
EFFECTS OF COLLABORATIVE INSTRUCTIONAL STRATEGY, SEX AND LOCATION ON ACADEMIC PERFORMANCE OF UPPER BASIC SOCIAL STUDIES STUDENTS IN DELTA STATE

BY

ETANEKI, Akpesiri Faith

omosorfaith@gmail.com

+23409156044684

Department of Social Science Education (Social Studies, Unit), Faculty of Education, Delta State University, Abraka Delta State Nigeria

&

Dr. E.C OGHENEAKOKE

drogheneakokeclifford@gmail.com

+2340703835474

Department of Social Science Education (Social Studies, Unit), Faculty of Education, Delta State University, Abraka Delta State Nigeria

ABSTRACT

The study investigated the effects of collaborative instructional strategy, sex and location on academic performance of upper basic social studies students in Delta State. The study was guided with four research questions and four hypotheses which were answered and tested respectively. The research adopted a quasi-experimental, 2x2 x2 factorial design. 49,796 JSS II (Upper Basic 2) students from the 467 Delta State Public Secondary Schools that are enrolled in the 2021/2022 academic year make up the study's overall population. 220 JSS2 (Upper Basic 2) students were selected as a sample from four mixed secondary schools among the 479 public secondary schools that spread across urban and rural areas of Delta State. Data was collected using Social Studies Achievement Test (SSAT) with a reliability index of 0.83. Mean, t-test and Analysis of Covariance (ANCOVA) were used to analyzed data collected after six weeks of instruction. The result of the analysis revealed that there is a significant effect of collaborative instructional strategy and conventional lecture method on the academic performance of social studies students; there is no significant difference in the mean performance scores of male and female taught using collaborative instructional strategy on Social Studies students; there is a significant difference in the mean performance scores of urban and rural students taught using collaborative instructional strategy in Social Studies and there is no significant effect of interaction of collaborative instructional strategy, conventional lecture method, sex and location on the academic performance of Social Studies students. Based on the findings it was recommended among others that social studies teachers should endeavour to utilize collaborative instructional strategy so as to enhance students' performance irrespective of sex and location.

Keywords: Collaborative Instructional Strategy, Sex, Location, Academic Performance.

INTRODUCTION

One of the main goals of social studies education is to ensure that all students receive high-quality instruction. This can be done by having effective classroom interactions that give both male and female students an equal chance to learn the material, develop positive attitudes and behaviors, and participate intelligently in deliberations about their own well-being. This suggests that classroom engagement should, among other things, cultivate in both genders a desire for and equal chance for understanding when presented with dire circumstances that they are unable to adequately explain in terms of their prior experiences and knowledge.

The students' curiosity is sparked by their relationships with their teachers, who may or may not be male or female, and by supportive learning environments that serve as a foundation for creative thought processes, reflection, questioning, and reading to gather information, as well as making it easy to start and complete investigations. As a result, it follows that for social studies education to provide high-quality instruction, the classroom must be appropriately organized to allow all students an equal chance to prove their merit in order to improve their academic performance. Teachers have identified and used a variety of educational methods that are capable of improving students' academic performance over the years in the teaching of social studies. Some of these strategies include demonstrations, role play, simulations, concept maps, inquiry method, and peer tutoring, all of which are regarded as useful and effective instructional approaches that can be applied (Oyovwi, 2015). However, one another instructional strategies that the researchers presume to be capable of enhancing students' academic performance compare to the conventional teaching method like lecture method is collaborative instructional strategy.

Collaborative learning strategy has been singled out as the most promising teaching method in elevating the academic performance of students in contemporary time due to the social support it provides during group learning (Cockerel, Cap low & Donaldson, 2016). It appears that collaborative learning has been properly developed and utilized in Nigerian school system, despite its benefits in the educational system the concept of collaborative learning is not very new to Nigerian students. Teachers in Nigerian school use and exploit collaborative learning for the purpose of achieving academic goals. In spite of the promises collaborative learning hold for the Nigerian school child, not much research has been done in Nigeria to compare its effectiveness and usefulness to the traditional teaching method. This method is effective at the university level, but looks more promising for both primary and secondary education in the future.

Collaborative instructional strategy helps students to gain gradual momentum within and outside the classroom. Students are better able to build social and academic support networks outside of the classroom when they work together to learn. In Nigerian classrooms today, collaborative learning is still in its infancy; that is, it is still in the phase where students typically form study groups with one of them serving as the group's leader and coordinating the learning by serving as the group's teacher. The majority of the time, students create a schedule that governs their meetings over the weekends or during exam season. In addition to working together to answer questions from previous exams, they also seek clarification from one another on specific course material. Michael and Hameed (2017) also opined that students collaborate in assignment; project and term paper presentation that help attain a tangible idea on how to solve the specific problem.

Collaborative instructional strategy is based on the view that knowledge is a social construct. Collaborative learning is a method that transforms that traditional lecture focused classroom into a student centered learning strategy. Collaborative learning occurs when learner is peer-to-peer or in small group. This means collaborative learning involves students working in pairs or small groups to discuss concepts or find solution to problems with instructor acting as a facilitator. It was created with the knowledge that interaction and small-group cooperation provide powerful solutions that could not be obtained separately and promote the exchange of information for improved learning.

Additionally, collaborative learning has the benefit of improving learning by reducing anxiety caused by the examination and critical analysis of complex situations. It also encourages students to be actively involved in the learning process and knowledge transfer. The learners will benefit from this method's emotional and cognitive support, which will result in significant learning and concept retention. In other words, Wiggs (2019) findings indicated that the utilisation of collaborative learning enhances students' academic achievement.

Another factor that may affect students' performance irrespective of instructional used in the classroom are sex and location. Sex is biological and physiological characteristics of being a boy or a girl. However, sex is also seen as a factor that could affect the academic performance of students as males are likely to show better performance than females. Looking at the effect of sex differential and identities on the academic performance of boys and girls in school, Etaneki (2018) maintained that it is how people identify to these biologically constructed categories that mold and shape, how gender identities emerge and are operated into the world. Sex is a biologically ascribed attribute which differentiates males from females. Sex may also be seen as a term the described the roles, behavior, mental and emotional characteristics between males and females developed by a society. Several studies have been done to find out if gender really has an effect on performance in social science in general and social studies in particular (Udosoro, 2019). Aniodoh and Egbo (2018) revealed in their study that female students scored significantly higher than the male students in science subjects. Hence sex could have a significant relationship with students' academic performance and that gender composition has a significant influence on secondary school students' academic performance. Conflicting findings on the relationship between sex disparities and academic performance have also been found (Dania, 2014). These show that the issue of gender in Social Studies is not yet been resolved. Hence, further study is required.

Another variable of this study is location. Location here mean different geographical areas where students attend school. It is the place a school is situated. The location of a school could be urban or rural area. According to Oriaku (2017), urban systems are comprised of the processes by which life in metropolitan areas is organized and operated. These processes may be grouped into four major categories of; infrastructure, built environment/planning, administration and human services, it includes multiple local governments, economies, and demographics. Cabral (2018) defined urban system as the centre of economic and social development characterized by the mixture of residential, commercial, agricultural and industrial activities. Urban life style, and by extension, urban area can be defined by three population characteristics which are on the basis of three (3) variables namely, number, density of settlement and degree of heterogeneity of the urban population

Urban areas are those thickly populated towns or cities with the basic amenities and facilities that make life comfortable like human structures such as houses, commercial buildings, roads, bridges, and railways, hospitals, local government headquarters etc. An urban area includes the city itself, as well as the surrounding areas, while rural areas are those places distinguished from towns and cities with little or no basic amenities or facilities and no government headquarters (Funk & Wagnalls, 2018). Okorie and Eze (2016) reported that the performance of urban students is quite higher than students in the rural areas, however urban students achieved higher and better than their rural counterparts. In the researcher's view, the urban students may have performed better than the rural students as a result of teachers not wanting to go to rural schools to teach, students spend so much time on farm work at the expense of the time they should spend on their study. From the foregoing, it is likely that differences in gender and location are factors capable of influencing and causing disparity in academic performance in Social Studies.

The discussion so far shows that blended learning and collaborative learning strategies are heuristic approach and they can enable teachers to meet the needs of all students and prepare them for better performance. This study therefore investigated the effects of blended learning, collaborative learning strategies on students' academic performance upper basic Social Studies students in Delta State.

Statement of the Problem

One issue that has recently plagued social studies teaching and learning that has the potential to prevent it from achieving its goals is the students' poor academic performance. The issue addressed in this study arises from the necessity to vary the teaching strategies utilised in the fields of learning and education, particularly when Social Studies performance test results show that students in this subject area are performing below average. This is demonstrated in students' poor academic performance and low level of learning ability in social studies classes, which prompted teachers to come up with different teaching strategies to enhance students' learning.

The study of social studies has expanded beyond the confines of conventional approaches to learning, thus educators must look for teaching methods that will help learners build learning skills, develop analytical thinking abilities, and improve their academic performance. The material that is now accessible on teaching strategies for social studies education points to the necessity of using cutting-edge instructional strategy like collaborative learning. Consequently, the purpose of this study is to ascertain how upper basic Social Studies students respond to collaborative instructional strategy.

Therefore, the problem of this study is posed as a question; "What will be the effect of collaborative learning strategy on Upper Basic II Social Studies students' academic performance in Delta State?"

Purpose of the Study

The purpose of this study is to investigate the effects of collaborative instructional strategy, sex and location on academic performance of upper basic social studies students in Delta State. Specifically, the study is designed to:

- 1 determine the effect of collaborative instructional strategy and lecture method on the academic performance of Social Studies students.
- 2 find out the difference in the mean performance scores of male and female taught using collaborative instructional strategies on Social Studies students.
- 3 ascertain the difference in the mean performance scores of urban and rural students taught using collaborative instructional strategies in Social Studies?

- 4 Determine the interaction effect of collaborative instructional strategy, conventional lecture method, sex and location on the academic performance of Social Studies students.

Hypotheses

The following null hypotheses were tested at 0.05 level of significant.

1. There is no significant effect of collaborative instructional strategy and conventional lecture method on the academic performance of Social Studies students?
2. There is no significant difference in the mean performance scores of male and female taught using collaborative instructional strategy on Social Studies students.
3. There is no significant difference in the mean performance scores of urban and rural students taught using collaborative instructional strategy in Social Studies?
4. There is no significant effect of interaction of collaborative instructional strategy, conventional lecture method, sex and location on the academic performance of Social Studies students

Materials and Methods

Design of the Study

A quasi-experimental, non-equivalent pre-test, post-test, control group design using a 2x2 x2 factorial design was adopted for the study. The design has treatment (instruction) at two levels (collaborative and conventional lecturing strategies) across with sex at two levels (male and female) students' location (urban and rural).

Population of the Study

49,796 JSS II (Upper Basic 2) students from the 467 Delta State Public Secondary Schools that are enrolled in the 2021/2022 academic year make up the study's overall population.

Sample and Sampling Techniques

220 JSS2 (Upper Basic 2) students were selected as a sample from four mixed secondary schools among the 479 public secondary schools that spread across urban and rural areas of Delta State. The method of selecting the schools was a purposive non-randomized sampling method. Table 1 depicts the Sample Distribution in terms of the number of schools, the number of intact classes, the number of students, the number of research assistants, the school's location, and the treatment method assigned.

Table 1: Sample size: Names of school and number of students

No of Schools	No of Intact-Classes	No of Students	Location	Assigned Treatment method
Aragba Secondary School Aragba Orogun	1	63	Rural	Control
Ede Grammar School Umunede	1	48	Rural	Experimental
Isiokolo Grammar School Isiokolo	1	61	Urban	Control
St John's Academy Secondary School Oleh	1	48	Urban	Experimental
TOTAL	4	220		

Source: Pre-Fieldwork, 2022.

Research Instrument

The instruments that were used for the study are Social Studies Achievement Test (SSAT), lesson plan developed by the researcher. The SSAT was used for data collection. The Social Studies Achievement Test consists of two sections. Section A consist of respondent bio data, gender and location while Section B consist of 40 multiple objective test-items with option letter A-D covering four concepts or topics.

Validity of Research Instrument

The face validity of the Social Studies Achievement Test (SSAT) was done by experts from the Departments of Measurement and Evaluation and Social Science Education at Delta State University in Abraka. The content validity was carried out on the SSAT by using the test blueprint, or table of specifications.

Reliability of Instrument

The reliability of the SSAT was determined by administering the instrument to forty (40) students in JSS 2 from a secondary school in Anambra State. Data collected through the test was used to compute the reliability of the instrument. The Kuder-Richardson formula -21 was used to calculate the reliability index, which yielded 0.83. The method was deemed appropriate because the test items were multi-choice achievement tests with dichotomous scores (1 or 0). The reliability test was done in order to determine the internal consistency of SSAT.

Methods of Data Collection

Each treatment group received a school, and on the first day of the study, the Social Studies Achievement Test was used to deliver pretests to the two groups (SSAT). The purpose of the pretest was to assess the two groups' similarity as well as their level of previous knowledge of the topics covered by the test. The lesson plans on collaborative instructional strategy that the researcher developed for each group was used by the usual Social Studies teacher in each of the sample schools to deliver the actual instruction over the course of six weeks. Only the conventional (lecture) form of instruction was used by the teacher in the control group. Six weeks were spent on the experiment (instructional exercises). A summative posttest using the same SSAT used in the pretest was given to the students at the completion of the lesson.

Method of Data Analysis

Descriptive statistics such as mean and standard deviations was used to answer the research questions. Hypotheses were tested using t-test and Analysis of Covariance (ANCOVA). All hypotheses were tested at 0.05 alpha level of significance.

Results

Research Question One: What is the effect of collaborative instructional strategy and conventional lecture method on the academic performance of Social Studies students?

To answer the research question, the mean gain scores of the two groups were used as shown in Table 2

Table 2: Mean and standard deviation (SD) comparison of pretest and posttest of social studies students taught with collaborative instructional strategy and those taught with conventional lecturing method.

Treatment group	N	Pretest		Post test		Mean performance gain
		Mean	SD	Mean	SD	
Collaborative instructional strategy	96	13.87	3.70	44.50	6.33	30.63
conventional lecturing method	124	12.99	2.98	30.31	5.72	17.32
Total	220					

Table 2 shows that the collaborative instructional strategy group pretest and posttest mean scores are 13.87 and 44.50 with standard deviation scores of 3.70 and 6.33 respectively. Also, the control group has pretest and posttest mean scores as 12.99 and 30.31 with standard deviation scores of 2.98 and 5.72 respectively. The mean performance gain for the treatment group was 30.63 while the mean gain in the control group was 17.32. The mean gain score of students taught using collaborative instructional strategy is greater than students taught with lecture method instructional strategy. This shows that there is difference in the academic performance of Social Studies students taught with collaborative instructional strategy and those taught with conventional lecturing method. Hence collaborative instructional strategy enhances students' performance better than the conventional lecturing method.

Research Question Two: What is the difference in the mean performance scores of male and female students taught using collaborative and conventional lecture instructional strategies in Social Studies?

To answer the research question, the mean gain scores of the two groups were used as shown in Table 3.

Table 3: Mean and standard deviation (SD) comparison of mean performance scores of male and female Social Studies students taught using collaborative instructional strategy.

Treatment methods	Gender	N	Pretest		Post test		Mean performance gain
			Mean	SD	Mean	SD	
Collaborative	Males	47	13.83	3.89	44.64	5.42	30.81
	Female	49	13.91	3.56	44.37	7.15	30.46
	Total	96					

Table 3 result shows that the pretest mean score and standard deviation for the male and female taught using collaborative instructional strategy are 13.83 and 13.91; 3.89 and 3.56 respectively. Also, the posttest mean score and standard deviation scores for male and

female students taught using collaborative instructional strategy, are 44.64 and 44.37; 5.42 and 7.15 respectively.

Research Question Three: What is the difference in the mean performance scores of urban and rural students taught using collaborative and conventional lecture instructional strategies in Social Studies?

Table 4: Mean and standard deviation (SD) on difference on the mean performance score of urban and rural students taught using collaborative and conventional lecture instructional strategies in Social Studies

Instructional strategy	Location	N	Pretest		Post test		Mean performance gain
			Mean	Std. Deviation	Mean	Std. Deviation	
Collaborative	Urban	48	14.96	3.69	47.63	6.44	32.67
	Rural	48	12.79	3.42	41.37	4.43	23.58
	Total	96					

Table 4 result shows that the pretest mean score and standard deviation for the male and female taught using collaborative instructional strategy are 14.96 and 12.79; 3.69 and 3.42 respectively. Also, the posttest mean score and standard deviation scores for male and female students taught using collaborative instructional strategy, are 47.63 and 41.37; 6.44 and 4.43 respectively. Students who were urban area had highest mean gain scores among the students exposed to collaborative instructional strategy. Urban students mean gain score is 32.67 while the rural students had mean gain score of 23.58.

Research Question Four: What is the interaction effect of collaborative instructional strategy, conventional lecture method, sex and location on the academic performance of Social Studies students.

Table 5: Mean and Standard of the Interaction Effect of Collaborative Instructional Strategy, Conventional Lecture Method, Sex and Location on the Academic Performance of Social Studies Students.

Treatment	Sex	Location	N	Pretest		Posttest		Mean gain
				Mean	Standard deviation	Mean	Standard deviation	
Collaborative	Males	Urban	25	14.96	4.00	47.60	4.58	32.64
		Rural	23	14.95	3.40	47.65	8.10	32.7
	Females	Urban	22	12.54	3.39	41.27	4.25	28.73
		Rural	26	13.00	3.49	41.46	4.65	28.46
Conventional lecture method	Males	Urban	24	13.16	2.56	35.25	4.85	22.09
		Rural	37	13.45	3.38	34.05	4.33	20.6
	Females	Urban	26	12.69	2.88	29.61	5.85	16.92
		Rural	37	12.59	2.90	26.37	5.69	13.78

Table 5 result shows the Interaction Effect of Collaborative Instructional Strategy, Conventional Lecture Method, Sex and Location on the Academic Performance of Social Studies Students. In the table the pretest mean score and standard deviation for the urban male and female taught using collaborative instructional strategy are 14.96 and 12.54; 4.00 and 3.39 respectively while the pretest mean score and standard deviation for the rural male and female student taught using collaborative instructional strategy are 14.95 and 13.00; 3.49 and 3.38 respectively. Likewise, the posttest mean score and standard deviation for the urban male and female taught using collaborative instructional strategy are 47.60 and 41.27; 4.58 and 4.24 respectively while the posttest mean score and standard deviation for the rural male and female students taught using collaborative instructional strategy are 47.65 and 41.46; 8.10 and 4.65 respectively. The pretest mean score and standard deviation for the urban male and female taught using collaborative instructional strategy are 13.16 and 12.69; 3.49 and 2.88 respectively while the pretest mean score and standard deviation for the rural male and female students taught using Conventional lecture method are 13.45 and 12.59; 3.38 and 2.90 respectively. The posttest mean score and standard deviation for the urban male and female taught using Conventional lecture method are 35.25 and 29.61; 4.85 and 5.85 respectively while the pretest mean score and standard deviation for the rural male and female students taught using Conventional lecture method are 34.05 and 26.37; 4.33 and 5.69 respectively.

Analysis of Research Hypotheses

Ho₁: There is no significant effect of collaborative instructional strategy and conventional lecture method on the academic performance of Social Studies students

Table 6: t-test comparison of the pretest and post-test performance of Social Studies students taught with collaborative instructional strategy and those taught with conventional lecturing method

	Instructional strategies	N	Mean	SD	df	t-cal.	t-crit.	Level of sign.
Pretests	Collaborative	96	13.87	3.70				
	Conventional	124	12.99	2.98	218	1.93 ^{ns}	1.98	0.05
	Total	220						
Posttest	Collaborative	96	44.50	6.33				
	Conventional	124	30.31	5.72	218	17.41 ^s	1.98	0.05
	Total	220						

ns: not significant; s: significant

Table 6 shows that the experimental pretest and posttest mean scores are 13.87 and 44.50 with standard deviation scores of 3.70 and 5.72 respectively. Also, the control group has pretest and posttest mean scores as 12.99 and 30.31 with standard deviation scores of 2.98 and 5.72 respectively. The mean performance gain for the treatment group was 30.63 while the mean gain in the control group was 17.32. The mean gain score of students taught using blended instructional strategy is greater than students in control instructional strategy. This shows that there is difference in the academic performance of Social Studies students taught with collaborative instructional strategy and those taught with conventional lecturing method. Collaborative instructional strategy enhances students' performance better than the

conventional lecturing method. This gives t-value calculated as 1.93 and t-critical value of 1.98 at 0.05 level of significant. The t-calculated is less than the t-critical value of 1.98. This shows that there is no significant difference in the academic performance of Social Studies students in the two groups during the pretest. The two groups were found to be marginally equivalent before the treatment commence.

H₀₂: There is no significant difference in the mean performance scores of male and female taught using collaborative instructional strategy on Social Studies students.

Table 7: t-test Comparison of Post-Test Academic Performance of Male and Female Social Studies Students Taught with Collaborative Instructional Strategy

Sex	N	Mean	SD	DF	t-cal.	t-crit.	Level of sign.	Remark
Males	47	44.64	5.42					
Females	49	44.37	7.15	94	1.17 ^{ns}	1.98	0.05	Null hypothesis accepted
Total	96							

Table 7 revealed that the calculated t-value of 1.17 is less than the critical t-value of 1.98. Thus the null hypothesis was accepted. This means that there is no significant difference in the mean performance scores of male and female taught using collaborative instructional strategy on Social Studies students. The use of collaborative instructional strategy appears to have produce similar effect on academic performance of male and female in the study area.

H₀₃: There is no significant difference in the mean performance scores of urban and rural students taught using collaborative instructional strategy in Social Studies.

Table 8: t-test Comparison of Post-Test Academic Performance of urban and rural Social Studies Students Taught with Collaborative Instructional Strategy

Sex	N	Mean	SD	df	t-cal.	t-crit.	Level of sign.	Remark
Males	48	47.63	6.44					
Females	48	41.37	4.43	94	2.98 ^s	1.98	0.05	Null hypothesis rejected
Total	96							

Table 8 revealed that the calculated t-value of 2.98 is greater than the critical t-value of 1.98. Thus the null hypothesis was rejected. This means that There is a significant difference in the mean performance scores of urban and rural students taught using collaborative instructional strategy in Social Studies. The use of collaborative instructional strategy appears to have slightly improved the academic performance of rural students more than that of their rural counterpart and female in the study area.

Ho₄: There is no significant effect of interaction among collaborative instructional strategy, conventional lecture method, sex and location on the academic performance of Social Studies students

Table 9: Analysis of Covariance on the effect of interaction of collaborative instructional strategy, conventional lecture method, sex and location on the academic performance of Social Studies students

Tests of Between-Subjects Effects

Dependent Variable: POSTTEST

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	12323.814 ^a	8	1540.477	53.189	.000
Intercept	16909.334	1	16909.334	583.842	.000
Pretest	.269	1	.269	.009	.923
Treatment	9025.140	1	9025.140	311.618	.000
Sex	58.429	1	58.429	2.017	.157
Location	2100.969	1	2100.969	72.542	.000
Instructional strategies * Sex * Location	111.020	4	27.755	.958	.431
Error	6111.022	211	28.962		
Total	318432.000	220			
Corrected Total	18434.836	219			

a. R Squared = .669 (Adjusted R Squared = .656)

Table 9 reveals that there was no significant effect of interaction of collaborative instructional strategy, conventional lecture method, sex and location on the academic performance of Social Studies students, $F(4, 211) = 0.958$, $P(0.431) > 0.05$. Thus, the null hypothesis is accepted. Hence, there is no significant effect of interaction among collaborative instructional strategy, conventional lecture method, sex and location on the academic performance of Social Studies students. This suggests academic performance score as in relation instructional strategies is independent of the combine effect of sex and location.

Discussion of Findings

The major purpose of this study was to investigate the effect of collaborative instructional strategies on student performance. The first findings in this study is that students taught using collaborative instructional strategy had mean gain score significantly different from those students taught using conventional instructional strategy. Based on personal view it can be said that student taught with collaborative instructional strategy obtain a better score than those taught using lecture method, this instructional strategy helps the learners to learn within and among themselves which help them to gain a better knowledge and have more clarity of the content. This strategy enable student to have access to content materials, help to build classroom interaction and self-confidence. Based on this fact the study therefore reveals that the use of collaborative instructional strategy enhanced performance of student in Social Studies better than the conventional teaching method. This finding is in line with Mutai (2015) who found that collaborative, as a teaching strategy, affects the performance of students in English language. Yusuf, (2018), who found that students taught using collaborative instructional strategy had enhanced performance which made the students different and to outscore their counterparts in the other groups. The finding of this study contradict the study of Telima and Omeodu (2017) they reported that conventional instructional strategy was superior to collaborative instructional strategy in laboratory work.

The second finding shows that there is no significant difference in the performance of male and female students taught using collaborative instructional strategy and conventional lecturing instructional strategy in Social Studies. The study revealed that sex did not affect the performance when taught using collaborative and conventional lecturing instructional strategies in social studies. This can be said to an extent that when teachers introduced an innovative instructional strategy all students either male or female will be involved to learn within themselves and if the strategy is favourable it will positively influence the academic performance of students generally disregarding their sex. These findings agreed with the findings of Adamson (2017) who showed that sex of students did not have any significant effect on their interaction. This finding is also in line with that of Nnorom (2015) who found that there is no significant difference between the male and female students mean score. The finding contradicts the study of Adekunle (2017) who stated that there was a significant difference existed between male and female students' performance in WASSCE multiple choice test in biology.

The third finding of this study is a significant difference in the academic performance of urban and rural students taught using collaborative instructional strategy in Social Studies. Location has an effect on student performance when appropriately exposed to these innovative instructional strategies. The effect of location could be attributed to the fact that urban and rural areas have different levels of exposure which may have affected their academic performance even when innovative like collaborative strategy was used. However, location to an extent did determine the performance of students if appropriate instructional strategies and necessary facilities are provided and used by teachers. This finding is consistent with that of Owoeye and Yara (2019) who revealed that there was a significant disparity between academic attainment of students in rural and urban zones. The study also agreed with the study of Nnenna and Adukwu (2018) who revealed that the accomplishment means scores of learners in rural and urban school districts differed significantly, students in cities outperformed students in rural areas. This finding contradicts that of Alokun and Arijesuyo (2018) who found out location has no significant effect on student academic performance.

The fourth hypothesis of this study revealed that there was no significant effect of interaction of collaborative instructional strategy, conventional lecture method, sex and location on the academic performance of Social Studies students. The findings disagreed with the study of Banford (2018) who stated there is an interaction between the treatment based on urban and rural students of English language in secondary school.

CONCLUSION

From the results obtained in the study on the effects of collaborative instructional strategies in Social Studies, it was concluded that students taught Social Studies using collaborative instructional strategy performed better than their counterparts taught Social Studies using the conventional lecture method. The performance of male and female students taught using collaborative instructional strategy in Social Studies were marginally equal. The performance of urban students is marginally better than their rural counterparts taught using collaborative instructional strategy in Social Studies were marginally equal. Instructional strategy like collaborative instructional strategy and conventional lecture method, sex and location do not have significant interaction effect on students' academic performance.

Recommendations

The following recommendations are made, based on the findings of this study.

- 1 Social Studies teachers should endeavour to expose students to collaborative so as to promotes and encourages social interaction, active engagement in learning, self-motivation, learning by doing and learning by experience in the classroom.
- 2 Instructional strategies had no differential effects on male and female students' achievement in Social Studies. Hence, teachers should make teaching and learning of Social Studies free from sex unbiased.
- 3 Regular workshops, seminars and symposia on topics/concepts of the Social Studies curriculum should be organized from time to time through universities for Social Studies teachers in the secondary schools so that they would be exposed to the new strategies of teaching Social Studies. In such activities strategies such as blended and collaborative could be adopted.

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