

EFFECT OF BLENDED LEARNING APPROACH ON POST-BASIC STUDENTS' ACADEMIC ACHIEVEMENT AND RETENTION IN COMMERCE IN ABIA STATE

Deborah Onyinyechi Payi

deborahmbah7@gmail.com

Department of Agricultural and Vocational Education
(Business Education programme)

Michael Okpara University of Agriculture, Umudike
Abia State, Nigeria

&

Nneka Charity Emeasoba

nnekaemeasoba@yahoo.com

Department of Agricultural and Vocational Education
(Business Education programme)

Michael Okpara University of Agriculture, Umudike
Abia State, Nigeria

Abstract

This study examined the effect of a blended learning approach on post-basic students' academic achievement and retention in Commerce in Abia State. Three specific research objectives, three research questions, and three hypotheses guided the study. The study adopted a quasi-experimental design, specifically a pretest, posttest non-equivalent control group design. The population of the study was 13,508 post-basic two (SS2) students in all the public secondary schools in Abia state, while the sample size of 56 post-basic two (SS II) students of two intact classes drawn from two co-education public secondary schools used a purposive sampling technique. Each of the two intact classes representing each of the schools, respectively, was assigned to two groups (one experimental group and one control group). The experimental group was taught using a blended learning approach, while the control group was taught with the lecture method. Data was collected using Commerce Achievement Tests (COMMAT). The instruments were face and content validated by three experts. The reliability of the instruments was determined using Kuder Richardson 20 (K-R 20), which yielded a reliability index of .81 and .82. Data collected from the pre-test and post-test were analyzed using means to answer the research questions, the standard deviation was used to determine the homogeneity of their responses, while the hypotheses were tested using analysis of covariance (ANCOVA) at the .05 level of significance. The findings, among others, showed that students taught Commerce using a blended learning approach had higher mean achievement gain compared to their counterparts exposed to the lecture method. It also revealed that the hypothesis of no significant difference in the mean achievement score of students taught Commerce using a blended learning approach compared to those using the lecture method was rejected. The study recommended, among others, that Commerce teachers should adopt the blended learning approach in teaching Commerce to improve students' achievement and retention.

Keywords: Blended learning approach, Post Basic School, Students' Achievement, Students' Retention, Commerce.

Introduction

The main purpose of education is to equip individuals with knowledge, skills, attitudes, and values desirable in society (Emeasoba and Ugwuoke 2019). Education, therefore, is a medium through which society transmits skills, attitudes, competencies, and behaviors to its younger ones, to provide a better life for society. It becomes necessary for primary school leavers to acquire post-basic education. Post-basic education is the education children receive after primary education and before tertiary education. It is geared towards giving learners the opportunity to discover and develop their potential in life (Nkechukwu, 2022). As enshrined in the National Policy on Education of the FRN (2014), the broad aims of post-basic education are: Preparation for useful living within the society (self-employment) and Preparation for higher education. A cursory look at the first objective of secondary education, as spelt out by the NPE depict that commerce comes in handy as a tool to achieve the objective.

Commerce is a subject that exposes students to the rudiments of the totality of all activities relating to trade. It comprises business economics, cost accounting, taxation, human resource management, auditing, entrepreneurship, business finance, business law, marketing mix, and wealth maximization (Nolan, 2016). The necessity and technicality of this subject make it necessary that appropriate pedagogical methods and learning experiences are used in teaching and learning the Commerce Subject. In post-basic schools today, the method of instructional delivery of commerce content has left much to be desired. Commerce contents are delivered to the students via the conventional classroom approach, which could be the lecture method, textbook method, the chalk and talk method, or the question-and-answer method, in which the teacher delivers lectures and presents information to the students, and then, in response, the students listen to receive the information passively. It seems that the use of conventional teaching methods does not fully achieve the objectives of Commerce Education or the subject; therefore, the need to integrate the conventional pedagogical methods of teaching with blended learning approaches arises.

Blended learning, as the name implies, is described as a flexible learning approach that combines the strengths of both in-person and digital learning, allowing for a more personalized and effective educational experience (Huang, 2020). Similarly, Ogonna and Emeasoba (page 108,2025) opined that the blended learning approach is the teaching and learning approach that brings together the face-to-face approach and the online learning approach. It is a hybrid of the two approaches to form a blend. Models of Blended Learning include the face-to-face driver model, flex model, and self-blend model, among others. Face-to-face driver model emphasizes that learning content and experiences are delivered in the physical classroom, although a considerable portion of classroom time has been replaced by online learning activities (Cleveland, 2018). Flex model allows instruction to be delivered by an online instructor with a classroom teacher to supervise and support the learner (Gairla, 2016). Self-blend model creates opportunities for students to participate in traditional classes but enroll in online learning activities to supplement their traditional face-to-face class courses (Cleveland, 2018). A blended learning approach cannot be applied effectively in isolation from Learning Management Systems.

According to Vinci et al (2021), a Learning Management System is a web-based platform that enables the creation, management, and delivery of educational content as well as the tracking and assessment of learner progress and performance. They include WhatsApp, YouTube,

Facebook, among others. The integration of LMS into the learning process has the potential to improve students' academic achievement in commerce because it enhances access to learning materials, fosters personalized learning, improves communication and feedback, and promotes student engagement and accountability.

Achievement is the accomplishment of a specified task against a predetermined standard. Araújo (2020) posited that academic achievement reflects an individual's intellectual engagement and is influenced by various factors, such as cognitive abilities, motivation, and socio-emotional aspects. This definition highlights the interplay between individual characteristics and external influences, suggesting that academic success is a product of both personal effort and environmental support. Similarly, Kuncel (2019) focused on the long-term implications of academic achievement, noting that it is a determinant of students' educational trajectories and future career paths. This definition underscores the significance of academic performance not only in the immediate educational context but also in shaping students' futures, including their job prospects and socioeconomic status. Academic achievement is the extent to which a student fulfills the set educational objectives and learning outcomes, often measured through continuous assessment and examination results. It connotes the extent to which a student fulfills the set educational objectives and learning outcomes, often measured through continuous assessment and examination results (Ogunyemi, 2019). Students with high academic achievement are confident, intrinsically motivated, and intentional about their learning, thereby increasing their sense of belonging and self-efficacy, which is likely to improve their retention capacity.

Retention is the term used to denote a demonstration that meaningful learning has taken place, been maintained, and sustained over time, which can be proved through recall, recognition, recitation, or practice (Abu & Flowers, 2019). It is essential for the transfer of knowledge because if the students do not retain previous knowledge, then most of the teachers' time is spent in reviewing and re-teaching (Gains, 2021). In the same vein, Andriotis (2017) asserted that learning retention is the ability to store new information in one's long-term memory so that a person can easily recall it and put that knowledge to use in the future. According to him, if the information is not retained, it will remain in the short-term memory and drop out after a certain period. Retention is the process by which new information is transferred from our short-term to our long-term memory. The retained information, when correctly registered, helps to create a connection between the old knowledge and the new learning. When this connection is not established (due to poor retention) new learning may not occur. These students who can build upon previously acquired knowledge and skills have a gender difference. Gender is a factor to consider when engaging academic achievement and retention as measurement constructs.

Gender connotes the socio-cultural roles and responsibilities assigned to males and females in society. It refers to the roles, responsibilities, expectations, and relationships that society considers appropriate for males and females (Onyeonuru, 2017). The era of perceiving education as well as some vocation, as the exclusive right of the male folks, has gone for good. Today, the place and role of the female gender in education, as well as the various facets of vocation in society, have been identified and accorded the same weight and importance as that of their male counterparts.

The conventional pedagogy has been in rampant use for delivering commerce education content in most post-basic schools in Abia State, with little or no attention paid to the students. As a result, their academic achievement in commerce as a subject is relatively low. The researcher is curious to find out if there could be a significant increase in academic achievement

and retention in commerce if conventional teaching methods are combined with online components. It is therefore on this premise that the researcher intends to find out the Effect of the blended learning approach on senior secondary students' academic achievement and retention in commerce in Abia State.

Statement of the Problem

Over the years, this conventional pedagogy in Commerce has been shown to be ineffective, evidenced by students' low academic achievement and retention in the subject. (Ezeani, 2019; Okoro, 2020). A significant percentage of students in Abia State have consistently performed poorly in commerce, with many scoring below average grades. For instance, in the 2024 WASSCE, only 36% of students in Abia state obtained credit passes in commerce, while 64% scored below credit level (WAEC, 2024). Similarly, a study has shown that many students in Abia State tend to forget key commerce concepts soon after instruction, leading to poor retention (Nwankwo, 2018). It seems that the persistently low academic achievement in commerce is largely due to inappropriate pedagogy employed by Commerce teachers, since higher academic achievement and retention rates at the secondary educational level are predicated on the pedagogy adopted. Consequently, pedagogical methods are being re-examined and re-assessed due to the dynamic nature of the world of work, society at large, and innovative practices in instructional delivery processes. Despite the tremendous benefits of commerce to students, individuals, and society at large, the objectives of commerce education in secondary school seem to be unattained. Therefore, one of such methods that may have an effect on achievement and retention in commerce is blended learning.

Purpose of the Study

The purpose of determining the effect of the blended learning approach on post-basic students' academic achievement and retention in commerce in Abia state guided the study. Specifically, the study determined:

1. The mean achievement score of male and female students taught commerce using a blended learning approach.
2. The mean retention score of male and female students taught commerce using a blended learning approach.
3. The interaction effect of gender and method on students' academic achievement in commerce.

Research Questions

The following research questions guided the study:

1. What is the mean achievement score of male and female students taught Commerce using a blended learning approach?
2. What is the mean retention score of male and female students taught commerce using a blended learning approach?
3. What is the interaction effect of gender and method on students' achievement in commerce?

Hypotheses

The following hypotheses were tested at .05 level of significance:

- H0₁: There is no significant difference between the mean achievement score of male and female students taught commerce using a blended learning approach.
- H0₂: There is no significant difference in the mean retention score of male and female students taught commerce using a blended learning approach.
- H0₃: There is no significant difference between the interaction effect of gender and method on students' academic achievement in commerce.

Methods

The study adopted a quasi-experimental design, specifically a pretest, post-test non-equivalent control group design. The population of the study was 13,508 post-basic two (SS2) students in all the public secondary schools in Abia state, while the sample size of 56 post-basic two (SS II) students of two intact classes drawn from two co-education public secondary schools used a purposive sampling technique. This study used the Commerce Achievement Tests (COMMAT) as an instrument for data collection. The Commerce Achievement Tests (COMMAT) is a 36-item multiple choice test which focuses on topics such as: banking (definition, importance, types, and functions), Warehousing (definition, types, and functions), Tourism (definition, types, and importance), and Insurance (definition, types, principles, and importance). The research instrument was validated by three research experts. To determine the reliability of the instruments, a trial test was carried out. Thirty (30) students offering Commerce from Ibeku secondary school, Umuahia, Abia State, who are not part of the study sample but have similar characteristics, were used to determine the reliability of the research instrument. The data obtained from the administration of COMMAT were analyzed using the Kuder-Richardson (KR20) formula to determine the internal consistency. Meanwhile, the choice of the KR20 method for the reliability of COMMAT was considered appropriate since all the items were dichotomously scored and the instrument does not have an equal item difficulty level. However, the reliability index for the items on the instrument was 0.81 and 0.82. considered reliable. Data was collected with the help of three research assistants by administering the test to the students. The pre-test was conducted for both the experimental (treatment) and control groups. The experimental group in this study was the group taught with the blended learning approach, while the control group was taught with the lecture method. Data collected from the pre-test and post-test were analyzed with mean, standard deviation, and Analysis of Covariance (ANCOVA). Mean was used to answer the research question; the standard deviation was used to determine the proximity of the students' responses, while the hypotheses were tested using Analysis of Covariance (ANCOVA) at .05 level of significance. The ANCOVA was used to analyze the significant difference between the treatments on post- test scores using the pre-test scores as the covariate. Also, the mean gain or loss on the pre-tests and post-test for the two groups were analyzed. The analysis was done with the aid of Statistical Package for Social Science (SPSS) version 23. The choice of ANCOVA is to eliminate initial group difference. Also, ANCOVA is considered appropriate for this analysis because intact classes were used. Hence, it helped the researcher to analyze the differences in the main effect of the treatment on the dependent variable and as well adjust the non-equivalence that may have occurred because of the pre-test and post-test that were administered to the intact groups. The research questions were answered by comparing the mean scores of the experimental group with the control group. Hence, the group with higher mean score was considered to have greater effect on academic achievement and retention in Commerce. In addition, the rejection or acceptance of the null

hypotheses was determined by comparing the p-value with the alpha .05. Therefore, the null hypotheses were rejected if the p – value is less than or equal to alpha level .05 and accepted if the p-value is greater than the alpha level of .05.

Results

Research Question 1: What is the mean achievement score of male and female students taught Commerce using Blended learning approach?

Table 1:

Mean achievement scores of Male and Female post basic students taught Commerce using Blended learning approach

Group	N	Pre-test Mean	S	Post-test Mean	S	Mean Gain
Male	13	28.00	6.16	62.15	10.41	34.15
Female	22	25.32	6.56	68.68	10.45	43.36

N = Number of Students, S = Standard Deviation

The result in table 1 indicated that male and female students taught Commerce using the Blended learning approach had pretest and mean achievement scores of 28.00 and 25.32 with the respective standard deviation of 6.16 and 6.56. More so, a post-test means achievement scores of 62.15 and 68.68 with standard deviations of 10.41 and 10.45, respectively. The statistical data presented in the table showed that the female students taught Commerce using the Blended learning approach performed better than their male counterparts, with a mean achievement gain score of 34.15 as against the male of 43.36, resulting in a mean achievement difference of 9.21. Meanwhile, to ascertain how significant the mean difference is, hypothesis one was tested at 0.05 level of significance.

Hypothesis 1

H0₁: There is no significant difference between the mean achievement score of male and female students taught Commerce using blended learning approach

Table 2:

Analysis of Covariance (ANCOVA) significant difference between the mean achievement scores of male and female post-basic students taught Commerce using a blended learning approach

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	312.076 ^a	3	104.025	0.8112	.009
Intercept	7356.101	1	7356.101	57.362	.000
PRETEST	57.097	1	57.097	0.445	.000
METHOD	1421.100	2	710.55	5.541	.101
Error	4231.901	33	128.239		
Total	44313.870	35			
Corrected Total	48545.771	34			

The data presented in 2 shows a p-value of .101, which is greater than the alpha value of .05. This indicates that there was no statistically significant difference between the mean achievement scores of male and female post-basic students taught Commerce using a blended learning approach and lecture methods. Therefore, the hypothesis that there is no significant difference between the mean achievement score of male and female students taught Commerce using a blended learning approach was not rejected.

Research question 2: What is the mean retention scores of male and female students taught Commerce using the blended learning approach?

Table 3:

Analysis of mean retention scores of Male and female post-basic students taught Commerce using a blended learning approach

Group	N	Post-test Mean	S	Retention Mean	S	Mean Gain
Male	13	62.15	10.41	69.82	14.76	7.67
Female	22	68.68	10.45	78.18	14.07	9.50

N = Number of Students, S = Standard Deviation

The result in Table 3 indicated that male and female students taught Commerce using the Blended learning approach had posttest mean achievement scores of 62.15 and 68.68, with the respective standard deviation of 10.41 and 10.45. More so, retention means achievement scores of 69.82 and 78.18 with standard deviations of 14.76 and 14.07, respectively. The statistical data presented in the table showed that the female students taught Commerce using the Blended learning approach had a higher retention gain than their male counterparts, with a mean retention gain score of 9.50 as against the male of 7.67. However, to ascertain how significant the mean retention difference is, hypothesis four was tested at a 0.05 level of significance.

Hypothesis 2

There is no significant difference in the mean retention scores of male and female students taught commerce using a blended learning approach

Table 4:

Analysis of Covariance (ANCOVA) significant effect in the mean retention scores of male and female students taught Commerce using blended learning approach

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	253.326 ^a	2	126.663	40.045	.000
Intercept	102.135	1	102.135	32.290	.000
Posttest	41.253	1	41.253	13.042	.001
Reten*Gender	2.711	1	2.711	.857	.101

Error	167.626	53	3.163
Total	14026.00	56	
Corrected Total	674.276	55	

a. R Squared = .751 (Adjusted R Squared = .733)

The data are presented in Table 4. It shows a p-value of .101, which is greater than the alpha value of .05. This indicates that there was no significant effect in the mean retention scores of male and female students taught Commerce using a blended learning approach. Therefore, the hypothesis of no significant difference in the mean retention scores of male and female students taught Commerce using a blended learning approach was accepted.

Research Question 3: What is the interaction effect of gender and method on students' academic achievement in commerce?

Table 5:

Interaction Effect of Gender and Methods on the mean students' achievement scores of students taught Commerce.

Group	Gender	N	Pre test		Post-test		Mean Gain
				SD	SD		
Blended Learning Approach	Male	13	28.00	6.16	62.15	10.41	34.15
	Female	22	25.32	6.56	68.68	10.45	43.36
	Differences		2.68	-0.4	-6.53	-0.04	-9.21
Lecture Method	Male	11	26.91	6.39	56.73	10.10	29.82
	Female	10	29.10	6.89	41.90	10.09	12,80
	Differences		-2.19	-0.50	-14.83	0.1	17.02

N = Number of Students, S = Standard Deviation

Table 5 revealed that students in the experimental group i.e. blended learning approach, had a pretest mean achievement score of 28.00 and 62.15 with standard deviation of 6.16 and 10.41 for male and female, respectively, while their corresponding posttest mean achievement scores were 62.15 and 68.68 with standard deviation of 10.41 and 10.45 for male and female, respectively. More so, for the control group (lecture method), it was equally observed that the male and female pretest mean achievement scores were 26.91 and 29.10 with standard deviation of 6.39 and 6.89, respectively, whereas their corresponding posttest scores were 56.73 and 41.90 with standard deviation of 10.10 and 10.09, respectively. Meanwhile, from the statistical data in the table, it could be observed that female students taught Commerce using a blended learning approach had a higher mean achievement score compared to their male students, and similarly, both male and female students taught Commerce in the experimental group performed better than their counterparts in the control group exposed to the lecture method. Thus, it could be deduced that the higher mean achievement scores recorded in Commerce were not because of gender, but the treatment of the students.

Hypothesis 3

There is no significant interaction effect of gender and methods on the mean achievement scores of students taught Commerce.

Table 6:

Analysis of Covariance (ANCOVA) of a significant interaction effect of gender and methods on the mean achievement scores of students taught Commerce.

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	93.633 ^a	3	31.211	3.274	.011
Intercept	542.645	1	542.645	56.929	.000
Pretest	7.535	1	7.535	0.790	.378
Method*gender	91.526	2	45.763	4.800	.13
Error	505.206	53	9.532		
Total	16411.000	56			
Corrected Total	598.839	55			

The data presented in Table 4.10 show a p-value of .13, which is greater than the alpha value of .05. This indicates that there was no statistically significant interaction effect of gender and method on the mean achievement scores of students taught Commerce. Therefore, the hypothesis of no significant interaction effect of gender and methods on the mean achievement scores of students taught Commerce was accepted.

Discussion of the Findings

The discussion of the findings was carried out based on the results of the analyzed data.

The mean achievement score of male and female students taught Commerce using a blended learning approach

The outcome of the study revealed that the female students taught Commerce using the Blended learning approach performed better than their male counterparts. However, there is no significant difference between the mean achievement score of male and female students taught Commerce using a blended learning approach. The finding is in alignment with the findings of Maccoun (2016) whose study revealed, among others, that there was no significant difference between the academic achievement of male and female students when taught with a blended learning strategy. The findings of this present study is an indication that the blended learning approach is one of the gender inclusive, innovative approaches of teaching, which improves the academic achievement of all learners irrespective of gender.

The mean retention score of male and female students taught commerce using a blended learning approach.

The finding revealed that students taught Commerce using a blended learning approach had higher mean retention gain when compared to students taught using the lecture method. Meanwhile, the study also found that there is a significant difference between the mean retention scores of senior secondary school students taught Commerce using the blended learning approach and the lecture methods. The finding conforms with the findings of Walid and Abdulmajeed (2016), which revealed that the blended learning strategy improved students' retention in Physics more than the conventional method, and that there was no significant effect

on the retention of Physics by male and female students taught with blended learning. Gender has no significant interaction effect on students' retention in senior secondary school Physics. There is clear evidence that the use of a blended learning approach positively enhances students' learning and academic achievement.

The interaction effect of gender and method on students' achievement in Commerce?

The result showed that there was no statistically significant interaction effect of gender and method on the mean achievement scores of students taught Commerce. The study findings confirmed that gender and instructional approach had no significant interaction effect on students' retention in Commerce. The result indicated that gender and instructional approach (Blended learning) did not combine to determine students' achievement scores in Commerce. The observed improvement in the achievement scores of students in Commerce was due to the approach adopted. This finding corroborated the findings in similar studies conducted by Ojo (2022), Maccoun (2016), and Walid and Abdulmajeed (2016), who in their separate studies found, among others, that gender and blended learning approach had no significant interaction effect on students' achievement. This implies that blended learning could be utilized successfully in a mixed classroom without either male or female students being at a disadvantage, as it embraces the active participation of both genders during the instructional process.

Conclusion

Based on the findings of the study, the following conclusions were drawn: Female students taught using the blended learning approach performed better than their male counterparts, though the difference was not statistically significant. Female students recorded higher retention gains than male students when taught using the blended learning approach, though the difference was not significant. Gender and teaching methods do not interact significantly to influence students' achievement in Commerce.

Recommendations

The following recommendations were made based on the findings and conclusions drawn there from:

1. Commerce teachers should adopt the blended learning approach in teaching Commerce to improve students' achievement and retention.
2. Given its gender-friendly nature, blended learning should be used in mixed-gender classrooms to promote equitable learning outcomes.
3. Teacher training institutions should integrate blended learning approaches into their Commerce education curricula to equip student-teachers with relevant instructional skills.

References

- Abu, E. & Flowers, N. (2019) Traditional teaching method: Educational in itself so let's reserve it. <https://www.Blogger.com/profit/0458731059605935696>.
- Akpan, K. P. & Aminikpo, N. R. (2017). Blended learning approach on students' academic achievement and retention in secondary schools in Rivers State. *Journal of Multidisciplinary Research and Development* 11 (2), 24-33.
- Androit, R. D. (2017). Psychology: The science of mind and behavior. Hodder & Stoughton Publication.

- Bichi D. S. (2016). Children's self-esteem and maternal behaviors in three low-income sample: Psychological reports, 52(3), 76-88.
- Bruno, V., Ongara & Fraser. L. (2017). Parental behavioural and adolescent self-evaluation. *Journal of Marriage and the Family*, 48(3), 37-46.
- Cleveland, M. I. (2018). *Guide to blended learning*. Athabasca University Press.
- Eneasoba, N. C., & Ugwuoke, L. N. (2019). Influence of social media on academic performances of business studies students in upper basic education level of Enugu education zone. *Global Journal of Education, Humanities & Management Sciences*, 1(2), 220-234.
- Federal Republic of Nigeria, (2014). *National Policy on Education* (4thed.). NERDC, press.
- Gairla, D. (2016). Blended learning; a new approach to learning. *International journal of information and education technology*. 6(1), 122-138.
- Gains, T. (2021). Formative classroom assessment and Benjamin S. Bloom: Theory, research and implications. *Paper presented at the annual meeting of the American Educational Research Association, Montreal, Canada*.
- Garrison, D. R., & Vaughan, N. D. (2021). *Blended learning in higher education: Framework, principles, and guidelines*. New York: Jossey-Bass.
- Huang, R. H. (2020). Educational technology: A comprehensive approach to blended learning. *Educational Technology Research and Development*, 68(1), 1-5.
- Maccoun, H. S. (2016). Effect of using blended learning on the achievement of students and information retention of fifth graders in Biology course. *Journal of Education and Practice* 4(2), 33-42.
- Nkechukwu, O.O.G (2022). Effect of jigsaw cooperative teaching and learning strategy on secondary school students' academic achievement and retention in Economics in Abia State. *Unpublished M. Ed Thesis*. Michael Okpara University of Agriculture Umudike.
- Nolan, J.M. (2016). The Determinant of students' financial awareness: Issues in Technology management research, 5(3). 21-37.
- Ogonna, .E. O. & Eneasoba, N.C. (2025). Utilization of Blended and Experiential Learning for effective teaching and learning of Business Education in universities in South-East, Nigeria. *Global Journal of Education, Humanities and Management Sciences (GOJEHMS)*; 5(1): 108 – 119.
- Ogunyemi, B. (2019). Continuous assessment in Nigeria: A tool for improving academic achievement. *Journal of Educational Research and Practice*, 9(2), 123-130.
- Ojo, A. A. (2022). The role of blended learning in enhancing students' academic achievement in Financial Accounting in Nigeria. *Journal of Accounting and Finance Education*, 14(2), 89-102.
- Onyenoru, I.P. (2017). Issues in Gender and socialization. *Journal of Education and Social Research*, 7(1), 12-20.
- Vinci, F, La Rocca, G., & Maggio, M. (2021). Learning Management Systems: A systematic review. *Journal of educational technology development and exchange*, 13(1)., 1-24.
- Walid, S., & Abdulmajeed, A. (2016). Effectiveness of blended learning based on blackboard in immediate and delayed achievement and retention in Physics among students. *Journal of Educational and Psychological Studies* 10(3), 476-504.