

PERCEPTION OF NIGERIAN STUDENTS ABOUT VIRTUAL LEARNING PLATFORMS:
COVID-19 PANDEMIC

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Abstract

This study explores the perceptions of undergraduate students in two public universities in southwest Nigeria regarding the use of virtual learning platforms, particularly in response to the challenges imposed by the COVID-19 pandemic. Utilizing a Google online questionnaire administered via WhatsApp, opinions were gathered from students in both a federal and a state university. The analysis of responses, presented through simple frequency and percentages, reveals that Zoom was the most commonly utilized platform due to its interactive features. While virtual learning has advanced education, challenges such as network issues, data constraints, dull lectures, and environmental distractions hinder its effectiveness. The findings emphasize the need for stakeholders to address these challenges to enhance the overall quality of virtual education in Nigerian public universities. The researcher therefore recommended that the problems of network, data, boring lectures and environmental distraction be properly taken care of by the stakeholders.

Keywords: virtual learning, virtual learning tools, virtual learning platforms, COVID-19, public universities.

Introduction

Virtual learning has become very visible, particularly in global education, owing to the outbreak of COVID-19 in 2020, which is a threat to humanity. Its spread has redefined the world in all aspects of life, especially the educational system, and Nigeria as a nation was not left out. The emergence of the coronavirus, popularly known as COVID-19, has brought a new wave of teaching and learning across the globe because it is highly contagious; virtual learning (learning without physical contact) has become the new normal dimension of education worldwide. Prior to this period, the major mode of learning in Nigeria was physical, in which students and lecturers were not separated by time and space. However, COVID-19, a viral disease, came with the law of social distancing to curtail its spread. Virtual learning now has a great impact on education, as learners are taught within the confines of their homes via different electronic platforms, and content is made available by lecturers via different teaching-learning platforms. In fact, information communication technology has made teaching and easier.

Virtual learning is study or education that takes place solely through the use of online platforms. It is the transfer of skills and knowledge via the internet using electronic applications. This is enabled through the development and deployment of different software, such as moodles, zooms, and telegrams, with the use of digital tools and content. Typically, it allows some form of interaction between the learner and teacher (The Economic Times, 2020). Virtual Learning platforms are used not only for teaching and learning processes but also for administrative work, tracking, reporting of the learning process in the classroom, submission of assignments, and receiving teaching materials.

Statement of the problem

The advent of the COVID-19 pandemic in 2020 has reshaped the landscape of global education, compelling a significant shift towards virtual learning. This transformation has been particularly pronounced in Nigeria, where the traditional mode of in-person education was disrupted by the

highly contagious nature of the virus, necessitating the implementation of social distancing measures. Consequently, virtual learning has emerged as the predominant mode of education, allowing students to receive instruction within the confines of their homes through various electronic platforms. While the adoption of virtual learning presents a revolutionary change in the educational system, it also introduces challenges that may impede its effectiveness. This study aims to address the specific issues and concerns faced by students and educators in Nigeria during this transition to virtual learning. Understanding these challenges is crucial for the development of strategies and interventions to enhance the quality and efficiency of virtual education in the country. The research focuses on uncovering the types of problems encountered, ranging from technological constraints to potential drawbacks in the virtual learning experience. By examining these challenges, the study aims to contribute insights that can inform policies and initiatives to optimize the virtual learning environment for both students and educators in Nigeria.

Objectives of the study

The general objective for this study is to examine the opinion of Nigeria students in public universities on the use of electronic learning platforms. The specific objectives are to:

1. find out the types of virtual learning platforms used in public Universities
2. examine the advantages of virtual learning platforms
3. find out the opinions of students on the use of virtual learning platforms.
4. investigate the problems associated with the use of virtual platforms

Review of Literature

The educational system in Nigeria is heavily built around traditional learning, that is, a physical learning environment in which students and lectures see face-to-face. However, things could not continue as usual due to the emergence of coronavirus disease 2019 (COVID-19) (one of the most dreaded, recent pandemics) that affected the whole world in all areas, including education.

This has rendered physical learning inadequate because it was a viral disease that spreads as quickly as possible. The World Health Organization declared COVID-19 a pandemic; hence, there was immediate closure of all academic institutions with accompanying rules and regulations to reduce physical contact to curtail its spread. Hence, virtual learning was introduced in an attempt to respond to both the first and second waves of the COVID-19 pandemic. This was quickly embraced by private universities, while public universities lagged behind due to poor virtual infrastructure and technological know-how (Lawal, Agboluaje, Akingboye and Osayande, 2021). The use of virtual learning has become very important to reduce physical contact among students and lecturers (Adeoye; Adanikin and Adanikin 2020). Virtual learning is performed through the use of digital technologies, not minding location and time, without physical interaction to support education. It is transferring knowledge via electronic media via network and internet enabled environment (Arkorful and Abaidoo, 2015). There were different virtual platforms available for teaching and learning.

The pandemic brought the use of virtual learning platforms such as Moodle, Telegram, WhatsApp, Zoom, and Google Meet into limelight. These platforms have several features that allow content development, discussion management, group work and class participation, communication, student study, tracking, and administrative tools. For instance, the University of Zambia (UNZA) and Technical College Yambol (TCY) used e-learning platforms such as Astria or Moodle, as they allow audio, video integration, and interaction, while Rusangu University (RU) harnessed tools such as YouTube for online instruction (Mulenga and Marbán, 2020, De 2020). In Nigeria, public universities such as the First Technical University, Ibadan, University of Ibadan, and Tai Solarin University of Education use moodles alongside telegram, Google Meet, Zoom, and WhatsApp.

A study, Ebohon, Obienue, Irabor, Amadin and Omoregie (2021) on Evaluating the impact of COVID-19 pandemic lockdown on education in Nigeria: Insights from teachers and students on virtual/ online learning, submitted that students were not satisfied using virtual platforms for learning because of limited physical interactions with one another. Furthermore, it was perceived that students were unable to gain essential knowledge and skills in some courses that were taught

virtually due to internet fluctuation, influx of cumbersome assignments with limited time for each; hence required more efforts compared to paper-based ones. Moreso, Egielewa, Idogho, Iyalomhe and Cirella (2022) found that students had low acceptance of virtual learning because of the bad internet and erratic power supply; hence preferred the physical learning

According to Al Rawashdeh, Mohammed, Al Arab, and Rawashdeh (2021), Maatuk et al. (2021), and Prayudha (2022), virtual learning platforms have some advantages in that they allow students to learn anywhere in the comfort of their homes, as long as internet connectivity and electronic devices are available; flexibility of time, collaborative activities become easier. Additional materials such as recorded training, lecture materials, and other sources of information, as well as assignments, are provided using these platforms. Lecture (including missed lecture notes) materials can be easily downloaded by students using their smartphones, while information dissemination from lecturer to students and amongst students is also fast. Furthermore, student workers can incorporate e-learning into their busy schedules and participate in e-learning at their convenience.

Virtual learning platforms came with pedagogical challenges, as many public universities were not prepared. Lack of network capacity, a major complaint by students in both urban and rural areas, hinders the smooth running of lectures because they need areas with a steady network to enable them to join the class, and students involved in practicals could not practice since they were supposed to be physically present in the laboratories. Finance is another big challenge; connecting to virtual classes, uploading and downloading of information requires data, and money is required to obtain the virtual learning devices that are on the high side in Nigeria (Egielewa et al., 2022). Most public university students such as Ladoke Akintola University of Technology, University of Ibadan, Tai Solarin University of Education, University of Nigeria, Nsuka, Federal University of Technology, Akure, and Delta State University are faced with the challenges of access to mobile devices and the Internet, high cost of data, inaccessibility to online library resources, limited access to computer, technical issues, and lack of resources. Poor funding by the state and Federal Governments also hampers the stability of the network and data accessibility (Olayemi and Olayemi (2021), Public Universities still struggle with virtual

learning 2021). Maatuk, Elberkawi, Aljawarneh, Rashaieh, and Alharbi (2022) submitted that unreliable Internet connectivity was a challenge for students and teachers using virtual teaching and learning platforms in Ghana. Egielewa, Idogho, Iyalomhe, and Cirella (2022) opined that virtual learning could be successful only if there are positive contributions from all stakeholders in addressing the areas where students have problems. The key to accepting and making maximum use of the platforms is to understand the students' needs concerns and the factors affecting their acceptance.

This study adopted the theory of the Technological Acceptance Model (TAM) proposed by Davis (1989) to drive home reasons for using different learning platforms. TAM proposes that the perceived usefulness and perceived ease of use of technological tools are the major determinants of its utilization. That is, the usability of any technological tool is dependent on the belief that the application will be of immense advantage, considering the environment and ability of the user (Scherer et al., 2019). Using a particular virtual platform is dependent on how beneficial and convenient it would be to users; though some institutions and lecturers decide on the type of platform to be used, considering the cost of data and ease of use. Conversely, the emergence of COVID-19 has greatly influenced social behavior by reducing physical contact (social distancing) hence it is mandatory for both parties (students and lecturers) to accept the use of virtual platforms in order to achieve their educational and career goals Maatuk, Elberkawi, Aljawarneh, Rashaieh and Alharbi (2022).

Methodology

A descriptive survey design was employed in this study, utilizing a convenient sampling technique to select participants. The study focused on undergraduate students enrolled in two Nigerian public universities, representing both state and federal institution, where virtual learning platforms are actively utilized. The participants were drawn from diverse academic disciplines, including science, applied sciences, arts, social sciences, and education. Data collection was facilitated through an online Google Form questionnaire, which was structured into five sections. The questionnaire was distributed to potential respondents via WhatsApp to

ensure accessibility and prompt completion. A total of 115 online questionnaires were disseminated via WhatsApp platforms, with 107 deemed suitable for analysis following the removal of incomplete or irrelevant responses. The collected data was analysis utilizing simple frequency and percentages in order to provide a comprehensive understanding of the participants' perspectives on virtual learning in Nigerian public universities.

Data Analysis

This section presents the result of data analysis thus:

Table 1: General Information

	Frequency	Percentage (%)
Name of University:		
University of Ibadan	74	69.2
Tai Solarin University of Education	33	30.8
Total	107	100%
Level of study:		
100	28	26.2
200	21	19.6
300	30	28.0
400	26	24.3
500	2	1.9
600	00	00
Total	107	100%
Gender:		
Male	59	55.1
Female	48	44.9
Total	107	100%

Table 1 showed general information about the respondents from the two universities. University of Ibadan has 74 (69.2%) while Tai Solarin University of Education has 33 (30.8) respondents. Majority of the respondents were between 100 and 400 levels of study. It could be concluded from this that the 500 and 600 levels were almost through with their class work and left with field work. Both male and female responded to the questionnaire. All were exposed to using virtual learning platforms.

Table 2: Platforms used for Virtual Learning

Platforms	Frequency	Percentage (%)
Moodle	52	48.6
Zoom	79	73.8
Whatsapp	64	59.8
Telegram	71	66.4
Google meet	53	49.5
Teams	11	10.3
Others	17	15.9

From table 2, majority of the respondents had their classes via zoom (79, 73.8%) and following closely is the telegram with frequency 71 (66.6%). Teams platform was least used by the respondents (11, 10.3%). The high use of zoom virtual learning platform could be as a result of its interactive learning mode, which allows inclusion of participants and also its ease of use and the benefits of its many features that are highly interactive i.e. video, audio, chat room, recording ability and screen sharing. This is in support of the work of Scherer; Siddiq, and Tondeur (2019).

Table 3: Advantages of virtual learning platforms

Advantages	Frequency	Percentage (%)
Classes can be held anywhere	94	87.9
Classes can be held anytime	61	57
Convenient for student workers	73	68
Reduce risks of travelling	53	49.5
Allows a dynamic synergy among the students	21	19.6
Encourages better interaction between lecturers and students	24	22.4
Missed lecture notes can readily be obtained	68	63.6

From table 3, (94, 87.9%) of classes held anywhere, (73, 68%) revealed that it was very convenient for student workers and (68, 63.6%) showed missed lecture notes could readily be obtained as advantages of virtual learning platforms. This finding is in line with the discovery of Maatuk, Elberkawi, Aljawarneh, Rashaieh and Alharbi (2022) who posited that students can study anywhere, anytime using any style once there is internet connectivity.

Table 4: perceptions about virtual teaching platforms

Opinion	Frequency	Percentage (%)
Virtual learning platforms are effective	53	49.5
Virtual learning platforms are not effective	54	50.5
Total	107	100%

From table 4, it was observed that virtual learning is not effective (54, 50.5%). This response may be as a result of the challenges faced by the respondents; challenges such as unreliable connectivity, lack of adequate devices etc. This may be due to the problems of lack of stable network, data electricity, boring lectures, cost, etc. The study is in line with the research of The Guardian, May 4th, 2021. and Egielewa, Idogho, Iyalomhe and Cirella (2022) that students had low acceptance of virtual learning because of the bad internet and erratic power supply; hence preferred physical learning environment.

Table 5: Preferred learning system

Preferred learning environment	Frequency	Percentage (%)
Physical only	67	62.6
Blended (combination of physical & virtual)	40	37.4
Total	107	100%

Table 5 revealed that majority of the respondents' preferred physical learning environment only to the blended learning. This may be due to the problems encountered with the use of the platforms. In a similar study by Egielewa, Idogho, Iyalomhe, and Cirella (2022), majority of the respondents strongly agreed to the use of blended learning platforms (254, 47.8%); there was steady internet access. This may be due to the fact that students need to see their lecturers occasionally. However, physical learning can never and should not be removed completely.

Table 3: Problems of virtual learning platforms

Problems	Frequency	Percentage (%)
Lack of stable network	98	91.6
Lack of data	73	68.2
Irregular supply of electricity	86	80.4
Environmental distraction	61	57.0
Self-distraction	46	43.0
Parental distraction	33	30.8
Distraction from phone calls	37	34.6
Boring lecture	65	60.7
Short period of lecture	19	19.8
Rushed syllabus	62	57.9
Topics were not being explained well	61	57.0
Odd hours of lecture time	28	26.2
Odd hours of sending materials	29	27.1
Odd hours of writing tests	14	13.1
Overlap of lecture timetable	34	31.8
Lack of necessary devices	34	31.8
Virtual learning is expensive	56	52.3
Practical classes are not being taught well	44	41.1
Others	08	7.5

Table 3 showed analysis of the problems encountered by the respondents using virtual platforms for their lectures. This revealed that lack of stable network (98, 91.6%) had the highest percentage supporting the findings of Egielewa, Idogho, Iyalomhe, and Cirella (2022) where unreliable internet was also identified as one of their challenges to the use of virtual learning platforms. This was followed by irregular supply of electricity (86, 80.4%), lack of data (73, 68.2%) and boring lectures (65, 61.7%). This is found to be in support of the research carried out in Uganda by Egielewa, Idogho, Iyalomhe, and Cirella (2022) and the report from Guardian Newspaper dated 4th March, 2021.

Limitations

The sample for this study is limited to undergraduate students from two public universities (federal and state) and only learners' opinions were investigated; therefore, more studies may focus on lectures only or both. Although the results are useful for describing the general characteristics of a large population of students, further study is encouraged on post graduate students. Studies can also delve into applied and science-based courses only.

Conclusion

This study sheds light on the significant impact of the COVID-19 pandemic on the educational landscape in Nigeria, prompting a paradigm shift towards virtual learning. The findings revealed that virtual learning platforms, such as Zoom and Telegram, have become integral tools in facilitating education, allowing students to engage in learning activities remotely. However, the study also highlights various challenges faced by students in adopting virtual learning, including issues related to network stability, electricity supply, and data availability. These challenges, coupled with perceptions of boring lectures and concerns about the effectiveness of virtual learning, underscore the need for comprehensive strategies to optimize the virtual learning experience in Nigerian public universities

Recommendations

Public universities should invest in enhancing virtual infrastructure, ensuring stable internet connectivity, and providing a reliable power supply to create a conducive environment for effective virtual learning. Considering the financial constraints faced by students in accessing virtual learning platforms, there is need for financial support mechanisms such as subsidies or grants to alleviate the burden of data and device costs. Also, students and lecturers should undergo training programs to effectively enhance their proficiency in using virtual learning platforms. This will contribute to a smoother transition and improve the overall experience. By

implementing these recommendations, educational institutions can foster an environment conducive to effective virtual learning, ensuring that the identified challenges are addressed to optimize the educational experience for both students and instructors.

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