

**AN INVESTIGATION INTO SOCIAL STUDIES STUDENTS' PERFORMANCE AND RETENTION USING BLENDED LEARNING IN UPPER BASIC EDUCATION LEVEL SCHOOLS IN DELTA STATE**

**DESTINY ONYEKA UKOR, PhD**

Department of Social Science Education, Faculty of Education,  
Delta State University, Abraka

[acadapeakp@gmail.com](mailto:acadapeakp@gmail.com), [destinyukor@gmail.com](mailto:destinyukor@gmail.com)

**ABSTRACT**

Social Studies is one important subject in upper basic education level schools (JSS 1-3) that exposes students to innovations and creative tendencies. It is believed that the teaching and learning of Social Studies with blended learning will make retention easier and realizable. This research investigated Social Studies students' performance and retention using blended learning in upper basic education level schools in Delta State. Four research questions and four hypotheses were used to guide the study. The research design for the study was a pre-test, post-test, control group, quasi experimental design with the population that comprised of all Social Studies students in public upper basic education level Schools in Ika North East Local Government Area of Delta State. A sample of 60 Social Studies students from three (3) non-equivalent intact classes were selected through purposive sampling technique. A validated researcher-made test titled Social Studies Performance Test (SSPT) consisting of 40 multiple choice items on the topic man and his environment in UBEL Schools 2 (JSS2) was used. Kuder-Richardson formula 21 was used to determine the reliability coefficient (r) and the reliability coefficient of the instrument was obtained as 0.69. The experimental group was taught using blended learning models as Social Studies station-rotation and Social Studies laboratory-rotation while the control group was taught using the conventional method. Social Studies Performance Test was administered to the two groups as pre-test and post-test. Retention test was administered to all the groups after three weeks of post-test. Mean and standard deviation were used for research questions and Analysis of Covariance was used to test the hypotheses at 0.05 alpha level. The findings of the study revealed that JSS2 Social Studies students taught using blended learning approach performed better than the conventional approach. The retention test showed that JSS2 Social Studies students' retention ability was significantly higher in the experimental groups as against the control group. The study recommended that Social Studies teachers should be encouraged to use blended learning approach in learning process and Social Studies students should also be encouraged on the usefulness of this learning approach thereby helping to improve their academic performance in upper basic education level schools and beyond.

**Keywords:** Social Studies, Students' Performance, Retention, Blended Learning, Upper Basic Education Level Schools (UBELS)

## **INTRODUCTION**

The teaching and learning of Social Studies have become an innovation that education has accepted. Overtime, there have been several discussions over the concept of blended learning; yet, the issue of it lacking a single definition still lingers on. This innovative teaching method has been given several names, some of which include, blended learning, hybrid instruction, web-enhanced instruction, e-learning, online instruction and so on. Delia, Lioglu and Tildrim (2017) irrespective of the different names, there have been much research carried out on this method of teaching and learning. It is found that majority of the social studies students are unable to show proper concentration and punctual participation in this method of learning. Majority of upper basic education level schools are still counting on the face-to-face teaching method but will need to embrace this new technology like bringing in blended learning thereby making the Social Studies students to be active in class, which can be of help to their academic performance because change is the spice of life (Mezieobi, 2016). It is high time Social Studies students accepted blended learning.

Blended learning can be defined as the merging of face-to-face teaching and online learning. Blended learning brings about success, satisfaction and retention if properly integrated. It provides and enhances good writing practice and it encourages peer collaboration. As an innovative teaching method, it offers learners flexible teaching and learning environment so that learning takes place in the classroom and online (Colis & Mooney, 2011). Blended learning gives opportunity to Social Studies students to stay in touch with their teachers and classmates. It encourages interaction and communication and it is a learning that brings out the full potentials of learners and gives supports by allowing learners feel safe, ask questions and share ideas in order to develop (Faye & Andrea, 2014).

Blended learning is the integration of both conventional and modern teaching-learning processes, and has shifted the culture of teaching-learning from being teacher-centered, to becoming student-centered which is also the core of Social Studies teaching and learning- student-centrism. Friesen and Norm (2012) noted that blended learning is a formal education program in which a student learns at least in part through delivery of content and instruction via digital and online media with some element of student control over time, place, path, or pace. Yong (2012) described blended learning as a situation where online education is combined with traditional classroom based instruction. Singh and Reed (2011) described blended learning as a learning program where more than one delivery mode is being used with the objective of optimizing the learning outcome and cost of program delivery.

There are some potential advantages to blended learning that are emerging. Some of these revolve around accessibility, pedagogical effectiveness, and course interaction. Al-Fiky (2011) summarizes the benefits of blended learning as follows:

Increasing Social Studies students' interaction and participation: This learning approach will help to create good communication between social studies teachers and the social studies students

while outside classroom gives room to online networking or website. Through the use of blended learning, it will help to improve interaction between teachers and students which can also give room to active participation of students in the classroom.

Developing social studies students' learning and performance: Social Studies students' learning activities are more active than teaching and in this case, Social Studies students have more opportunities to develop their ideas in solving the problem that is at hand which will help to improve their performance in upper basic education level schools.

Developing independent Social Studies students, a source of instant feedback, time saving and motivation to Social Studies students: Blended learning enables Social Studies teachers to make better use of the limited time they have with their Social Studies students and by moving some traditional classroom activities into the online world, you end up spending less time talking in front of the class and more time working with individual Social Studies students.

Maximizing Social Studies classroom space and/or reduce the number of overcrowded classrooms (Gould, 2013). Blended learning of the Social Studies students is a customized learning experience, if they are struggling with a particular topic, they can access supplemental resources online or get help they need from their class Social Studies teacher (Pappas, 2015). Hybrid classes have an integration of pedagogical strategies that are found in both face-to-face and online environment. This has the potential of increasing Social Studies students' learning outcome (Justice & Zhu, 2015).

The application of blended learning revealed some of the difficulties and challenges which might affect the quality of Social Studies teaching and learning and hinder the expansion of using it in a wide range in the Social Studies teaching. Harriman (2014) confirmed that blended learning faces several challenges of offering blended learning as on how to manage teaching complexity, how to design it, how to manage the roles and responsibilities, how to create a seamless learning experience, how to meet expectations, and how to control costs. In spite of the numerous benefits, Social Studies students and Social Studies teachers may benefit in using blended learning strategy. There are some challenges that hinder effective implementation of blended learning. These may include poor accessibility, poor utilization on the use of media technology, digital illiteracy, poor sensitization and awareness, and poor technology facilities.

Furthermore, gender is a variable in this study. In education, gender plays a vital role. An individual's gender can influence his or her attitude towards learning. Gender is the social construction of female and male identity which is more than biological differences between men and women. It includes the way in which those differences have been valued, used and relied upon to classify women and men and to assign roles and expectations to them (Nzewi, 2017). For Aydon (2015), gender means the social phenomenon of distinguishing males and females based on a set of identity traits. It is social, not psychological or biological construction. On the same note, Ametefe and Ametefe (2017) referred to gender as a social construct that establishes and differentiates status and roles between men and women particularly in the way they contribute and participate in social, political and economic activities and are rewarded by the economy and most social institutions. It has been noted that gender is a contextual issue in research generally.

Furthermore, the teaching and learning of social studies exposes Social Studies students to the importance of access, equity and quality in all sphere of human endeavour. Mezieobi (2016) has noted that social studies as a discrete subject in upper basic education level schools is essential for effective living in every environment and society including Nigeria. According to Osakwe (2013), social studies is a course of study that studied human beings in various capacity of his interaction with his fellow counterparts. Social studies is a programme of study which a society uses to instill in students or learners the knowledge, skills, attitudes and actions it considers important in the relationships human beings have with each other, their world and themselves (Mezieobi, Ossai, & Young, 2013). Furthermore, the relative newness of social studies in Nigeria in general and in Nigerian schools in particular, coupled with varieties of persons, professional social studies educators and non-professionals or generalist social studies personnel who are associated with social studies have led to an overdose of social studies definitions (Mezieobi, Fubara & Mezieobi, 2018). The all encompassing definition of social studies is social studies as an integrated field of study which probes man's symbiotic relationships with his environments, endows man with the reflective or contemplative capacities, intellectual, effective, social and work skills, to enable him understand his world and its problems, and to rationally solve or cope with them for effective living in the society (Mezieobi et al, 2018).

### **Statement of the Problem**

Blended learning has not been accepted by several upper basic education level schools in Delta state due to some factors like inadequate funding, lack of experienced and professional social studies teachers, unavailability of ICT and ICT accessories and so on. It has been observed that a good number of upper basic education level schools' students do not perform excellently in their academic pursuit in spite of endowed potentials and abilities. It has also been observed that the academic performance of social studies students in upper basic education level schools and retention level in learning of Social Studies has suffered some setback as a result of the inability with various obvious effects on the educational policies in Nigeria which has gradually reduced the quality of education in schools. Another problem is that many Social Studies teachers do not use appropriate methods for teaching Social Studies to the Social Studies students. Again, Social Studies teachers that have knowledge of these method known as blended learning have not been using it effectively the way they ought to, during teaching and learning which can affect the social studies students' academic performance and retention level. This may be the reason that is responsible for the poor assessment of social studies students on the part of social studies teachers. In order to meet the need of the 21<sup>st</sup> century social studies students, there is need to inculcate new strategies of teaching which will give learners including social studies students the opportunity to be actively engaged in the learning process. It is on this note the researcher tends to find out if blended learning strategies will improve social studies students' performance and retention in Social Studies in upper basic education level schools.

### **Purpose of the Study**

The purpose of this study is to determine Social Studies students' performance and retention using blended learning in upper basic education level schools (JSS 1-3) in Delta State. Specifically, the study sought to;

1. Determine the difference between the mean performance scores of Social Studies students taught Social Studies using social studies station-rotation, social studies lab-rotation model and conventional method.
2. Determine the relative effect of gender on Social Studies students' performance in Social Studies when taught using social studies station-rotation, social studies lab-rotation model and conventional method.
3. Determine the mean retention scores of social studies students who were taught Social Studies using Social Studies station-rotation, Social Studies lab-rotation and conventional method.
4. Determine the mean retention scores of male and female Social Studies students who were taught Social Studies using social studies station-rotation, social studies lab-rotation and conventional method.

### **Research Questions**

To achieve the desired objectives, the following research questions were drawn to guide the study;

1. What is the difference between the mean performance scores of social studies students taught Social Studies using social studies station-rotation, social studies lab-rotation and conventional method?
2. What is the relative effect of gender on social studies students' performance in Social Studies when taught using social studies station-rotation, social studies lab-rotation and conventional method?
3. What is the mean retention scores of social studies students who were taught Social Studies using social studies station-rotation, social studies lab-rotation and conventional method?
4. What is the mean retention scores of male and female social studies students who were taught Social Studies using social studies station-rotation, social studies lab-rotation and conventional method?

### **Hypotheses**

The following null hypotheses were tested at 0.05 alpha level of significance guided this study.

1. There is no significant difference in the mean performance scores of social studies students who are taught Social Studies using social studies station-rotation, social studies lab-rotation and conventional method.
2. There is no significant difference between the mean performance scores of male and female social studies students taught Social Studies using social studies station-rotation, social studies lab-rotation and conventional method.

3. There is no significant difference between mean retention scores of social studies students who were taught Social Studies using social studies station-rotation, social studies lab-rotation and conventional method.
4. There is no significant difference between mean retention scores of male and female social studies students who were taught Social Studies using Social Studies station-rotation, Social Studies lab-rotation and conventional method.

## **METHODOLOGY**

The research design that was used for this study is a quasi-experimental, non-equivalent pre-test, post-test, control group design which was adopted to determine the Social Studies students' performance and retention using blended learning. The population of this study comprised of all students in public upper basic education level Schools in Ika North East LGA. A sample of 60 social studies students from three (3) non-equivalent intact classes, two upper basic education level schools were purposively chosen and assigned into groups, two experimental groups and one control group. These were selected through purposive sampling technique. A validated researcher-made test titled Social Studies Performance Test (SSPT) consisting of 40 multiple choice items on the topic Man and his Environment in JSS2 Social Studies was used. Kuder-Richardson formula 21 was used to determine the reliability coefficient (r) and the reliability coefficient of the instrument was obtained as 0.69. The experimental group was taught using blended learning models as social studies station-rotation and social studies lab-rotation while the control group was taught using the conventional method. Social Studies Performance Test was administered to the two groups as pre-test and post-test. Retention test was administered to all the groups after three weeks of post-test. Mean and standard deviation were used for research questions and Analysis of Covariance was used to test the hypotheses at 0.05 alpha level.

## **RESULTS OF THE STUDY**

**Research Question 1:** What is the difference between the mean performance scores of social studies students taught using social studies station-rotation, social studies lab rotation and conventional method?

**Table 1: Mean and standard deviation scores of social studies students' performance taught Social Studies using social studies station-rotation, social studies lab-rotation and conventional method.**

Teaching Strategies	Pre-test		Post-test			
	N	Mean	SD	Mean	SD	Mean Gain
SS Station-Rotation	20	30.1000	8.35968	67.7500	9.03282	37.65
SS Lab-Rotation	20	30.4000	8.79833	73.5500	9.05233	43.15
Conventional Method	20	28.4500	8.26199	57.6500	10.81069	29.20

The table 1 above shows that the mean performance scores for social studies station-rotation, social studies lab-rotation and conventional method are 30.100, 30.4000 and 28.4500 respectively with standard deviation of 8.35968, 8.79833 and 8.26199 respectively. While for the post-test, the mean score is 67.7500 for social studies station-rotation, 73.5500 for social studies lab-rotation and 57.6500 for the conventional method. This implies that the social studies lab-rotation strategy was slightly superior to social studies station-rotation and conventional method in pre-test. Similarly, social studies lab-rotation was superior to the social studies station-rotation and conventional method in post-test. Comparatively, social studies lab rotation and social studies station-rotation appears to have great effect on social studies students' performance in Social Studies. This simply implies that those taught with social studies station-rotation and social studies lab-rotation performed better than those taught using conventional method.

**Ho1:** There is no significant difference in the mean performance scores of social studies students taught Social Studies using Social Studies station-rotation, Social studies lab-rotation and conventional method.

**Table 2: Result of Analysis of Covariance of social studies students' performance scores taught Social Studies with social studies station-rotation, social studies lab-rotation and conventional method.**

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	2678.441 <sup>a</sup>	3	892.814	10.802	.000
Intercept	22463.465	1	22463.465	271.782	.000
Pretest	88.708	1	88.708	1.073	.305
Methods	2677.188	2	1338.594	16.195	.000
Error	4628.542	56	82.653		
Total	271181.000	60			
Corrected Total	7306.983	59			

The table 2 above reveals a significant difference between social studies station-rotation, social studies lab-rotation and conventional method on social studies students' performance. The exact probability 0.000 associated with the effect due to teaching methods is less than 0.05 and therefore significant. To this effect, the researcher rejects the null hypothesis and concluded that there was significant difference in teaching methods on social studies students' achievement in social studies. Therefore, the result revealed that there is a significant difference of teaching methods (social studies station-rotation, social studies lab-rotation and conventional method) on social studies students' performance scores in social studies.

**Research Question 2:** What is the difference between the mean performance scores of social studies students taught using social studies station-rotation, social studies lab rotation and conventional method based on gender?

**Table 3: Mean and standard deviation scores of social studies students’ performance taught social studies using social studies station-rotation, social studies lab-rotation and conventional method based on gender**

Teaching Strategies	Gender	Pre-test		Post-test			
		N	Mean	SD	Mean	SD	Mean Gain
SS Station-Rotation	Male	13	31.0769	8.92059	70.6923	5.86493	39.6154
	Female	7	28.2857	7.49921	62.2857	5.85133	34.0000
SS Lab-Rotation	Male	11	29.6364	7.24255	77.0000	6.34035	47.3636
	Female	9	31.3333	10.79352	69.3333	10.39230	38.0000
Conventional Method	Male	6	24.0000	7.29383	61.0000	13.98571	37.0000
	Female	14	27.5000	8.68022	56.2143	9.39049	28.7143

The table 3 showed that males performed better than the females under pre-test with 31.0769 for male and 28.2857 for female in social studies station rotation but female performed better than male under pre-test for social studies lab-rotation and conventional method with mean scores of 29.6364 and 24.0000 respectively with standard deviation of 7.2425 and 7.29833 respectively and for female with mean score of 31.3333 and 27.5000 respectively with standard deviation of 10.79352 and 8.68022 respectively. For post-test, the male performed better than the female when taught with the teaching methods. Social Studies Station-rotation, social studies lab-rotation and conventional method all had the mean scores of 70.6923, 77.000 and 61.000 respectively with standard deviation of 5.86493, 6.34035 and 13.98571 respectively for male. For female, social studies station-rotation, social studies lab-rotation and conventional method had the mean scores of 62.2857, 69.3333 and 56.2143 respectively with standard deviation of 5.85133, 10.39230 and 9.39049. The results also showed that social studies station-rotation and social studies lab-rotation for both male and female performed better than the conventional method.

**Ho2:** There is no significant difference between the mean performance scores of male and female social studies students taught social studies using social studies station-rotation, social studies lab-rotation and conventional method.



**Table 4: Result of Analysis of Covariance of social studies students’ performance scores taught social studies with social studies station-rotation, social studies lab-rotation and conventional method based on gender.**

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	1353.968 <sup>a</sup>	2	676.984	6.482	.003
Intercept	20558.841	1	20558.841	196.850	.000
Pre-test	.218	1	.218	.002	.964
Gender	1352.715	1	1352.715	12.952	.001
Error	5953.015	57	104.439		
Total	271181.000	60			
Corrected Total	7306.983	59			

The table 4 showed significant difference of teaching methods and gender on social studies students’ performance in social studies. Results on this table show that the calculated F- values of 12.952 was significant at 0.001 which is less than 0.05 and therefore is significant at 0.05 level of probability. Consequently, the researcher rejects the null hypothesis and concluded that there was significant difference of teaching methods and gender on social studies students’ performance in social studies. Therefore, the result revealed that there is a significant difference in the mean performance scores of male and female social studies students taught social studies using social studies station-rotation, social studies lab-rotation and conventional method.

**Research Question 3:** What is the mean retention scores of social studies students who were taught social studies using social studies station-rotation, social studies lab-rotation and conventional method?

**Table 5: Mean and standard deviation scores of social studies students’ retention scores taught social studies using social studies station-rotation, social studies lab-rotation and conventional method.**

Teaching Strategies	Post-test			Retention test			
	N	Mean	SD	N	Mean	SD	Gain
SS Station-Rotation	20	72.7000	8.35968	20	74.2000	9.03282	1.50
SS Lab-Rotation	20	72.9000	6.91375	20	73.3500	6.32955	0.45
Conventional Method	20	60.6000	8.65721	20	62.0000	9.27021	1.40

The table 5 above showed that the social studies students taught social studies using social studies station-rotation have mean score of 72.7000 and standard deviation of 8.35968

respectively for post-test and mean score and standard deviation of 74.2000 and 9.03282 respectively for retention test. Social studies students taught with social studies lab-rotation have mean score of 72.9000 and standard deviation 6.91375 for post-test and mean score of 73.3500 and standard deviation of 6.32955 for retention test. Social studies students taught social studies using conventional method have mean score of 60.6000 and standard deviation of 8.65721 respectively for post-test and mean score of 62.0000 and standard deviation of 9.27021 respectively for retention test. This implies that social studies students taught social studies using social studies station-rotation retained more compared to social studies lab-rotation. Similarly, social studies students taught social studies using social studies lab-rotation retained more compared to conventional method. Comparatively, social studies lab-rotation and social studies station-rotation appears to have the great effect on social studies students' retention in social studies.

**Ho3:** There is no significant difference between mean retention scores of social studies students who were taught social studies using social studies station-rotation, social studies lab-rotation and conventional method.

**Table 6: Result of Analysis of Covariance of methods on social studies students' retention score in social studies.**

Dependent Variable: Retention score

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	3101.187 <sup>a</sup>	3	1033.729	19.188	.000
Intercept	14393.842	1	14393.842	267.171	.000
Pre-test	779.553	1	779.553	14.470	.000
Methods	2116.200	2	1058.100	19.640	.000
Error	3016.997	56	53.875		
Total	294961.000	60			
Corrected Total	6118.183	59			

The table 6 showed significant difference of teaching methods on social studies students' retention in social studies. Results on this table show that the calculated F-value of 19.640 was significant at 0.000 which is less than 0.05 and therefore is significant at 0.05 level of probability. Consequently, the researcher rejects the null hypothesis and concluded that there was significant difference of teaching methods on students' retention in social studies. Therefore, the result revealed that there is a significant difference in the mean retention score of social studies

students taught social studies using social studies station-rotation, social studies lab-rotation and conventional method.

**Research Question 4:** What are the mean retention scores of male and female social studies students who were taught social studies using social studies station-rotation, social studies lab-rotation and conventional method?

**Table 7: Mean and standard deviation scores of male and female social studies students' retention scores taught social studies using social studies station-rotation, social studies lab-rotation and conventional method.**

Teaching Strategies	Gender	Post-test		Retention test			
		N	Mean	SD	Mean	SD	Mean Gain
SS Station-Rotation	Male	10	72.3750	5.52753	73.6250	5.65528	1.2500
	Female	10	72.9167	7.93678	74.5833	6.96039	1.6666
SS Lab-Rotation	Male	10	71.6000	8.31598	72.0000	8.21922	0.4000
	Female	10	74.2000	9.91968	74.7000	9.17787	0.5000
Conventional Method	Male	10	62.4167	8.69125	60.8333	9.43719	1.5834
	Female	10	60.2500	9.16418	61.3750	9.64735	1.1250

The table 7 revealed that male social studies students who were taught social studies with social studies station-rotation had a mean retention score of 73.6250 with standard deviation of 5.65528 while female social studies students who were taught social studies with social studies station-rotation had a mean retention score of 74.5833 with standard deviation of 6.96039 respectively for retention test. Male social studies students who were taught social studies with social studies lab-rotation had a mean retention score of 72.0000 and standard deviation of 8.21922 while female social studies students who were taught social studies with social studies lab-rotation had a mean retention score of 74.7000 and standard deviation of 9.17787 respectively for retention test. Male social studies students who were taught with conventional method had a mean retention score of 61.3750 with standard deviation of 9.43719 while female social studies students who were taught social studies with conventional method had a mean retention score of 62.4167 with standard deviation of 9.64735 respectively for retention test. This result indicated that female social studies students who were taught social studies with social studies station-rotation and social studies lab-rotation retained more than their male counterparts who were taught with conventional method.

**Ho4:** There is no significant difference between mean retention scores of male and female social studies students who were taught social studies using social studies station-rotation, social studies lab-rotation and conventional method.

**Table 8: ANCOVA table of male and female social studies students who were taught social studies with social studies station-rotation, social studies lab-rotation and conventional method on retention.**

Dependent Variable: Retention score

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	1099.904 <sup>a</sup>	2	549.952	6.247	.004
Intercept	13870.175	1	13870.175	157.544	.000
Pretest1	979.487	1	979.487	11.125	.002
Gender	114.917	1	114.917	1.305	.258
Error	5018.279	57	88.040		
Total	294961.000	60			
Corrected Total	6118.183	59			

In the table, it was indicated that gender is not significant among the groups (social studies station-rotation, social studies lab-rotation and conventional method). The table showed the value of F to be 1.305 and that the result of F test is not significant beyond the 0.05 level of significant as 0.258 is greater than 0.05. Therefore, hypothesis 4 is retained. This indicated that there is no significant difference between the mean retention scores of male and female social studies students taught social studies with social studies station-rotation, social studies lab-rotation and conventional method in social studies.

## DISCUSSION OF FINDINGS

The result in table 1 indicated that the students taught with social studies lab-rotation slightly performed better than the social studies station-rotation model and conventional method in pre-test while for the post-test, social studies students taught with social studies lab-rotation also performed better than the social studies students taught with social studies station-rotation model and conventional method. Comparatively, social studies lab-rotation model and social studies station-rotation model appears to have great effect on social studies students' performance in social studies. This simply implies that those taught with social studies station-rotation and social studies lab-rotation performed better than those taught using conventional method. To this effect, since ( $p < 0.05$ ), the researcher rejects the null hypothesis and conclude that there was significant

difference in teaching methods on social studies students' performance in social studies. Therefore, the result revealed that there is a significant difference of teaching methods when taught using social studies station-rotation, social studies lab-rotation and conventional method on social studies students' performance scores in social studies. The finding agrees with that of Diepreye (2013) who asserted that students are better motivated to learn with blended learning than with conventional method. The finding of Akpanson (2015) revealed that the percentage of students taught using station-rotation and lab-rotation model is of high achievement than the conventional classroom teaching.

The result in table 3 indicated that male performed better than the female social studies students under pre-test for social studies station-rotation, but female social studies students performed better than male social studies students under pre-test for social studies lab-rotation and conventional method. For post-test, the male social studies students performed better than the female social studies students for social studies station-rotation, social studies lab-rotation and conventional method. The results showed that social studies station-rotation and social studies lab-rotation model for both male and female social studies students performed better than the conventional method. Consequently, the researcher rejects the null hypothesis since ( $p < 0.05$ ) and concludes that there was significant difference of teaching methods and gender on social studies students' performance in social studies. Therefore, the result revealed that there is a significant difference in the mean performance scores of male and female social studies students taught social studies using social studies station-rotation, social studies lab-rotation and conventional method. Lulu (2014) opined that male students were significantly better off than their female classmates in terms of performance in the use of simple computer operations. Research findings indicated that male students are better academically than female students (Adebayo, 2017).

The result in table 5 indicated that social studies students taught social studies using social studies station-rotation and social studies lab-rotation retained more compared to conventional method. Consequently, the researcher rejects the null hypothesis and concluded that there was significant difference of teaching methods on social studies students' retention in social studies. Therefore, since ( $p < 0.05$ ), the result revealed that there is a significant difference in the mean retention scores of social studies students taught social studies using social studies station-rotation, social studies lab-rotation and conventional method. The result of Ogundele (2014) revealed that the retention level was higher for station-rotation group than the conventional group. Also, the result shows that experimental subjects significantly improved on their post-test scores after treatment.

The result in table 7 showed increase in the mean performance scores in relation to the post-test and retention of social studies students when taught using social studies station-rotation, social studies lab-rotation and conventional method based on gender. The result in table 7 indicated that female social studies students who were taught with social studies station-rotation and social studies lab-rotation retained more than their male counterparts who were taught with

conventional method. Consequently, the researcher retained the null hypothesis and concluded that there is no significant difference the mean retention scores of male and female social studies students taught social studies with social studies lab-rotation, social studies station-rotation and conventional method. Therefore, since ( $p > 0.05$ ), the result revealed that there is no significant difference between the mean retention scores of male and female social studies students taught with social studies lab-rotation, social studies station-rotation and conventional method in Biology. Katie and Shank (2010) revealed that the experimental group performed better in retaining of concepts than the conventional group. The study of Abidoye (2015) was in line with the study which indicated that there is no significant difference between the mean retention scores of male and female students when taught using station-rotation, lab-rotation and conventional method.

## **CONCLUSION**

This study indicated that effective use of these blended learning strategy (social studies station-rotation model and social studies laboratory-rotation model) improved social studies students' academic performance in teaching of social studies concepts significantly than the conventional teaching method. This simply implies that blended learning approach is more effective in enhancing social studies students' performance in social studies as compared with conventional teaching method. The study indicated that blended learning model helps the social studies students to navigate, integrate knowledge and it also fosters collaborative learning of the subject matter which can as well enhance a better learning outcome. The findings of the study revealed that male social studies students taught using social studies station-rotation and social studies lab-rotation model performed better than their female counterparts. The result of this study also helped in improving social studies students' level of retention in social studies.

## **Recommendations**

Based on the findings of the study, the following recommendations are made:

1. Social studies teachers should be encouraged to use blended learning approach in learning process and social studies students should also be encouraged on the usefulness of this learning approach thereby helping to improve their academic performance in upper basic education level schools.
2. Secondary schools should be adequately equipped with computer systems and get connected with internet so as to have access to online learning.
3. Both male and female social studies students should be encouraged to learn social studies together as both are equally good in the subject.
4. Blended learning should be integrated into the curriculum and scheme of works so that more time will be allocated to social studies teachers who are using it in their teaching.

5. In-service training and seminars on the use of computers and internet facilities should be organized for upper basic education level schools' social studies teachers in particular and other teachers in general.

## References

- Abidoye, J.A. (2015). The effect of blended learning instructional approach on secondary school students' academic achievement in Geography in Akure, Ondo State, Nigeria. *Research Journal of Education Studies and Review*, 1(5), 100-110, September, 2015. Retrieved from <http://pear/researchjournals.org/journal/rjes/index>.
- Adebayo, A.O. (2017). Environment and co-education as factors of performance in the ravens standard progressive matrices combed, 33-35.
- Akpanson, P. T. (2015). Blended learning for effective teaching and learning of science technology and Biology in secondary schools. Macmillan Publishing. Votex Publishers.
- Al-Fiky, A., Al-Kaabi, A. & Al-Muftah, S., (2011). Effect of a blended e-learning environment on students' achievement and attitudes toward using E-learning in teaching and learning at the University LEVEL. *International Journal for Research in Education (IJRE)* 29, Qatar University- Qatar.
- Ametefe, G.T.D & Ametefe, M.D. (2017). Repositioning women education for national development in the 21<sup>st</sup> century. *Journal of Research Development*, 8(5), 68.
- Aydon, E. (2015). It's a man's world: The effect of traditional masculinity or gender equality. <http://www.info/2015/03/29/its-mans-world-the-effect-of-traditional....30/3/2019>
- Colis, B. & Mooney, J. (2011). *Flexible Learning in a Digital World: Experiences Learning Experience in Science Education*. Interactive Technology and Smart Education, v6 n4 p223-233. (Eric reproduction service no. EJ868118).
- Delia, S., Lioglu, D. & Tildrim, Z. (2017). *Students' perception on effective dimensions of interactive learning is a blended learning environment*. Educational Technology and Society 10 (2) pp. 133-146.
- Diepreye, A. (2013). The use of blended learning (laboratory-rotation) compared with the traditional based lecture method in anatomy class in Bayelsa State School of Nursing Tombia Nigeria.
- Faye, E.T. & Andrea, A.D. (2014). *Just-in-time Teaching: Blended active learning with Web Technology*. Upper Saddle River, New Jersey: Prectice Hall.
- Friesen, N. & Norm. (2012). Defining blended learning. <http://www.learningspace.org/papers/defining-blended>.
- Gould, T. (2013). Hybrid classes: Maximizing institutional resources and student learning, Proceedings of the 2013 ASCUE Conference, Myrtle Beach, South Carolina. <http://www.ascue.org/files/proceedings/2003/p54.pdf>.
- Harriman, G. (2014). What is Blended Learning? E-Learning Resources. <http://www.grayharriman.com>.
- Justice, K. & Zhu, C. (2015). *Computer competences among academic staff and student in relation to the use of blended learning: The case of maintains of the moon University in Western Uganda*. Proceedings from the South Africa International conference on Educational Technologies, April, 2015 Pp 62-76.

- Katie, A. & Shank, J. (2010). *Blended learning and students' retention in vocational studies*. Pennsylvani State University. <http://members.educause.edu.com>
- Lulu, J. (2014). Gender bias and academic achievement on the use of technology for learning among secondary school students. *Unpublished Thesis of Gender and Conflict Management; Uniport.*
- Mezieobi D.I, Ossai, J.N. & Young S.C (2013). Agenda for a transformation implementation of social studies curriculum in Nigeria university. *Development Country Student* 3(12), 100-104
- Mezieobi, K. A. (2013) *Social studies curriculum*. Owerri: Acadapeak Publishers
- Mezieobi, K. A. & Mezieobi, K. C. (2019) Factors that affect the study of social studies education in higher education institutions (HEIs) in Nigeria. *Journal of Education and Social Review*, 10(15), 89-102
- Mezieobi, K. A., Fubara, V. R. & Mezieobi, S. A. (2018) *Social studies in Nigeria: Teaching methods, instructional materials and resources*. Owerri: Acadapeak Publishers
- Mezieobi, K. C. (2016) Social studies: Meaning, historical foundations and rationale for introducing it in schools. In Mezieobi, K. A. and Mezieobi, K. C. (eds.) *Social studies and the social sciences: A book of readings*. Owerri: Whyte and Whyte Publishers
- Mezieobi, K.C. & Chikwelu, V.N. (2015). Education for all/inclusive education in Nigeria: The missing dimensions. In *Nigerian Educational Researcher*, 20(20), 108-113.
- Nzewi, U.M. (2017). Conceptual issues in gender studies in Nzewi, U.M, Kanno, T.N., Obasi, V.A and Obih, S.O.A. (Eds) *New Perspectives in gender studies in Nigeria*. Owerri: Mercy Divine Publisher.
- Ogundele, O.J. (2014). Enhancing students' performance using blended learning (station a rotation) among science students in private secondary schools in Lagos. An Unpublished Thesis of University of Lagos.
- Osakwe, E. (2013). *Social Studies and Integrated National Development in Nigeria*. Ibadan: Kraft Book Limited
- Pappas, C. (2015). *Advantages and disadvantages of blended learning in corporate trainings*. <http://www.elearningindustry.com> on 1<sup>st</sup> August, 2016.
- Singh, H. & Reed, C. (2011). A white paper: *Achieving Success with Blended learning*. Lexington, MA; Central Software. <http://www.central.com/download>.
- Yong, J.R. (2012). Hybrid teaching seeks to end the divide between traditional and online instruction *chronicle of higher education*, 48(28), 33-34.