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NIGERIAN ONLINE JOURNAL OF  
EDUCATIONAL SCIENCES AND TECHNOLOGY

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**ASSESSING THE EFFECTIVENESS OF ONLINE LECTURES AND EXAMINATION  
MODES IN BUSINESS STUDIES POST-COVID-19 ERA**

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**To cite this article:**

**Ojerinde, F** (2024). Assessing the effectiveness of online lectures and examination modes in business studies post-covid-19 era. *Nigerian Online Journal of Educational Sciences and Technology (NOJEST)*, 6 (1), 409-423

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**ASSESSING THE EFFECTIVENESS OF ONLINE LECTURES AND EXAMINATION  
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Article Infor

*Article History*

Received:

26 January 2024

Accepted:

June 07, 2024

**Keywords**

*Post Covid Business Education,  
lectures, online, and Examination*

**Abstract**

This study assessed online lectures and examination modes in business studies during the post-COVID-19 period in selected secondary schools in Lagos State, Nigeria. The research employed a multistage sampling technique, selecting 400 junior secondary school students from 15 schools across three educational districts. Data was collected using the Online Lectures and Examination Modes Assessment Questionnaire (OLEMAQ). The findings revealed a low level of parental guidance during virtual learning, with parents mainly providing devices and data subscriptions but minimally engaging in monitoring or assisting with online activities. The study found that paper-and-pencil examinations remained the primary assessment mode, despite the shift to online learning. Students perceived virtual learning platforms as highly user-friendly and beneficial, particularly in terms of self-paced learning, home-based study, and access to recorded lectures. However, challenges such as technical issues, poor learning conditions at home, high data costs, and inconsistent electricity supply were identified as significant barriers to effective online learning. The research concludes that while the transition to virtual learning methods was implemented, examination modes largely remained traditional. Recommendations include encouraging greater parental involvement, implementing diverse online assessment methods, ensuring device accessibility for all students, developing a state-specific virtual learning platform, and improving electricity supply to enhance the effectiveness of online education in Lagos State.

## **Introduction**

In December 2019, a strange virus called Coronavirus, later renamed Covid-19 by the World Health Organization (WHO), was discovered in Wuhan, China. It is believed to have originated from human interaction with bats, which are a major reservoir of animal coronaviruses. By January 30th, 2020, WHO declared Covid-19 a global pandemic. The virus spread rapidly across the globe, with Thailand being the first country outside China to report a case in January 2020. By March 2020, it had reached over 100 countries across six continents, with China, Iran, Italy, South Korea, and the United States experiencing the highest number of cases.

Covid-19 symptoms include dry cough, fever, respiratory distress like shortness of breath, and breathing difficulties. In severe cases, it can lead to pneumonia, acute respiratory syndrome, kidney failure, and death, especially in older individuals and those with underlying health conditions. The virus spreads through respiratory droplets expelled when an infected person coughs or sneezes, as well as contact with contaminated surfaces. As of August 26, 2021, over 24 million cases and 821,000 deaths had been reported globally, with 16 million recoveries. To curb the spread, WHO recommended avoiding crowded spaces by staying indoors, leading to a sudden halt in human activities like work, school, and business operations. Upon easing lockdowns, preventive measures like wearing face masks outdoors were implemented to prevent the spread of virus-laden particles. Currently, there is no confirmed cure, but research efforts are ongoing.

The pandemic led to the closure of educational institutions in most countries, affecting around 1.6 billion students across 194 countries at its peak in April 2020. In Nigeria, the Federal Ministry of Education directed school closures in March 2020, with reopening only in October. To prevent the virus's spread, educational institutions transitioned to online teaching and learning environments, uploading courses online at an unprecedented speed, despite challenges faced by institutions primarily focused on traditional face-to-face instruction.

Although online education was not a new concept, the Covid-19 pandemic introduced an unprecedented global need to explore online teaching and learning opportunities across all educational levels and majors. According to UNESCO, over 1.5 billion students worldwide (90.1% of total enrolled learners) were affected by the pandemic's closures and subsequent educational changes. The sudden shift to fully online or blended formats in a short transitional time presented various challenges for academic institutions accustomed to traditional face-to-face instruction.

### **Statement of the Problem**

The COVID-19 pandemic has precipitated an unprecedented shift towards online teaching and learning platforms in Nigeria's education sector. Educational institutions have rapidly adopted various electronic learning applications and models, including Google Classroom, Microsoft Teams, Udemy, Moodle, radio, and television, to deliver instruction and provide learning materials in multiple formats. Examinations are now conducted through Computer-Based Testing (CBT), teleconferencing, and Learning Management Systems (LMS), alongside traditional paper-and-pencil modes. This swift transition has raised critical questions about the availability and accessibility of electronic teaching and learning devices for public school students in Nigeria. As institutions grapple with these challenges, it is essential to understand students' perspectives on e-learning systems, including device availability, ease of use, perceived benefits, and potential inhibiting factors. Addressing these issues through research is crucial for ensuring a smooth transition to online learning environments, identifying barriers, and improving educational quality. By gaining insights into students' experiences and perceptions, educational institutions can better tailor their approaches and resources to meet the unique challenges posed by the pandemic, ultimately supporting the academic success of Nigerian students during these unprecedented times.

### **Purpose of the Study**

This study assessed online lectures and examination modes in business studies during the post Covid-19 periods in selected secondary schools in Lagos State. Specific objectives of the study were to:

1. Assess the level of parental guidance during the usage of virtual learning devices for learning business studies in the Covid-19 lockdown in selected secondary schools in Lagos State.
2. Examine the modes of examination in business studies during the post Covid-19 period in selected secondary schools in Lagos State.

3. Investigate business studies students virtual learning platform ease of use during the post Covid-19 periods in selected secondary schools in Lagos State.
4. Investigate the business education students' perceived benefits of the virtual learning system during the post Covid-19 period in selected secondary schools in Lagos State.
5. Examine the challenges faced by the business studies students in online lectures and examination mode during the post Covid-19 period in selected secondary schools in Lagos State.

### **Research Questions**

The following questions were answered in the course of this study;

1. What is the level of parental guidance during the usage of virtual learning devices for learning business studies in the Covid-19 lockdown in selected secondary schools in Lagos State?
2. What are the modes of examination in business studies during the post Covid-19 period in selected secondary schools in Lagos State?
3. How does business studies students perceived virtual learning platform ease of use during the post Covid-19 periods in selected secondary schools in Lagos State?
4. What are the business education students' perceived benefits of the virtual learning system during the post Covid-19 period in selected secondary schools in Lagos State?
5. What are the challenges faced by the business studies students in online lectures and examination mode during the post Covid-19 period in selected secondary schools in Lagos State.

### **Methodology**

The population for this study comprised all business studies students in junior secondary schools in Lagos State. A multistage sampling technique was employed, first dividing the schools into six strata based on educational districts, from which three were randomly selected. These were further subdivided by local government areas, with one local government randomly chosen from each district. Five schools were then randomly selected from each of the three local governments,

totaling 15 schools. Finally, 400 junior secondary school students were randomly selected using the balloting method, ensuring equal opportunity for all identified students to participate in the study. Data collection was facilitated through the Online Lectures and Examination Modes Assessment Questionnaire (OLEMAQ). This instrument was divided into two sections: Section A gathered respondents' socio-economic data, while Section B assessed their views on online lectures and examination modes, using only closed-ended questions clustered according to the study's objectives. The questionnaire underwent face validation by the project supervisor and two experts from the Department of Art and Social Science Education, University of Lagos, who evaluated its wording, relevance, coverage, simplicity, clarity, and potential ambiguity. Their feedback was incorporated into the final version of the questionnaire. The researcher, assisted by two trained research assistants, personally administered the questionnaire in each selected school. Respondents were asked to complete the questionnaire on the spot, with no coercion applied. The collected data were scored using an appropriate scale for easy understanding and condensing. Analysis was conducted using descriptive statistics including frequency count, percentage, and mean, all processed through the Statistical Package for Social Science (SPSS).

## **Result**

**Research Question One:** What is the level of parental guidance during the usage of virtual learning devices for learning business studies in the Covid-19 lockdown in selected secondary schools in Lagos State?

**Table 1: Descriptive analysis of parental guidance in the usage of virtual learning devices for learning business studies during the COVID19 lockdown**

S/N	Statement	SA	A	D	SD	X
1.	My parent makes the device to access learning available for me.	236 (59.0%)	152 (38.0%)	12 (3.0%)	-	3.69
2.	My parent makes provision for data subscription whenever i need it.	200 (50.0%)	57 (14.3%)	5 (1.3%)	119 (29.8%)	2.70
3.	My parent create time to observe my learning.	35 (8.7%)	48 (12.0%)	209 (52.3%)	108 (27.0%)	2.03
4.	My parent cross check my work when done.	29 (7.3%)	40 (10.0%)	57 (14.3%)	274 (68.5%)	1.56
5.	My parent check up on my online activities.	5 (1.3%)	48 (12.0%)	78 (19.5%)	269 (67.3%)	1.47
6.	My parent often call on my teachers to discuss my progress.	0	9 (2.3%)	53 (13.3%)	338 (84.5%)	1.18
7.	My parent are involved in looking through my online assignment.	0	48 (12.0%)	48 (12.0%)	304 (76.0%)	1.36
<b>Grand Mean</b>						<b>1.99</b>

Table 1 shows the descriptive analysis of parental guidance during the usage of virtual learning devices for learning business studies in the Covid-19 lockdown in selected secondary schools in Lagos State. It can be observed that item 1 had the highest mean of 3.69, which means that parent were highly involved in providing virtual learning device for their children. This was followed by the item 2 with a mean score of 2.70 and then item 3 had a mean score of 2.03. It showed that averagely parents make provision for data subscription and observe their wards learning. However, item 4, 5, 6 and 7 had a mean score of 1.56, 1.47, 1.18 and 1.36 respectively which were below average point and showed that parent didn't involve themselves with cross checking, monitoring of online activities, didn't call their wards teachers to monitor performance nor involved in looking through their wards online assignment. An overall mean of 1.99 was realized which according to the standard set for the mean score showed a low level of parental guidance during the usage of virtual learning devices for learning business studies in the Covid-19 lockdown in selected secondary schools in Lagos State.

**Research Question Two:** What are the modes of examination in business studies during the post Covid-19 period in selected secondary schools in Lagos State?

**Table 2:** *Descriptive analysis of modes of examination in business studies during the post Covid-19 period*

S/N	Statement	SA	A	D	SD	X
1.	My school despite the Covid-19 pandemic continue the usage of paper and pencil examination mode.	236 (59.0%)	164 (41.0%)	0	0	3.59
2.	My school immediately switch to computer based examination mode due to the Covid-19 pandemic.	0	0	200 (50.0%)	200 (50.0%)	1.50
3.	During the Covid-19 pandemic, my school adopted the usage of virtual examination mode.	0	0	0	400 (100.0%)	1.00
4.	Online quiz and assignment was used for students assessment in my school during the Covid-19 pandemic.	0	0	0	400 (100.0%)	1.00
5.	My school switch to qualitative assessment as a way of examining students during covid-19 pandemic.	0	0	0	400 (100.0%)	1.00

Table 2 shows the descriptive analysis of modes of examination in business studies during the post Covid-19 period in selected secondary schools in Lagos State. It can be observed that item 1 had the highest mean of 3.59. this was followed by the item 2 with a mean score of 1.50 while the remaining three items in the table had a mean score of 1.00 each which showed that students strongly disagreed to the usage of these examination mode in their various shools during covid-19 pandemic. Hence, it is concluded that modes of examination in business studies during the post Covid-19 period was paper and pencil examination mode.

**Research Question Three:** How does business studies students perceived virtual learning platform ease of use during the post Covid-19 periods in selected secondary schools in Lagos State?

**Table 3:** *Descriptive analysis of business studies students perception of virtual learning platform ease of use during the post Covid-19 periods*



S/N	Statement	SA	A	D	SD	X
1.	I found navigating around the virtual learning means adopted in my school easy.	187 (46.8%)	154 (38.5%)	29 (7.3%)	30 (7.5%)	3.25
2.	It is very easy distinguishing the appropriate icon for the needed information on the virtual learning tools.	200 (50.0%)	187 (46.8%)	10 (2.5%)	3 (0.8%)	3.46
3.	The virtual learning means adopted by my school is user friendly.	245 (61.3%)	155 (38.7%)	-	-	3.61
4.	The virtual learning tool adopted by my school always adapt to my mobile device's screen size.	200 (50.0%)	167 (41.8%)	30 (7.5%)	3 (0.8%)	3.41
5.	The virtual learning tools adopted by my school have a layout arranged alphabetically to ensure ease of use.	78 (19.5%)	32 (8.0%)	177 (44.3%)	113 (28.2)	2.19
<b>Grand Mean</b>						<b>3.18</b>

Table 3 shows the descriptive analysis of how business studies students perceived virtual learning platform ease of use during the post Covid-19 periods in selected secondary schools in Lagos State. It can be observed that item 4 had the highest mean of 3.61, which was followed by the item 2 and 3 with a mean score of 3.46 and 3.41 respectively. Also, item 1 had a high mean score of 3.25 while the lowest is item 5 with a mean score of 2.19. This mean that business studies students perceived the virtual learning platform to be highly easy to use in terms of navigating, icon distinguishing, friendly and adaptation to all type of mobile device while its layout arrangement was viewed to be moderately easy to use. An overall mean of 3.18 was realized which according to the standard set for the mean score showed that business studies students perceived virtual learning platform to be highly easy to use during the post Covid-19 periods in selected secondary schools in Lagos State.

**Research Question Four:** What are the business studies students' perceived benefits of the virtual learning system during the post Covid-19 period in selected secondary schools in Lagos State?

**Table 4: Descriptive analysis of business education students' perceived benefits of the virtual learning system during the post Covid-19 period**

S/N	Statement	SA	A	D	SD	X
1.	Virtual learning system provide me with unending access to learning materials.	200 (50.0%)	154 (38.5%)	36 (9.0%)	10 (2.5%)	3.36

2. Virtual learning system afford me to learn on my own pace.	280 (70.0%)	100 (25.0%)	10 (2.5%)	10 (2.5%)	3.63
3. Virtual learning system afford me to learn while staying at home.	245 (61.3%)	155 (38.7%)	0	0	3.61
4. The virtual learning system encourages classes interactivity for both students and teacher.	98 (24.5%)	107 (26.8%)	100 (25.0%)	95 (23.7%)	2.52
5. The virtual learning system give me the privilege to record a class for subsequent listening and watching.	168 (42.0%)	132 (33.0%)	56 (14.0%)	44 (11.0)	3.06

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**Grand Mean**

**3.24**

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Table 4 shows the descriptive analysis of how business studies students' perceived benefits of the virtual learning system during the post Covid-19 period in selected secondary schools in Lagos State. It is observed from the table that item 2 had the highest mean of 3.63, which was followed by the item 3 and 1 with a mean score of 3.61 and 3.36 respectively. Also, item 5 had a high mean score of 3.06 while the lowest is item 4 with a mean score of 2.52. This mean that business studies students perceived the virtual learning system to highly help them learn on their own, learn at home, access to unlimited learning resources and give them privilege to record a class for subsequent listening and watching while it moderately encourages classes interactivity for both students and teacher. Moreover, an overall mean of 3.24 was realized which according to the standard set for the mean score showed that business studies students perceived benefits of the virtual learning system to be high during the post Covid-19 period in selected secondary schools in Lagos State.

**Research Question Five:** What are the challenges faced by the business studies students in online lectures and examination mode during the post Covid-19 period in selected secondary schools in Lagos State?

**Table 5:** *Descriptive analysis showing challenges faced by the business studies students in online lectures and examination mode during the post Covid-19 period*

S/N	Statement	SA	A	D	SD	X
1.	Virtual learning system reduced interaction with the teacher.	34 (8.5%)	30 (7.5%)	104 (26.0%)	199 (49.8%)	1.58
2.	Virtual learning system is very prone to technical problems.	200 (50.0%)	195 (48.8)	2 (0.5%)	2 (0.5%)	3.48
3.	Poor learning conditions at home affect the successful usage of virtual learning system.	188 (47.0%)	108 (27.0%)	20 (5.0%)	84 (21.0%)	3.00
4.	The virtual learning system requires a lot of high data subscription cost.	267 (66.8%)	100 (25.0%)	33 (8.2%)	-	3.59
5.	Lack of constant electricity supply affect the usage of virtual learning system.	159 (39.8%)	120 (30.0%)	80 (20.0%)	41 (10.2%)	2.99

Table 5 shows the descriptive analysis of challenges faced by the business studies students in online lectures and examination mode during the post Covid-19 period. It can be observed that item 4 had the highest mean of 3.59. This was followed by item 2 with a mean score of 3.48; then items 3 and 5 had a mean score of 3.00 and 2.99 respectively. while item 1 had a mean score of 1.58 which showed disagreement. Since the mean score of items 2,3,4 and 5 were above the criteria set for the mean score which revealed that technical problems, poor learning condition, high cost of data subscription and lack of constant electricity supply were challenges faced by the business studies students in online lectures and examination mode during the post Covid-19 period in Lagos State.

## **Discussion of Findings**

The table revealed that a low level of parental guidance during the usage of virtual learning devices for learning business studies in the Covid-19 lockdown in selected secondary schools in Lagos State. This lack of involvement of parents in the children's virtual learning might be due to economic meltdown and a lot of difficulties parents faced in getting food and other basic needs of their family which make them to be worn out. These findings failed to support that of Dini, Rosyidamayani and Maningtyas (2020) which concluded that the involvement of parents in distance learning during the Covid-19 pandemic was in a good category. It also opposed the study of Ria and Meyke (2020) which concluded that most of the parents are engaged in children online learning activities, although there are still those who have obstacles and difficulties in dividing time, attention and explaining the lesson to learners. It also opposed the study carried out on Portuguese parents by Ribeiro, Cunha, Silva and Carvalho (2021) which revealed that Portuguese parents supported their children during the pandemic mainly through the monitoring of attention they pay while in their classes and task realization. However, several variables appear to significantly determine parental involvement time, which is higher when students attend public schools, when they are less autonomous and younger, when parents' level of education is lower, when the child is a boy (except in secondary education where gender is not relevant), and when the online school time is higher. This showed that though the Covid-19 virus has made government to swiftly adopt virtual learning means to ensure that teaching and learning was not totally put to halt by the pandemic, yet they have not changed the examination mode from the traditional paper and pencil test. This finding opposed the study of Arend (2007) which found that a large percentage of the courses were using online discussion as a graded activity. Quizzes and tests were used in 83% of the courses and written assignments in 63%. A grand mean score of 3.18 was gotten, which according to the decision-making criteria set showed that business studies students perceived virtual learning platform to be highly easy to use during the post Covid-19 periods in selected secondary schools in Lagos State. This means that most of the students found the virtual learning platform provided by the government during the covid-19 pandemic to be very easy to operate. This corroborates the study of Leni, Maria and Hartati (2019) which showed that students are very familiar with mobile technology, but the usage is still not directed according to the competencies to achieve in certain subjects. The results of this study also revealed that students have a positive

perception of mobile technology. It also supports the study of Olayemi, Adamu and Olayemi (2021) which revealed that majority of the respondents indicated high level of ICTs skills and competencies needed for online learning. On the negative side, fear of high cost of data, poor internet services, erratic power supply, inaccessibility to online library resources and limited access to computer were the major perceived challenges to effective online learning.

### **Conclusion**

It can be concluded based on the findings of the study that government changed the mode of teaching and learning of Business Studies in the public junior secondary schools in Lagos state to virtual method during the past Covid-19 Pandemic however, the use of paper and pencil examination was highly retained. Also, the Business Studies students perceived virtual learning platform to be highly easy to use during the post Covid-19 periods because they perceived its benefits to be high especially on class recording for subsequent listening and watching while it moderately encourages classes interactivity for both students and teacher. However, the problem faced in utilization of the virtual learning platform by the Business Studies students were technical problems, poor learning condition, high cost of data subscription and lack of constant electricity supply during the post Covid-19 period in Lagos State.

### **Recommendations**

Based on the findings of the study, the following recommendations were made.

1. The parent where also encourage to always endeavour to engage themselves in the learning process of the children by monitoring their activities regularly.
2. Government should encourage the state ministry of education to see to the teacher usage of qualitative assessment method on the provided virtual learning platform.
3. The government should make it compulsory for all the students in the junior secondary school to have at least a smart mobile phone which can be used to access lectures virtually at any time and at their comfort zones.
4. The state government should also design a specific virtual educational learning platform which can be use by all the teachers and students within the state to facilitate continuous learning during and even after the Covid19 pandemic.

5. The government should work in conjunction with the electricity providers within the state to ensure constant supply of electricity which will enhance students' usage of virtual learning devices without stress.

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