to wear school uniforms. The first phase of secondary education, which lasts for three years, is provided at the Junior Secondary School (JSS). At the end of these three years, students sit for Junior Secondary School Examination (JSSE) and the successful ones are awarded the Junior Secondary School Certificate (JSSC). A successful completion of the JSS is a prerequisite for the second phase – the Senior Secondary School (SSS), which also lasts for three years. At the end of this period, students obtain the Senior Secondary School Certificate (SSSC) after writing and passing the final examination, which is the Senior Secondary School Examination. The SSSC is equivalent to the former West African School Certificate (WASC).

Concept of Virtual Classes

A virtual classroom is a digital learning environment that allows teachers and students to connect online in real time virtual office hours and hold discussions in an interactive setting. Virtual classrooms utilize video conferencing, online whiteboards and screen sharing to allow educators to hold live lectures. Virtual classrooms replicate the experience of physical classrooms, with the added benefits of file sharing, instant feedback and interactions. A virtual class refers to an online system that allows students and teachers to communicate and collaborate. Virtual classrooms are typically cloud-based learning solutions that are part of larger learning management systems (LLMS). They are highly customizable and are accessible to users on a variety of devices such as smartphones, tablets and laptops (Elfaki, Abdulraheem & Abdulrahim, 2019; and Adelakun, 2021). Virtual classroom allows participants to communicate with one another, view presentations or videos, interact with other participants and engage with resources in work groups. The tools required for virtual classroom include, among others: (a) a smart phone/computer system with webcam; (b) mobile data; and (c) virtual classroom application. There are various virtual classroom applications. Some enable synchronous learning while some others enable asynchronous learning. Some notable virtual classroom applications are: Zoom, Google Classroom, Google Meet, Whatsapp, Facebook, Telegram, YouTube, etc. According to Oguntimehin, et al. (2021), virtual learning reduces physical presence in classroom; there is reduced dependence on rote learning; effective time management, synchronous and asynchronous discussions with classmates; sharpened digital skill and so on. However, virtual learning is also fraught with the need for regular training of staff and also technical issues.

Concept of Covid-19

The novel corona virus disease 2019 (covid-19) was first identified in Wuhan China in December, 2019, and rapidly spread to almost every other region of the world. The disease was caused by a new and severe type of coronavirus known as Severe Acute Respiratory Syndrome Coronavirus 2 (SARS- COV-2). The infection has no immediate treatment and vaccine, and according to the World Health Organization (WHO, 2020), it become a worldwide pandemic causing significant morbidity and mortality. Covid-19 is a contagious respiratory illness transmitted through the eyes, nose and mouth, via droplets from coughs and sneezes, close contact with infected person and contaminated surfaces. It has an incubation period of approximately one to fourteen days. The systems included cough, fever and shortness of breath, and it is diagnosed through a laboratory test. The contagion could lead to severe respiratory problems or death, particularly among the elderly and persons with underlying chronic illnesses.

Some infected persons, however, are carriers for the virus with no symptoms while others may experience only a mild illness and recover easily (Sauer, 2020). As there was currently no cure or vaccine for the covid-19, medical treatments were limited to supportive measures aimed at relieving symptoms, use of research drugs and therapeutics.

Concept of Academic Performance

Academic performance could be referred to as knowledge and skills attained by a student in school subjects, designated by a score obtained in a test. Nicholas (2018) expressed academic performance to really mean: the ability to study and remember facts, being able to study effectively and see how facts fit together and form larger patterns of knowledge and being able to think for oneself in relation to facts and thirdly, to be able to communicate. According to Soyebi (2023), it is the level of achievement attained via the combination of inputs from students' motivation and conduct. Academic performance is generally referred to as how well a student is accomplishing his tasks and studies but there are quite a number of factors that determine the level and quality of students' academic performance. Incidentally, good academic performance is one of the major goals of a school.

Concept of Teaching

Teaching as an art, is also a process lying at one pole of a continuum with learning at its opposite within which interaction occurs between the teacher and the learner. Zahra, Mansoreh and Narges (2012) viewed teaching as a specialized form of bi-directional communication in which the students are active (and interactive) participants in the process of exposition. Teaching involves the setting up of activities to enable somebody learn something which can improve the person's knowledge, skills, attitude and value. Thus, the aim of teaching is to facilitate learning. Learning is a lifetime process. Virtual learning is expected equip Business Studies students with a larger mastery of knowledge, a broader understanding of facts, a larger repository of wisdom and a better insight on life that will make them better individuals who are responsible and upright.

Benefits of Virtual Teaching on Academic Performance of Students in Post Nigeria Covid-19 Era

There is a great number of studies to suggest that different teaching delivery styles can have different degrees of success, as measured in terms of academic results (Mayer, 2013; and Zahra, 2012). In relation to virtual classroom teaching, studies have indicated that the virtual classroom medium of delivery has a positive impact on performance. For example, Adelakun (2021) expressed the benefits of virtual teaching offering to include a variety of new possibilities to learners, in addition to having a positive effect on students' achievement in business studies. Other benefits of virtual teaching to Business Studies students include increase in enrolment or time in school as education programmes reach underserved regions; broadened educational opportunity for students who are unable to attend traditional schools; access to resources and instructions not locally available; and increase in student-teacher communication.

Virtual teaching-learning operation has evolved through generations where a variety of information and communication technologies have been used. Due to the rapid technological changes, a large number of educational institutions have adopted virtual learning course delivery (Krubu & Osawaru, 2011) and have immensely invested in technology. Krubu et al. posited that education cannot become more productive or hold costs down unless learning institutions embrace technological tools for teaching and learning. Synchronous learning, wherein business studies students and teachers are simultaneously present on the system and have instant communications can provide opportunities for social interaction. The use of synchronous conferencing techniques in a virtual classroom space provides for social interaction. It allows students and teachers from different locations to have a class by the help of audio-visual

communication through video conferencing software. It offers extensive meeting set-up features providing both moderators and the students with effective option for interaction and learning. These environments also have several interactive characteristics. According to (Humphreys, 2020), virtual classes allow students and teachers to transmit video, surf websites together, communicate orally, exchange messages through typing, share PowerPoint presentations, and more.

The use of multimedia technologies and the internet in teaching and learning Business Studies can be seen as a means to improve accessibility, efficiency and quality of learning by facilitating access to information, resources and services as well as remote exchanges and collaboration. It has been established that students in educational institutions that engage in virtual learning generally perform better than those in the conventional, face-to-face, course. Whyte (2020) posited that students who participate in online/virtual learning achieve better grades than students who studied through traditional approach. As a result of this finding virtual learning is growing very fast and has become popular and that is why many educational institutions are adopting the system of which Business Studies cannot be an exemption.

Virtual teaching has become a new normal and new underlying principles in library services as well as educational sector with a mission to serve as a development platform for present-day society based on knowledge. Virtual teaching is all about learning that occurs at the computer (Adelakun, 2021). Teaching Business Studies through the aid of a computer simply means more knowledge acquisition though the internet or offline through CD-ROM, etc. Elfaki, Abdulraheem and Abdulrahim (2019) opined that virtual learning has the potential to change the way we teach and how we learn. So, the use of network technologies creates, fosters, delivers and facilitates Business Studies, anytime and anywhere. Furthermore, Abooki and Kitawi (2014) in a study on impact of e-learning strategy on students' academic performance, concluded that e-learning (virtual classroom teaching) strategy had a positive impact on the academic performance of students, and this Business Studies also stands to gain in the respect.

Roles of Management on Virtual Classroom Teaching in the Nigeria Post Covi-19 Era

The Federal Government of Nigeria like her counterparts in other parts of the world issued notice on lockdown of gymnasiums, schools, cafes, pubs, restaurants, and other businesses in March, 2019, as a means to prevent transmission of covid-19. Since the discoveries of the virus, it has been transmitted from countries to countries without particular treatment or cure. According to Yu (2020), if people go about their day-to-day as normal, each person with the virus could go on to infect a great number of people; hence the need for shutting down of businesses and schools among other places with social distancing amidst other preventive measures.

UNESCO (2020) asserted that 87% of the world's student population is affected by the covid-19 school closure, and since the closure of schools is to contain the covid-19 pandemic, governments have been deploying virtual classroom solutions and grappling with the complexity of providing education remotely – from delivering content and supporting teachers to providing guidance to families and addressing connectivity challenges. The adoption and integration of virtual learning has given so many educational institutions around the world the opportunity of conventional and distance educational modes of instruction (Rogerson-Revell, 2015).

Studies (Beese, 2014; Aktaruzzaman & Plunkett, 2016) have shown that virtual classroom gains popularity every day, significantly expanding teaching and learning space not only because computer technologies allow exchange of information meaningfully at any distance within the framework of the student-teacher system, but because it allows students to learn interfaculty

educational programmes indepth. This shows that adoption of virtual learning by the authorities in the education sector facilitates the meaningful exchange of student-teacher information without minding the distance.

Relatedly, Adarkwah (2021) opined that the obvious advantage of online programme (virtual learning) to the management of educational institutions encompass increasing enrollments and profits, extending research reaches, increasing student technological skills, mitigating the projected shortfall in instructors, eliminating overcrowding of classrooms, reducing infrastructural cost, allowing students to work at their own pace and learning style, reducing faculty bias and improving retention and graduation rates.

However, as Kentnor (2015) observed, online education requires certain skills from design to support system, among others, before any institution can embark on it. The author postulated that lack of understanding of online pedagogy and online learning styles, lack of administrative support for online education and for marketing the programme, among others, can doom virtual learning to failure. So some institutional and holistic implementation of a virtual classroom framework need to be well understood. Porter, Hamsphire, Milner, Munthali, Robson, De-Lannoy and Abane (2016) as well argue that though the majority of students might have access internet and related education content on their mobiles, it is important that the harmful impact such as addition to smartphones is also taken into consideration while formulating policy (especially for school going students) to ensure better educational outcomes.

Conclusion

The outbreak of corona virus, popularly called the covid-19 virus, in Nigeria led to a total closure of schools on 19th March, 2020, by the Federal Ministry of Education. The exposed the knowledge of government, school owners, teachers, parents and students, to the need for alternative way of teaching apart from the conventional physical classroom method – the virtual learning. The virtual class is a form of electronic learning. Electronic learning basically involves the application of information and communication technologies (ICT) such as the personal computers, tablets, cell phones, learning management systems (LMS), television, radio and other means, to improve teaching and learning process. A review of some of studies carried out on the effectiveness of virtual teaching on students achievements indicate that significant differences exist between the achievement of students taught using virtual environments and those taught using conventional method of teaching. This paper thus concluded that such can also improve Business Studies students' academic performance in the Nigeria Secondary schools.

Recommendations

Based on the findings of this paper, it was recommended that:

1. Relevant stakeholders in Business Studies should provide funds for procurement of information and communication technologies for the students and teachers, so as to ensure capacity development and stable network services.
2. Educational institutions in Nigeria, especially the secondary schools, should be equipped with all ICT facilities to enable them switch at any time to virtual learning in case of any pandemic resurface again, so that teaching and learning could continue in the country like in other advanced countries.
3. Government could subsidize the cost of ICT facilities to educational institutions so that virtual learning could be easily accessible to Business Studies students for effective teaching and learning.

4. The government should provide training and retraining programme for students (inclusive of Business Studies students) and teachers to enable them acquire the necessary ICT skills that will allow them to use the virtual/online education system.
5. Government should endeavour to translate all ICT policies regarding ict development in Nigeria learning institutions into reality for effective teaching and learning of business studies.

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