



EFFECTS OF TEACHING ENVIRONMENT ON THE ACADEMIC PERFORMANCE OF SOCIAL STUDIES STUDENTS IN TERTIARY INSTITUTIONS IN CROSS RIVER STATE, NIGERIA

E. E. Essien¹, B. I. Ele² and B. G. Ele³

¹Department of Social Science Education, Faculty of Arts and Social Science Education, University of Calabar, Calabar, Nigeria

Email: essienekpenyong73@gmail.com, essienekpenyong@unical.edu.ng
+234(0)8036241406

²Department of Computer Science, University of Calabar, Calabar, Nigeria.

Email: mydays2020@gmail.com, elebassey@unical.edu.ng +234(0)8064451381

³Department of Social Science Education, Faculty of Arts and Social Science Education, University of Calabar, Calabar, Nigeria.

Email: eleblessing2020@gmail.com, +234(0)7030773542

Cite this article:

Essien E. E., Ele B. I., Ele B. G. (2023), Effects of Teaching Environment on the Academic Performance of Social Studies Students in Tertiary Institutions in Cross River State, Nigeria. British Journal of Education, Learning and Development Psychology 6(3), 130-144. DOI: 10.52589/BJELDP-JQEVY0VG

Manuscript History

Received: 1 Sept 2023

Accepted: 20 Oct 2023

Published: 23 Nov 2023

Copyright © 2023 The Author(s).

This is an Open Access article distributed under the terms of Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0), which permits anyone to share, use, reproduce and redistribute in any medium, provided the original author and source are credited.

ABSTRACT: *This study examined the effects of the teaching environment on the academic performance of Social Studies students in tertiary institutions in Cross River State, Nigeria. The researchers adopted a quasi-experimental of pre-test and post-test research design for the study. The population of the study comprised 1200 students and samples of 600 students were selected through a stratified random sampling technique from three tertiary institutions in Cross River State. The researchers collected data with a learners environment structured questionnaire developed based on a five-point Likert scale whose reliability estimate ranged from 0.7 to 0.8 and achievement test scores adopted from Social Studies examinations in the Department of Social Science Education from the Federal College of Education - Obudu, Cross River State College of Education - Akamkpa and Elder Oyama Memorial College of Education, Ofat, Obubra in 2022. Analysis of Covariance (ANCOVA) was used to analyze the data collected. The hypotheses were tested at a 0.05 level of significance and 5% degree of freedom to ascertain the extent to which face-to-face and online teaching environments affect Social Studies students' academic performance in tertiary institutions in Nigeria. The result showed the negative effects of the traditional teaching environment on students' academic performance in Social Studies. Also, the result showed the negative effects of the online teaching environment on students' academic performance in Social Studies. It was recommended that the traditional teaching environment and online teaching environment should be encouraged if students' academic performance in Social Studies must recuperate.*

KEYWORDS: Teaching Environment, Academic Performance, Social Studies, Students, Face-to-Face Teaching Environment, Online Teaching Environment.



INTRODUCTION

Social studies is an innovation in the curriculum of schools in Nigeria. Its introduction into schools in Nigeria is very recent and dates back to the early 1960s. Like any other innovation, its acceptance by Nigerian educators and students alike has been rough. In the first instance, not many people have been trained to teach the subject. Secondly, instructional materials in the discipline are scanty. Furthermore, the definition of social studies is said to be unclear. Its focus on critical thinking and reflective inquiry is not understood by many people. Essien, Essien, Unimna, and Effiom (2020) opined that the stated objectives of Social Studies would positively impact the learner if the socio-psychological factors that affect the learners' academic achievement are properly identified and controlled. Socio-psychological factors are the factors that affect a person socially and psychologically through interaction with the social environment.

The teaching environment and its effects on the academic performance of students in Social Studies has been a matter of concern for educationists, students, government, and the general public. This might be because of its recent introduction into the tertiary institutions' curriculum and the discouraging performance of students compared to their performances in Business Studies. Teaching environment comprised so many sub-elements, but this study has limited it to the traditional teaching environment and online teaching environment. Research findings, according to Yimaz (2009), have shown that students typically have a negative attitude toward school. Experience has shown that most students complain about the traditional teaching environment and also the online teaching environment in which learning takes place.

A Social Studies lecturer is expected to be a facilitator of learning and must be competent in the use of both the traditional teaching environment and the online teaching environment to make the teaching and learning environment more conducive for the learners.

A traditional teaching environment is a well-established instructional medium in which teaching style and structure have been refined over several centuries. Face-to-face instruction has numerous benefits not found in its online counterpart (Xu & Jaggars, 2016). Classroom instruction is extremely dynamic and a traditional teaching environment provides real-time face-to-face instruction and sparks innovative questions. It also allows for immediate teacher response and more flexible content delivery (Hafeez, Ajmal, & Zulfiqar, 2022).

Online learning and teaching are generally understood as courses that are delivered completely online using an online teaching platform. Ever since the introduction of online teaching by the University of Illinois in 1960 (Tom, 2017), it has gradually gained momentum in higher education, especially in developed countries. Such transition in teaching-learning culture was mainly driven by the advancement of the Internet and technology considering its positive influence to facilitate effective teaching and learning processes. By reviewing many articles on online teaching, Singh and Thurman (2019) defined online teaching as teaching being delivered in an online environment through the use of the Internet for teaching and learning. This includes online learning on the part of the students that are not dependent on their physical or virtual collocation. The teaching content is delivered online and the instructors develop teaching modules that enhance learning and interactivity.



These two variables: traditional face-to-face teaching environment and virtual or online teaching environment are necessary for effective teaching and learning of Social Studies. Therefore, this study focuses on the effects of the teaching environment on the academic performance of Social Studies students in tertiary institutions in Cross River State, Nigeria.

STATEMENT OF THE PROBLEM

The comparative poor academic performance of students in Social Studies examinations probably caused by inadequate face-to-face teaching environment and expensive online teaching environment in which the students have their studies formed the problem of this study.

The recurring experience of decline in academic performance of tertiary institutions in Social Studies, particularly in examinations, has become a great concern to parents, teachers, and management of schools in our society. This poor academic performance in Social Studies occurs yearly and more students are running away from Social Studies as a course. This alarming rate of poor performance in Social Studies can be attributed to challenging factors such as teacher-centred instructional methods, poor and inadequate learning facilities, inflexible learning arrangements, poor funding, unqualified teachers, and non-digital tools for learning among others. Also, research has shown that the "transmission" or lecture model which has been seen as an obstacle to effective learning still poses as the preferred teaching-learning method by lecturers in tertiary institutions. Based on the foregoing, this research focuses on the effects of the teaching environment on the academic performance of Social Studies students in tertiary institutions in Cross River State, Nigeria.

Aim and Objectives of the Study

This study aims to examine the effects of the teaching environment on the academic performance of Social Studies students in tertiary institutions in Cross River State, Nigeria. The specific objectives are:

- i) To examine if there is any significant effect of face-to-face teaching environment on the academic performance of Social Studies students in tertiary institutions in Cross River State.
- ii) To assess whether there is any significant effect of the online teaching environment on the academic performance of Social Studies students in tertiary institutions in Cross River State.

Research Questions

The following research questions were formulated to guide the study:

- i) How does the face-to-face teaching environment affect the academic performance of Social Studies students in tertiary institutions in Cross River State?
- ii) To what extent does the online teaching environment impact the academic performance of Social Studies students in tertiary institutions in Cross River State?



Research Hypotheses

The following hypotheses were formulated in pursuance of the objectives of the study:

- i) There is no significant effect of a face-to-face teaching environment on the academic performance of Social Studies students in tertiary institutions in Cross River State.
- ii) There is no significant effect of the online teaching environment on the academic performance of Social Studies students in tertiary institutions in Cross River State.

Concept of Teaching Environment

The teaching environment encompasses teaching/learning resources and technology, means of teaching, modes of teaching, and connections to societal and global contexts. The term also includes human behavioural and cultural dimensions, including the vital role of emotion in teaching (Study.com, 2018). The teaching environment is a composite of human practices and material systems, much as ecology is the combination of living things and the physical environment (Balog, 2018). Contemporary teachers deserve teaching spaces that meet their individual and collective needs. To meet this challenge, educational leaders must provide physical and cultural environments that are empowering and engaging (Orlu, 2013).

Teaching environments vary from classroom to classroom and from context to context each with unique elements. According to study.com (2018), teaching environments can be teacher-centered; knowledge-centered; assessment-centered; and community-centered. Teacher-centered environments are designed for the active construction of knowledge by and for learners (Federation University, 2018). Knowledge-centered teaching environments are those which support students' deep investigations of big ideas through generative teaching activities. Assessment-centered teaching environments provide frequent, ongoing, and varying opportunities for assessment, including opportunities for revision and self and peer assessment (Alvaro, 2010). Community-centered environments value collaboration, negotiation of meaning, respect for multiple perspectives around which knowledge is constructed, and connections to the local community and culture (Raccoon, 2018).

The teaching environment is composed of some components that influence the student's learning curve. These components, according to Balog (2018), include people; teaching materials, technical tools, and learning resources; curriculum, training and instruction, and physical environment/teaching space. The people are the individuals that affect the student directly or indirectly through connection or relationship which can contribute to students' growth and success in their career aspect. The teaching materials, technical tools, and learning resources are the teaching materials, highly advanced tools, or other instructional resources that are aligned with the curriculum as a part of student learning support. The curriculum, training, and instruction are the core foundations of the learning process; they influence one another and play vital roles to facilitate the flow of knowledge and delivery of instructional content/curriculum.

The physical environment/teaching space refers to the physical setting of the learner's environment which should evoke positive responses and hold the interests of those who inhabit it (Balog, 2018).



Mondal (2012) identified some important factors that can affect the learning process including the intellectual factor which refers to the individual mental level. Learning factors are factors owing to faulty methods of work or study and narrowness of experimental background which can affect the learning process. Physical factors include health, physical development, nutrition, visual and physical defects, and glandular abnormality. Mental factors are attitudes like interest, cheerfulness, open-mindedness, etc. that are important in the development of personality. Personal factors, such as instincts and emotions, and social factors, such as cooperation and rivalry, are directly related to a complex psychology of motivation.

The teacher as an individual personality is an important factor in the teaching environment. They are key factors that create a favourable teaching-learning milieu that will make the instructional process easy, enthusiastically adaptable, and useful (Usman, 2016). How his personality interacts with the personalities of the students helps to determine the kind of behaviour which emerges from the learning situation (Brown, 2015). Environmental factors like classrooms, textbooks, equipment, school supplies, and other instructional materials, etc. are the physical conditions needed for learning (Mondal, 2012).

Waldman (2016) observed that before students can succeed academically, they must feel safe, both physically and mentally, and to have a safe learning environment, students must feel welcomed, supported, and respected. Personalizing learning helps students develop skills including thinking critically, using knowledge and information to solve complex problems, working collaboratively, communicating effectively, learning how to learn, and developing the academic mindset that would greatly increase students' engagement (Raccoon, 2018). More so, students must feel connected to teachers, staff, and other students. Schools can nurture these connections by focusing on students' social and emotional learning (SEL). Students must also feel supported by all those connected to their learning experiences like teachers, classmates, administrators, family, and community members for a higher academic feat (Waldman, 2016).

Productive teaching environments are crucial to students' academic, emotional, and social success in school. A conducive teaching environment does not just happen on its own or by chance. They should be created through conscious procedures like interacting with students positively, exhibiting positive behaviours, etc. that would promote teaching activities in the teaching environment (Becton, 2017).

LITERATURE REVIEW

Face-to-face and online teaching environments on the academic performance of Social Studies students in tertiary institutions in Cross River State are all considered during the teaching-learning process.

The face-to-face teaching approach is generally said to be a teacher-centered approach, which is endorsed with little communication between the instructors and the learners. The instructor served as the propagator of knowledge, distributing the information most of the time in the classroom. During the lecture, the instructor spends most of the time presenting new information. So, a lack of communication between instructors and learners occurs. The learners then complete the task allotted by the instructor after class (Saira et al., 2021). The framework for traditional or face-to-face learning is shown in Figure 1.



Figure 1: Structural Framework for Face-to-Face Teaching Approach

Online teaching is the integration of computers and the Internet in traditional teaching approaches with online activities. The learning management system (LMS), Zoom meeting software or Skype can be used for the online teaching approach. The instructor usually uploads the learning materials on the LMS account before the face-to-face classroom. The learners read the learning materials before the class. The quizzes, examinations, and viva voice are conducted in online modes (Hafeez et al., 2021). The structural framework of the blended or online teaching approach is shown in Figure 2.

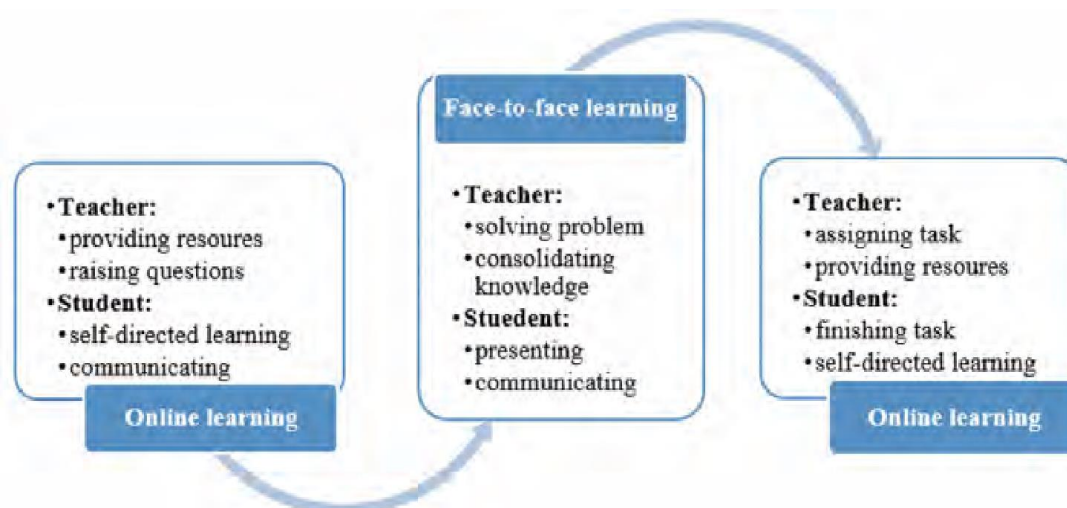


Figure 2: Structural Framework of Online Teaching Approach



Online Learning and Teaching System in Nigeria

During the pandemic COVID-19 circumstances, a research study was done by Adnan and Anwar (2020) and assessed the attitude of Nigerian undergraduate and postgraduate students toward online education. According to the findings of the study, online education in developing countries such as Nigeria cannot produce the desired outcomes since many learners are unable to access the Internet owing to economic and technical issues. In digitally developed nations (Basilaia & Kvavadze, 2020), online learning is beneficial, but it is extremely difficult to adopt in developing countries like Nigeria. However, in Nigeria, substantial teaching and learning activities of educational organizations are manually controlled (Salam, Jianqiu, Pathan & Lei, 2017).

The lack of access to fast, affordable, and regular Internet connections impedes the growth of online teaching and learning, particularly for learners residing in remote parts of Nigeria (Shehzadi, Nisar, Hussain, Basheer, Hameed & Chaudhry, 2021). Modification of online education and a new level of administrative agility has become unprecedented (Wu, 2020), with many educational institutions focused primarily on transferring educational material into the digital medium. The capacity to engage in digital education is nevertheless indicated by the failure to provide students with resources and to achieve social exclusion at schools, as well as the absence of proper access to the Internet and the newest technology (Zhang, Wang, Yang & Wang, 2020). Unlike regular digital learning circumstances, it is more catastrophe learning. The conditions are extraordinary. Lessons are greatly needed to improve their curriculum and implement new ways of education and policy (Pace, Pettit & Barker, 2020). For municipal activities and contributions, educational organizations are also significant factors. If instructional activities halt, many children and young people will lose the community behaviours needed to develop and learn (Joosten, Lee-McCarthy, Harness & Paulus, 2020).

Much research in Nigeria on the difficulties and potential of online learning has been carried out in a common environment (Fareed, Ashraf & Bilal, 2016) where learning, education and the integration of E-learning cycles are not necessary. Very few national educational institutions were using this technology before COVID-19.

In the past, certain Nigerian educational research works have shown good outcomes in online learning. The relationship between educators and online learners is satisfactory, the curriculum is well-designed and up-to-date, and the instructors are devoted to, qualified and knowledge-intensive training (Ali & Ahmad, 2011). The present scenario is nevertheless quite different from regular remote learning programs in which all universities throughout Nigeria are expected, regardless of their low resources and financing, to apply their teaching methods.

Boelens, De Wever, and Voet (2017) conducted a study to evaluate the effectiveness of online learning against face-to-face learning in an undergraduate class statistical course. The results of the study indicated that no significant difference has been found in the learning outcomes of students learned by face-to-face and online modes. Singh and Thurman (2019) researched to explore the impacts of online learning for university students in information and communication technology courses by applying LMS. The consequences of the study revealed that the learner's academic grades were better in online learning as compared to face-to-face learning. Khader (2016) investigated research that blended or online learning had enough potential to increase the learning efficiency of university students. Harsasi and Sutawijaya (2018) researched to find the challenges to the implementation of online learning in higher



educational institutions in Indonesia. They found that technical skills and economy are the main hurdles in the implementation of E-learning in higher educational institutions.

Benefits of Face-to-Face (F2F) Education via Traditional Classroom Instruction

The other modality, classroom teaching, is a well-established instructional medium in which teaching style and structure have been refined over several centuries. Face-to-face instruction has numerous benefits not found in its online counterpart (Xu & Jaggars, 2016).

First, and perhaps most importantly, classroom instruction is extremely dynamic. Traditional classroom teaching provides real-time face-to-face instruction and sparks innovative questions. It also allows for immediate teacher response and more flexible content delivery. Online instruction dampens the learning process because students must limit their questions to blurbs and then grant the teacher and classmates time to respond (Salcedo, 2010). Over time, however, online teaching will probably improve, enhancing classroom dynamics and bringing students face-to-face with their peers/instructors. However, for now, face-to-face instruction provides dynamic learning attributes not found in Web-based teaching (Kemp & Grieve, 2014).

Second, traditional classroom learning is a well-established modality. Some students are opposed to change and view online instruction negatively. These students can be technophobes, more comfortable with sitting in a classroom and taking notes than sitting at a computer absorbing data. Other students can value face-to-face interaction, pre- and post-class discussions, communal learning, and organic student-teacher bonding (Roval & Jordan, 2004). They may see the Internet as an impediment to learning. If not comfortable with the instructional medium, some students can shun classroom activities; their grades might slip and their educational interest might vanish. Students, however, can eventually adapt to online education. With more universities employing computer-based training, students can be forced to take only Web-based courses. Albeit true, this does not eliminate the fact some students prefer classroom intimacy.

Third, face-to-face instruction does not rely upon networked systems. In online learning, the student is dependent upon access to an unimpeded Internet connection. If technical problems occur, online students cannot be able to communicate, submit assignments, or access study material. This problem, in turn, can frustrate the student, hinder performance, and discourage learning.

Fourth, campus education provides students with both accredited staff and research libraries. Students can rely upon administrators to aid in course selection and provide professorial recommendations. Library technicians can help learners edit their papers, locate valuable study material, and improve study habits. Research libraries can provide materials not accessible by computer. In all, the traditional classroom experience gives students important auxiliary tools to maximize classroom performance.

Fifth, traditional classroom degrees trump online educational degrees in terms of hiring preferences. Many academic and professional organizations do not consider online degrees on par with campus-based degrees (Columbaro & Monaghan, 2009). Often, prospective hiring bodies think Web-based education is a watered-down, simpler means of attaining a degree, often citing poor curriculums, unsupervised exams, and lenient homework assignments as detriments to the learning process.



Finally, research shows online students are more likely to quit class if they do not like the instructor, the format, or the feedback. Because they work independently, relying almost wholly upon self-motivation and self-direction; online learners can be more inclined to withdraw from the class if they do not get immediate results. The classroom setting provides more motivation, encouragement, and direction. Even if a student wanted to quit during the first few weeks of class, he/she may be deterred by the instructor and fellow students. Face-to-face instructors can be able to adjust the structure and teaching style of the class to improve student retention (Kemp & Grieve, 2014). With online teaching, instructors are limited to electronic correspondence and cannot pick up on verbal and non-verbal cues.

METHODOLOGY

This research adopted a quasi experimental of pre-test and post-test design for the study because the researchers had no control over the independent variables (traditional face-to-face teaching environment and online teaching environment). The population of the study comprised 1200 students and a sample of 600 students were selected through a stratified random sampling technique from three tertiary institutions in Cross Rivers State. The researchers collected data with the Teaching Environment Structured Questionnaire (TESQ) developed on a five-point Likert scale model reliability estimate ranging from 0.7 to 0.8 and achievement test scores extracted from tertiary institutions in Cross Rivers State. Analysis of Covariance (ANCOVA) was used to analyze the data collected. The hypotheses were tested at 0.05 level of significance and 5% degree of freedom to ascertain the degree of reliability that existed between those variables.

Table 1: The Design of the Study

	Pre-test		Post-test	Experimental group
Y ₁	O ₁	X ₁	O ₂	E ₁
Y ₂	O ₁	X ₂	O ₂	E ₂
Y ₃	O ₁	X ₃	O ₂	T

where E₁ = Experimental group one; E₂ = Experimental group two; T = Traditional teaching method; X₁ = Treatment procedure that involves teaching social studies with face-to-face teaching method; X₂ = Treatment procedure that involves teaching social studies with online teaching method; O₁ = Pre-test measurements; O₂ = Post-test measurements; and Y₁, Y₂, Y₃ = Moderating variables.

Table 2: Distribution of Sample by Institution and Sex

Sex	FCE	COE	EMCOE	Total	Percentage
Male	88	79	80	247	41.17
Female	112	121	120	353	58.83
Total	200	200	200	600	100



RESULTS AND DISCUSSION

The data collected were analyzed using the Computer Software Statistical Package for the Social Sciences (SPSS) version 22.0. The results of data analyses were presented hypothesis by hypothesis.

Hypothesis One:

H₀₁: There are no significant effects of a traditional face-to-face teaching environment on the academic performance of Social Studies students in tertiary institutions in Cross River State.

H_{a1}: There are significant effects of a traditional face-to-face teaching environment on the academic performance of Social Studies students in tertiary institutions in Cross River State.

Independent Variable: Traditional face-to-face teaching environment.

Dependent Variable: Social Studies Students' academic performance.

Statistical Analysis Technique: Analysis of Covariance (ANCOVA).

To test this hypothesis, one-way analysis of covariance (ANCOVA) was used with traditional face-to-face teaching method as factor, pre-test as covariates and post-test as dependent variable of students' academic performance in social studies, while F-ratio test value was used to test for the significance. The results are shown in table 3.

Table 3: One-way ANCOVA of Students' Academic Performance by Face-to-Face Teaching Method

Treatment Group	N	Mean	STD	Std Error	
Traditional Environment	80	48.775	10.609	.728	
Academic Performance	80	32.525	8.853	.728	
Total	160	40.650	12.700	.515	
Source of variable	Sum of Square	Df	Mean Square	F-Value	P- Value
Corrected Model	18993.139	2	9496.570	224.095	0.000
Intercept	1443.497	1	1443.497	34.063	0.000
Pre-test	8430.639	1	8439.639	198.942	0.000
Traditional Environ	11476.304	1	11476.304	270.812	0.000
Error	6653.261	157	42.377		
Total	290034.000	160			
Corrected Total	25646.400	159			

Significant at 0.05 level $P < 0.05$



From Table 3, the mean academic performance score of those using the traditional face-to-face teaching method in social studies ($X=48.775$) is greater than the mean score of teaching with the traditional method ($X=32.525$). The P-value of (0.000) associated with the computed F-value of 270.812 is less than 0.05. From the above results, the null hypothesis was rejected, while the alternative hypothesis was accepted. This implies that there are significant effects of the traditional face-to-face teaching environment on the academic performance of Social Studies students in tertiary institutions in Cross River State.

Hypothesis Two:

H₀₂: There are no significant effects of the online teaching environment on the academic performance of Social Studies students in tertiary institutions in Cross River State.

H_{a2}: There are significant effects of the online teaching environment on the academic performance of Social Studies students in tertiary institutions in Cross River State.

Independent Variable: Online teaching environment.

Dependent Variable: Social Studies students' academic performance.

Statistical Analysis Technique: Analysis of Covariance (ANCOVA).

To test this hypothesis, one-way analysis of covariance (ANCOVA) was used with traditional face-to-face teaching method as factor, pre-test as covariates and post-test as dependent variable of students' academic performance in social studies, while F-ratio test value was used to test for the significance. The results are shown in Table 4.

Table 4: One-way ANCOVA of Students' Academic Performance by Online Teaching Method

Treatment Group	N	Mean	STD	Std Error	
Online Environment	80	40.400	8.383	.728	
Academic Performance	80	32.525	8.853	.728	
Total	160	36.465	9.458	.414	
Source of variable	Sum of Square	df	Mean Square	F-Value	P- Value
Corrected Model	9925.883	2			
Intercept	965.803	1	4962.941	181.294	0.000
Pre-test	7445.258	1	965.803	35.280	0.000
Online Environment	3267.499	1	7445.258	271.972	0.000
Error	4297.892	157	3267.499	119.360	
Total	226946.000	160	27.375		
Corrected Total	14223.775	159			

Significant at 0.05 level $P < 0.05$.



From Table 3, the mean academic performance score of those using the online teaching method in social studies ($X=40.400$) is greater than the mean score of teaching with the traditional method ($X=32.525$). The P-value of (0.000) associated with the computed F-value of 119.360 is less than 0.05. From the above results, the null hypothesis was rejected, while the alternative hypothesis was accepted. This implies that there are significant effects of the online teaching environment on the academic performance of Social Studies students in tertiary institutions in Cross River State.

DISCUSSION OF FINDINGS

Hypothesis One

The result showed that there are significant effects of the face-to-face teaching environment on the academic performance of students in Social Studies. However, the data collected and analyzed indicated that there exist insignificant negative effects of the face-to-face teaching environment on the academic performance of students in Social Studies. This is in agreement with Xu and Jaggars (2016) that asserted that face-to-face instruction has numerous benefits not found in its online counterpart. The result also agrees with the findings of Salcedo (2010) who opined that traditional classroom teaching provides real-time face-to-face instruction and sparks innovative questions. It also allows for immediate teacher response and more flexible content delivery, while online instruction dampens the learning process because students must limit their questions to blurbs, and then grant the teacher and classmate time to respond.

The findings are also in line with Roval and Jordan (2004) who opined that traditional classroom learning is a well-established modality. Some students are opposed to change and view online instruction negatively. These students can be technophobes, more comfortable with sitting in a classroom taking notes than sitting at a computer absorbing data. Other students can value face-to-face interaction, pre- and post-class discussions, communal learning, and organic student-teacher bonding. Furthermore, Kemp and Grieve (2014) stated that face-to-face instructors can be able to adjust the structure and teaching style of the class to improve student retention, while with online teaching, instructors are limited to electronic correspondence and cannot pick up on verbal and non-verbal cues.

Hypothesis Two

The result showed that the online teaching environment significantly influences students' academic performance in Social Studies. Based on the F-value of 119.360, the result showed a significant effect of the online teaching environment on the academic performance of students in Social Studies. Thus, as the cost of acquiring resources for an online teaching environment increases, students' academic performance in Social Studies declines. In line with this result, Adnan and Anwar (2020) assessed the attitude of Nigerian undergraduate and postgraduate students toward online education. According to the findings of the study, online education in developing countries such as Nigeria cannot produce the desired outcomes since many learners are unable to access the Internet, owing to economic and technical issues. In digitally developed nations, Basilaia and Kvavadze (2020) opined that online learning/teaching is beneficial, but it is extremely difficult to adopt in developing countries like Nigeria. However, Salam, Jianqiu, Pathan and Lei (2017) asserted that substantial teaching and learning activities of educational organizations are manually controlled in Nigeria. Shehzadi, Nisar, Hussain, Basheer, Hameed



and Chaudhry (2021) further stressed that the lack of access to fast, affordable, and regular Internet connections impedes the growth of online teaching and learning, particularly for learners residing in remote parts of Nigeria.

Moreover, this finding is in line with that of Boelens, De Wever and Voet (2017) conducted to evaluate the effectiveness of online learning against face-to-face learning in an undergraduate class statistical course. The results of the study indicated that no significant difference has been found in the learning outcomes of students learned by face-to-face and online modes. Singh and Thurman (2019) researched to explore the impacts of online learning for university students in information and communication technology courses by applying LMS. The consequences of the study revealed that the learner's academic grades were better in online learning as compared to face-to-face learning. Khader (2016) investigated research that blended or online learning had enough potential to increase the learning efficiency of university students. Harsasi and Sutawijaya (2018) conducted research to find the challenges to the implementation of online learning in higher educational institutions in Indonesia. They found that technical skills and economy are the main hurdles in the implementation of E-learning in higher educational institutions.

CONCLUSION

Based on the findings, it was concluded that the face-to-face teaching environment significantly affects students' academic performance in Social Studies. Also, the online teaching environment had significant effects on the academic performance of students in Social Studies.

Based on the findings of the study and the conclusions made, it is recommended that:

- i) Both the government and educational bodies should ensure that teachers are trained to acquire the expertise and professionalism to use the proper face-to-face teaching environment and methods for instruction delivery if students' academic performance in Social Studies must improve.
- ii) An encouraging online teaching environment should be maintained as this tends to improve students' academic performance in Social Studies.
- iii) A combination of both face-to-face and online teaching environments should be encouraged as this will significantly and positively influence the academic performance of students in Social Studies.

REFERENCES

- Adnan, M., & Anwar, K. (2020). Online Learning amid the COVID-19 Pandemic: Students' Perspectives. *Journal of Pedagogical Sociology and Psychology*, 2(1), 45-51.
- Ali, A., & Ahmad, I. (2011). Key Factors for Determining Student Satisfaction in Distance Learning Courses: A Study of Allama Iqbal Open University. *Contemporary Educational Technology*, 2(2), 118-134.



- Alvaro, J. A. (2010). An Investigation of an Assessment-Centered Learning Environment with Formative Use. Pearson assessment bulletin 18. Pearson education inc. Accessed from <https://images.pearson assessments.com/images/PDF/TMRSBulletin18.pdf?> on 30/09/2022
- Balog, N. (2018). Impacts of the Learning Environment on Developer's Progress. Accessed 4/10/2019 from <https://www.codingdojo.com/blog/impacts-of-the-learning-environment>).
- Basilaia, G., & Kvavadze, D. (2020). Transition to online education in schools during a SARSCoV-2 coronavirus (COVID-19) pandemic in Georgia. *Pedagogical Research*, 5(4), 1-9.
- Becton, L. (2017). Strategies for Building a Productive and Positive Learning Environment: Accessed 7/10/2022 from <https://www.educationcorner.com/building-a-positive-learning-environment.html>.
- Boelens, R., De Wever, B., & Voet, M. (2017). Four key challenges to the design of blended learning: A systematic literature review. *Educational Research Review*, 22, 1-18.
- Brown, L. (2015). The Importance of the Learning Environment; Accessed 2/10/2022, from <https://blog.lightspeed-tek.com/blog/the-importance-of-the-learning-environment/>.
- Columbaro, N. L., and Monaghan, C. H. (2009). Employer perceptions of online degrees: a literature review. *Online Journal of Distance Learning. Administration*, 12.
- Essien, E. E., Essien, C. K., Unimna, F. A. & Effiom, J. E. (2020). Family Stability and Social Studies Students' Academic Achievement in Tertiary Institutions in Cross River State, Nigeria: Implications for Adult Environmental Education. *European Journal of Social Sciences*, 59(2), 138-148.
- Federation University (2018). Principles of learning Environment: Accessed 22/09/2022 from <https://federation.edu.au/staff/learning-and-teaching/teachingpractice/development/principles-of-learning-environment>.
- Hafeez, M., Ajmal, F., & Kazmi, Q.A. (2021). Challenges Faced by the Teachers and Students in Online Learning, *International Journal of Innovation, Creativity, and Change*, 15(2): 325-346.
- Hafeez, M., Ajmal, F., & Zulfiqar, Z. (2022). Assessment of student's academic achievements in online and face-to-face learning in higher education. *Journal of Technology and Science Education*, 12(1), 259-273.
- Harsasi, M., & Sutawijaya, A. (2018). Determinants of student satisfaction in the online tutorial: a study of a distance education institution. *Turkish Online Journal of Distance Education*, 19(1), 89-99.
- Joosten, T., Lee-McCarthy, K., Harness, L., & Paulus, R. (2020). Digital Learning Innovation Trends. *Online Learning Consortium*.
- Kemp, N., and Grieve, R. (2014). Face-to-Face or face-to-screen? Undergraduates' opinions and test performance in classroom vs. online learning. *Front. Psychol.* 5:1278.
- Khader, N.S.K. (2016). The Effectiveness of Blended Learning in Improving Students' Achievement in Third Grade Science in Bani Kenana. *Journal of Education and Practice*, 7(35), 109-116.
- Mondal, M. (2012). Important Factors that may affect the Learning Process. Accessed 3/10/2022 from <http://www.yourarticlelibrary.com/learning/7-important-factors-that-may-affect-the-learningprocess/6064>.



- Orlu, C. (2013). Environmental influence on academic performance of secondary school students in Port Harcourt Local Government Area of Rivers State. *Journal of Economics and sustainable development*, 4(12), 34-38.
- Pace, C., Pettit, S.K., & Barker, K.S. (2020). Best Practices in Middle-Level Quaran Teaching: Strategies, Tips, and Resources Amidst COVID-19. *Becoming: Journal of the Georgia Association for Middle-Level Education*, 31(1), 2.
- Raccoon, G. (2018). What Makes a Good Learning Environment. Accessed 28/09/2022 from <https://raccoongang.com/blog/what-makes-good-learning-environment/>.
- Royal, A. P., and Jordan, H. M. (2004). Blended learning and sense of community: a comparative analysis with traditional and fully online graduate courses. *Int. Rev. Res. Open Dist. Learn.* 5.
- Saira, Ajmal, F., & Hafeez, M. (2021). Critical Review on Flipped Classroom Model versus Traditional Lecture Method. *International Journal of Education and Practice*, 9(1), 128-140.
- Salam, S., Jianqiu, Z., Pathan, Z.H., & Lei, W. (2017). Strategic barriers in the effective integration of ICT in the public schools of Pakistan. In *Proceedings of the 2017 International Conference on Computer Science and Artificial Intelligence*.
- Salcedo, C. S. (2010). Comparative analysis of learning outcomes in face-to-face foreign language classes vs. language lab and online. *J. Coll. Teach. Learn.* 7, 43–54. September 20/9/2022.
- Shehzadi, S., Nisar, Q.A., Hussain, M.S., Basheer, M.F., Hameed, W.U., & Chaudhry, N.I. (2021). The role of digital learning toward students' satisfaction and university brand image at educational institutes of Pakistan: a post-effect of COVID-19. *Asian Education and Development Studies*, 10(2), 276-294.
- Singh, V. & Thurman, A. (2019). How many ways can we define online learning? A systematic literature review of definitions of online learning (1988-2018). *American Journal of Distance Education*, 33(4), 289-306.
- Study.Com (2018). Types of Learning Environments: Accessed 02/04/2023 from <https://study.com/academy/lesson/types-of-learning-nvironment.html#transcriptHeader>.
- Tom, M. A. (2017). The history of online education. Retrieved on 10/09/2022 from <https://www.petersons.com/blog/the-history-of-online-education/>.
- Usman, Y. D. (2016). "Why Teachers Need Professional Development". Daily Sun Newspaper. 26th Sep, P.14 .Available also at <https://www.sunnewsonline.com> › Opinion
- Waldman, C. (2016). Four Elements for Creating a Positive Learning Environment; Accessed 04/05/2023 from <https://all4ed.org/four-elements-for-creating-a-positive-learning-environment/>.
- Wu, S.Y. (2020). Incorporation of collaborative problem-solving and cognitive tools to improve higher cognitive processing in online discussion environments. *Journal of Educational Computing Research*, 58(1), 249-272.
- Xu, D., & Jaggars, S. S. (2013). Examining the effectiveness of online learning within a community college system: An Instrumental variable approach (No. 56). New York, NY: Teachers College, Columbia University.
- Yilmaz, K. (2009). A vision of History teaching and learning: Thoughts on history. *The High School Journal*. 92(2), 37-46.
- Zhang, W., Wang, Y., Yang, L., & Wang, C. (2020). Suspending classes without stopping learning: China's education emergency management policy in the COVID-19 outbreak