VIRTUAL CLASSROOM MANAGEMENT AND SECONDARY SCHOOL STUDENTS ATTITUDES TOWARDS LEARNING DURING LOCKDOWN COVID-19 PANDEMIC IN LAGOS STATE, NIGERIA

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ARTICLE INFORMATION

ABS TRACT

The mindset of secondary school students regarding education, particularly during a lockdown during the COVID-19 pandemic appears to have had an impact on students' academic performance. This study aimed to investigate the relationship between virtual classroom management and secondary school students' attitudes towards learning in Lagos State, Nigeria. The descriptive research design and survey type were used for the study. A multistage sampling procedure using a simple random sampling technique, a total of 1497 secondary school students and 935 teachers were selected from 66 schools in Lagos State for the study. Data was collected through a self-structured questionnaire and analyzed using both descriptive and inferential statistics. Data was collected through a structured questionnaire and validated using Cronbach's Alpha to determine the reliability ($\alpha= 0. .931$) of the instrument using a descriptive survey design. Frequency counts, percentages and correlation analysis were used to analysis the data. The findings showed that virtual classroom management was mostly related ($r=0.838$) to the students' learning attitudes during the lockdown COVID-19 pandemic. The study recommended that the Lagos State government should provide technological support to secondary schools, provide effective training for teachers and work on a strategy to improve secondary school students' attitudes towards learning in Lagos State, Nigeria.

1. Introduction

COVID-19 was a global pandemic outbreak from late 2019 to 2020 that affected virtually everything, with education not being left behind. Most developing countries like Nigeria were grossly affected and there was a total lockdown for about six (6) months. Students at all levels of education could not have access to the conventional teaching-learning activities, engaging in non-educative activities and education was disrupted. In Nigeria, everybody was not prepared for it, so the heat effect was more on education. As a revealing voyage, education facilitates the cooperative sharing of information that drives personal development and advances society. This life-changing process enables people to develop critical abilities, enlighten and self-improvement. Acting as a spur for change, education of their rig fosters a spur broadening students' awareness of their rights, promoting personal development and fostering growth, empowering and engaging with society, making original contributions and becoming skilled members of the labour field. Every child's right to an education is unquestionably upheld by the National Policy on Education (2014) which transcends geographic, social economic and physical boundaries.

A diverse attitude towards learning occurs within the heterogeneous geography of students' backgrounds, settings, social statuses, and exposures shaped by personal circumstances. Kurniawan, Astalini, Darmaji and Melsayanti (2019) claimed that attitude is the inclination to naturally access things in a certain way and plays a crucial role in the process of learning. It has a major effect on students' drive; interest and capacity to look for problems, pose inquiries and take an active role in their education, success and the development of critical thinking skills are more likely for students who are passionate about their studies (Warsah, Morgang, Uyun, Afandi & Hamengkubuwono, 2021). Experiences and environmental circumstances shape an individual's attitude, which affects their choices, interactions with others and reactions to situations (Ajzen, Fishbein, Lohmann& Albarracin, 2018); four basic types of attitude are recognized by psychologists; positive negative, neutral and silken. Attitude significantly impacts students being highly motivated and engaged thus, seeking challenges, asking questions to extend thinking approaches, learning with active interest, seeks own solutions to problems, organizing time effectively set as an example, taking responsibility, connecting ideas, showing a desire to improve, showing kindness and listen carefully as the characteristics of different types of attitudes (Falore & Oredein, 2023).

The focus of this research is on the modern world of virtual classrooms which are dynamic online spaces where teachers and students interact while using a variety of platforms like chat, radio, TV, Zoom and Telegram, which it will completely replace conventional learning environments. Virtual classrooms present a cross-border option for accessing high-quality education. It emphasizes how virtual classrooms may be tailored to meet each student's unique learning objectives. It also helps students develop their digital skills, collaborate with others, and retain more information. Thus, Virtual classroom management is an essential component that includes a range of methods, approaches, and resources used by teachers and approaches, and resources used by teachers and organizations (Kasmia & M'hammed, 2023) Thus administration guarantees a smooth and effective virtual learning environment, covering areas like maintaining student interest, encouraging cooperation and resolving technical. In addition, to maintain student interest, encourage collaboration, resolve technological issues and build an inclusive equitable learning environment, this management guarantees a smooth and effective virtual learning experience.

According to Kanimozhi (2018), virtual classroom management is a proactive strategy for preserving civility, and order and guaranteeing students' independence in this changing educational environment rather than a reaction to the demands of the digital age. Virtual classroom management describes the collection of methods, approaches and resources used by instructors and educational institutions to promote a seamless, effective learning environment in a virtual context (Swisawat & Piriyasurawong,

2022). Therefore, the purpose of this study is to look into how secondary school students' views towards virtual classroom management relate to one another.

2.   Statement of the Problem

The advent of the COVID-19 pandemic and the closure of schools for months in the year 2020 seem to wrought a significant disruption to the landscape of education in Nigeria. This impact somehow has been pronounced at the secondary school level of education. The closure of the conventional teaching-learning activities gave rise to the virtual teaching-learning activities that the Lagos State government had undertaken in collaboration with radio and television stations. This collaboration aimed at developing and broadcasting educational content catering to the needs of the students. The shift to virtual classroom teaching during COVID-19 presented challenges in managing students' engagement and attitudes towards learning. The lack of face-to-face interactions, technical difficulties, distractions at home, and varying levels of digital literacy among students seems to have affected the participation and motivation of students towards learning. Understanding these challenges is crucial to enhancing the virtual learning experience and fostering a positive attitude towards learning in this educational landscape. Studies have been carried out on challenges students faced during the COVID-19 pandemic outbreak but much work has not been done in the area of virtual classroom management and students' attitude towards learning during lockdown. To this end, this study will investigate the relationship between virtual classroom management and secondary school students' attitudes towards learning during the lockdown COVID-19 pandemic in Lagos State.

3.   Objectives of the Study

This study aims to investigate virtual classroom management and secondary school students' attitudes towards learning.

The specific objectives are to:

i.   identify the attitudinal level of secondary school students towards learning during the COVID-19 lockdown in Lagos State.

ii   identify the virtual classroom management techniques used by teachers in teaching the students during the COVID-19 lockdown in Lagos State.

iii   ascertain the relationship between virtual classroom management techniques and secondary school students towards learning during the COVID-19 lockdown in Lagos State.

4.   **Research Questions**

1. What is the attitudinal level of secondary school students towards learning during the COVID-19 lockdown in Lagos State?
2.   What are the virtual classroom management techniques used by teachers in teaching the students during the COVID-19 lockdown in Lagos State?

5.   **Hypothesis**

H$_O$1:   There will be no significant relationship between virtual classroom management techniques and secondary students' attitudes towards learning during the COVID-19   lockdown in Lagos State.

6.   **Methodology**

6.1   Research Design

The study used a descriptive survey research design to determine virtual classroom management techniques and secondary school students' attitudes towards learning. The advantages of the design were its robustness concerning the distribution of data, easy computation and its flexibility in handling large amounts of data.

6.2   Selection of Participants

Multi-stage sampling procedure using a simple random sampling technique was used to select a sample of the population that participated in the study. The sample was selected in such a way that everyone stands an equal chance of being selected. At first Lagos State was stratified into six educational districts, secondly, one local government was chosen using a simple random sampling. In the third stage, the local government with the least number of schools among the selected local governments is used as a benchmark to ensure uniformity. In the fourth stage, the Taro Yamane formula is $n+N(1=N(e)^2)$. 1497(One thousand four hundred and ninety-seven) secondary school students were selected out of 32,435 using random sampling. 932 (nine hundred and thirty-five) out of 8840 teachers were used teachers.

6.3   Research Instrument

A self-structured Teachers' Questionnaire titled Virtual Classroom Management Techniques (VCMT) was developed, whose items were generated from the content of the study to collect data which consisted of virtual classroom management techniques. Responses were rated using at all times AAT) =4 Sometimes (ST)=3, Rarely (RL)=2, Not at all (NAL). The student's questionnaire (SATLDC) items measured readiness, self-discipline and patience. All responses were rated using the rating scale at all times (AAT, Sometimes ST (3) Rarely (RL) Not at All (NA) A pilot survey was conducted. Face and content validity tests were conducted on the survey that was used.

6.4   Method of Data Analysis

Descriptive and inferential statistics were used to analyze the quantitative data collected. This includes frequency count; simple percentages, mean, and standard deviation were employed to measure the structured questionnaires to analyze the data collected. Inferential statistics Linear Multiple Regression Analysis (ANOVA) was employed to determine the significant relative correlation between virtual classroom management techniques

6.5   Ethical Consideration

Ethical guidelines relating to data collection, analysis and interpretation of research as specified by Lead City University were strictly adhered to with the view of enhancing the credibility, validity, and reliability of the study.

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7.1   Presentations of Research Questions

Research Question I: What is the attitudinal level of secondary school students towards learning during COVID-19 in Lagos State?

Table 1 The attitudinal level of secondary school students towards learning during COVID-19 Lagos State

S/N	Items	At All Time Freq (%)	Sometimes Freq(%)	Rarely Freq(%)	Not At All Freq(%)	Mean	SD
1.	Confident in learning new concepts	1201(802)	274 (18.3)	2 (.1)	20(1.3)	3.77	0 .508
2.	Dedicate time and efforts to studying `	856(57.2)	560(37.4)	80(5.3)	01(0.1)	3.52	0.601
3.	Get familiar with tools and its rules	626 (41.8)	703(47.0)	142(9.5)	26(1.7)	3.29	0.707
4.	Adjust to online learning during lockdown	595(39.7)	639(42.7)	163(10.9)	100(6.7)	3.15	0.866
5.	Create study plan and stick to it	599(40.0)	658(44.0)	200(13.4)	40(2.7)	3.21	0.772
6.	Avoid distractions from social media	519(34.7)	592(39.5)	281(18.8)	105(7.0)	3.02	0.903
7.	Set goals for academic performance	1203(80.4)	237(15.8)	237(15.8)	13(.9)	3.76	0.543
8.	Persist in the face of difficulties	914(61.1)	461(30.8)	461(30.8)	34(2.3)	3.51	0.710
9.	Take time to fully understand new concepts	1053(70.3)	419(28.0)	419(28.1)	08(.5)	3.68	0.522
10.	Remain focused and engaged during virtual classroom teaching	1008(67.3)	439(29.3)	439(29.3)	12(.8)	3.63	0.576
11.	Maintain a positive attitude and avoid become frustrated	798(53.3)	567(37.9)	567(37.9)	13(.9)	3.44	0.676
12.	Refrain from rushing through assignment	598(39.9)	777(51.9)	777(51.9)	28(1.9)	3.30	0.669

Weighted Mean					3.44	

Field Survey, 2023

The table presents the level of secondary school students' attitude towards learning during COVID-19 in Lagos across various dimensions, providing an insight into their perceptions and behaviours overall weighted mean was calculated as 3.44 indicating a generally positive attitude towards learning during COVID-19. From the table, several key inferences can be drawn regarding the attitudes of secondary school students towards learning, for instance, the high percentage of students (80.2%) expressing confidence in their ability to learn new concepts during the lockdown highlights their resilience and adaptability. A significant proportion of students (57,2%) reflect a strong sense of responsibility towards their education even in the face of disruptions caused by the pandemic. Student familiarity (41.8%) suggests that many students in the digital learning environment with the least significant proportion (34.7%) avoid distractions; the presence of (18.5%) signifies a need for improved focus during virtual learning. This indicates an opportunity for students to develop better strategies for maintaining concentration result presents a comprehensive assessment of students' attitudes and behaviours, revealing a balanced perspective on their approach to learning in the challenging context of the pandemic. In all, the results indicate that secondary students in Lagos state have demonstrated adaptability, determination and dedication to learning in the face of the COVID-19 pandemic.

Research Question 2: What are the virtual classroom management techniques used by teachers in teaching the students during COVID-19 in Lagos State?

Table 2 shows the Virtual Classroom Management of Secondary School Teachers during the lockdown in Lagos State.

S/N	Items	At All Time Freq (%)	Sometimes Freq(%)	Rarely Freq(%)	Not At All Freq(%)	Mean	SD
1.	Incorporating digital resources to lesson plan	438(46.8)	337(40.3)	95(10.2)	25(2.7)	3.31	0.761
2.	Using technologies that involves use of digital tools	430(46.0)	379(40.5)	74(7.9)	52(5.6)	3.27	0.830
3.	Engage in professional development activities	516(55.2)	300(32.1)	86(9.2)	33(3.5)	3.39	0.796
4.	Establishing guidelines for students behavior	563(60.2)	273(29.2)	71(7.6)	28(3.0)	3.47	0.762
5.	Monitor students' progress using digital tools	544(58.2)	281(30.1)	73(7.8)	37(4.0)	3.42	0.799
6.	Plan and structure virtual classes keeping, students engaged	426(45.6)	364(38.9)	108(11.6)	37(4.0)	3.26	0.814
7.	Set clear goals for virtual classes	658(70.4)	170(18.2)	80(8.6)	27(2.9)	3.56	0.769
8.	Define roles and students' responsibilities	587(62.8)	265(28.3)	37(4.0)	46(4.9)	3.49	0.791
9.	Establish protocols for decision making	531(56.8)	287(30.7)	62(6.6)	55(5.9)	3.38	0.850
10.	Complying with the stated timetable for	522(55.8)	268(28.1)	79(8.4)	71(7.6)	3.32	0.919
11.	Providing explicit instructions and feedback	407(43.5)	399(42.7)	110 (11.8)	19(2.0)	3.28	0.747
	Weighted Mean					3.37	

Field Survey2023

Table 2 provides a comprehensive assessment of virtual classroom management techniques used by teachers of secondary schools during COVID-19. It specifically delved into various dimensions including planning, organizing, and directing, The overall weighted mean for the entire range of items of 3.37. Regarding planning, the proficiency of teachers in planning and structuring virtual lessons to sustain students' engagement is reflected in a mean score of 3.26, indicating a level of competence that falls within the high range. In terms of organizing, the proficiency of teachers in establishing clear guidelines for students' behaviour in virtual classroom management is commendable, boasting a high level of competence with a mean score of 3.32. The clarity with which teachers set goals for lessons in virtual classes' showcases a high level of competence with a mean score of 3.56 Defining roles and responsibilities for students during classes also exhibits a high level of competence with a mean score of 3.49. The overall weighted mean for all dimensions combined is 3.37, underscoring a high level of virtual classroom management among teachers exhibited during COVID-19 in Lagos State. Overall, teachers exhibit a remarkable level of virtual classroom management particularly in planning, directing, and communication while certain elements of planning and organizing reveal areas for improvement. The results indicate that there is room for improvement in terms of planning directing and organizing virtual lessons. The findings offer insights into the areas where teachers might need more support and training. Policymakers and educational institutions can use this information to develop targeted policies and programs that address specific areas of improvement, fostering a more inclusive and effective online environment.

7.2 Testing of Hypothesis

H_01: There will be no significant relationship between virtual classroom management techniques and secondary school students' attitudes towards learning during the COVID-19 lockdown in Lagos State.

	Virtual Classroom Management	Student attitude towards learning
Virtual Classroom Management	1	0.838
Student attitude towards learning	0.838	1

Table 3a reveals the relationship between virtual classroom management and secondary school student's attitudes towards learning during the COVID-19 lockdown in Lagos State, while Table 3b shows the relation relationship of virtual classroom management indicators (planning, directing and organizing) against the students; attitudes towards learning. Table 3a shows a high positive relationship (r=0.838), which implies that the more teachers tried to manage the virtual classroom during the lockdown and the students' attitudes towards learning were improved. Table 3b reveals that directing had the highest relationship (r=0.846), followed by organizing (r=0.842) while planning had the least (r=0.729).

8.   Discussion of Findings

Research question one delved into the attitudinal level of secondary school students' attitudes towards the evaluation of readiness, self-discipline and patience in the context of learning during the pandemic. The result of this study was unveiled. The remarkable acceptability, determination and dedication displayed by secondary school students as they navigated the challenges of the COVID-19 pandemic. These findings were in line with prior research endeavours that similarly highlighted positive attitudes and resilience among students when faced with online learning. A study examining the attitudes of university students towards online learning during the pandemic discovered a positive outlook. These findings were in line with prior research endeavours that similarly highlighted positive attitudes resilience and adaptability all of which were identified as pivotal for successful virtual teaching and learning Liu, Zhao and Su (2022). This alignment is also observable in this study's findings regarding students' confidence, adjustment to online learning and persistence during lockdown (Hongsuchon, Emary, Hariguna & Qhal, 2022). In a related investigation, the engagement levels of students in virtual classrooms were explored, revealing their dedication, focus and patience throughout the online process (Zheng, Zhang, Lau, Xu, Zhang, Mo, Yang, Mak & Wong, 2020). This evidence further reinforced the result of this study regarding time dedication, focused engagement and comprehension of new concepts.

Furthermore, an examination of the impact of self-discipline and goal setting on students' performance concurred with this study's findings. The study highlighted how students' creation of study plans, avoidance of distractions and establishment of achievable goals contributed to their success in virtual learning activities (Al-Abyadh & Azeem, 2022). Moreover, a longitudinal study that tracked students over their educational journey discovered that students who maintained a positive attitude and exhibited persistence were most likely to graduate successfully (Goode, Nieuwoudt & Roche, 2022). These findings correlated with the present study's discoveries concerning persistence

and positive attitudes in the face of challenges in online courses and goal setting on student performance.

The second research question aimed to ascertain the extent of virtual classroom management on secondary school students' attitudes during the COVID-19 in Lagos State. The investigation involved an evaluation of teachers' planning, organizing and directing capabilities during lockdown. The outcomes revealed a notable high level of virtual classroom management among teachers particularly and specific aspects of planning, directing and organizing indicated areas for potential enhancement. Moreover, the findings suggested an overreaching positive attitude and findings suggested an overreaching positive attitude and strong dedication among teachers in Lagos State towards integrating digital technology into their teaching practices.

 An exploration of teacher's collaboration impact on digital learning outcomes emphasized how collaborative efforts led to effective digital tool integration, enhanced communication and innovative lesson planning, aligning with the present study's results (Asfihana, Salija, Iskandar & Garim, 2022). Likewise, researchers delved into teachers' perspectives on online assessment strategies showcasing teachers' planning skills and adopted integration of digital tools to maintain students' engagement and accurate assessment mirroring the findings on teachers' competence in planning and assessment in this study (Singh & Meena, 2022). Similarly, an exploration of strategies for organizing virtual classrooms uncovered that teachers who established clear guidelines adhered to conducive learning environments, aligning with this study's results on organizing, adhered to schedules and fostered virtual community-building created conducive environments, aligning with this study's results on organizing (Maphalala, Mncube & Mkhasibe, 2022).

Moreover, research discussed challenges in planning virtual lessons, highlighting the complexities of designing engaging virtual lessons, assessing students learning and communicating expectations for teachers, contrasting with the results on planning in this study (Stamenova, Chu, Pang, Fang, Shakeri, Cran, Bhattacharyya, Bhatia & Tadrus, 2021) Additionally, a related study addressed the challenges of organizing digital classrooms, identifying obstacles like maintaining student adherence to schedules and fostering virtual community building, differing from organizing results in this study (Ober & Koshamanska, 2022). Furthermore, a study examined challenges directing virtual classrooms, revealing difficulties in setting clear goals and defining students' roles in providing explicit instructions, contrasting with the directing findings in this study (Rosa, Nascimento-e-Silva & Santos, 2022).

9. Conclusion

Secondary school students in Lagos State demonstrated remarkable, adaptability, commitment and growth-oriented mindsets during the COVID-19. Despite challenges, a significant majority showcased confidence, dedication to studies, and perseverance in achieving academic goals. The findings underscore their academic achievement goals. The findings underscore their ability to embrace online learning tools, practice, and self-discipline and maintain a positive attitude indicating resilience amidst adversity. The consistent positive attitude towards learning highlights their unwavering determination and dedication to education throughout the pandemic.

Secondary school teachers showcased confidence in digital technology, integration and readiness to collaborate and communicate effectively. It also highlighted the importance of tailored support and training, ensuring teachers continued effectiveness in the evolving educational landscape beyond the pandemic.

10. Recommendations

Based on the findings of this study, the following are recommended.

1. To further enhance students' adaptability, commitment and growth-oriented mindsets, educational institutions should integrate online learning tools effectively into the curriculum.
2. Encouraging continued development of self-discipline, positive attitudes and perseverance can be achieved through tailored intervention and motivational programs. Providing platforms for peer interactions and collaboration will help students maintain engagement and a sense of community, supporting their overall resilience and positive attitude towards learning.
3. Educational institutions should offer continuous professional development that focuses on effective digital teaching strategies and technology integration.
4. Providing opportunities for collaboration and sharing of best practices can further enhance teachers' skills and confidence
5. Educational policymakers should allocate resources for teacher training and technological resources to ensure the enduring impact of these strategies

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