

# Effects of Cooperative and Questioning Instructional Strategies on Academic Performance of Upper Basic Social Studies Students in Delta State

Etaneki, Akpesiri. Faith

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

**Abstract:** This study investigated the effects of cooperative and questioning strategies on academic performance of Upper Basic Social studies students in Delta State. Six hypotheses were formulated and tested at 0.05 level of significance. A quasi-experimental, equivalent pre-test, post-test, control group design using a 3x2x3 factorial design was adopted for the study. The population of this study comprises a total 77,295 Upper Basic 8 students in all the 471 public secondary schools in Delta State during the 2017/2018 session. The sample of the study was 204 Upper Basic 8 students randomly selected from three different schools. The selected schools were randomly assigned to three treatment group. Treatments were given to the three groups for four weeks. A Social Studies Achievement Test (SSAT) with reliability coefficient of 0.77 was used to measure students' performance before and after treatments. Data was analysed using T-test and Analysis of variance (ANOVA). The findings showed that: There is a significant difference in the academic performance of social studies students taught with cooperative instructional strategy and those taught with conventional lecturing method; There is a significant difference in the academic performance of social studies students taught with questioning instructional strategy and those taught with conventional lecturing method; There is no significant difference in the academic performance of social studies students taught with cooperative instructional strategy and those taught with questioning instructional strategy; There is a significant difference in the mean performance scores among the three group of students taught using cooperative, questioning and conventional lecturing instructional strategies; There is no significant difference in the performance of male and female students taught using cooperative instructional strategy, questioning instructional strategy and conventional lecturing instructional strategy in Social Studies; and there is no significant interaction effect of instructional strategies and students scoring ability on students' academic performance in Social Studies. Based on these findings, it was recommended among others, that Social Studies teachers should endeavour to expose students to cooperative and questioning instructional strategies so as to promote and encourage social interaction, active engagement in learning, self-motivation, learning by doing and learning by experience in the classroom.

**Keywords:** Cooperative strategy, questioning strategy, gender, Scoring Ability.

## I. INTRODUCTION

Education has been regarded as the process of transferring knowledge from trained persons with the necessary skills

to the persons with a desire to get informed. The goal of education in any nation is to provide in-depth knowledge, seek academic development, and educate students as well as to meet the national demands for human resource. The Nigeria system of education is geared towards producing individuals who will not only possess the capability to solve his problems but also contribute to the development of his society (Yusuf, 2014). Social Science Education as one of the branches of education is very imperative for useful living in any society particularly in the Nigeria society that is faced with different kinds of problems. Within the context of Social Science Education, Social Studies has been identified in the curriculum of our schools as one of the core subjects at the Junior Secondary School level, now known as Basic Secondary Education. It fosters new and integrated approaches at resolving societal and environmental issues (Osakwe, 2009). Social Studies is concerned with the study of people in society, in space and in time, and how they relate to one another and to the group to which they belong. It focuses on the promotion of civic competence, integration of knowledge skills and attitudes in resolving societal problems, issues and challenges (Osakwe, 2010). Mbang, Okobia and Oyibe, (2014) regards Social Studies as a discipline that is geared towards providing young people with opportunity for nurturing the virtues of self-realization, better human relationships, self and national unity, social and political advancement, scientific and technological development. Iyewarun (2009) stated that Social Studies when effectively taught has the potential to influence the intellectual, social and personal growth and development of the individual.

In spite of the importance of Social Studies in our educational system and considering its role in relation to societal values, problems, changing circumstances and democratic heritage students' performance in the subject shows growing decline in Junior Secondary School Certificate Examination (JSCE) now known as Basic Education Certificate Examination (BECE) in Delta State. Basic Education Certificate Examination is conducted for candidates in their third year of the upper basic education level schools, to transit from the ninth year of the basic education to the senior secondary school. In three successive years of 2015, 2016 and 2017, the number of candidates who sat for Basic Education Certificate Examination (BECE) in Delta State,

were 77,544, 76,112, and 77,295 respectively. 27140 representing 35% passed at credit level in the year 2015. In the year 2016, 28,922 representing 38% passed at credit level while only 23,188 representing 30% passed at credit level in 2017 (Ministry of Basic and Secondary Education Examinations Department, 2018). These results created a worry as each falling below 40%. Parents, educators and even the students themselves are desirous of better academic performance.

Over the years, many instructional strategies have been recognised and tried out. While many have been rejected as not suitable enough for learning at the secondary school level, a few are still being considered as relatively effective. Instructional strategies are known to contribute very significantly to cognitive attainments of students in various subject areas. Students are known to have developed intrinsic interest in a subject as a result of the teaching strategy used by the teacher in the subject. Several research reports (Inomesia, 2010; Yusuf, 2014) indicate that many teachers do not have the clear insight about the appropriate instructional strategy to enhance Social Studies teaching and development, thus Social Studies is being taught using only one particular instructional strategy- the lecture method (Inomesia, 2010). The lecture method is a teaching method in which the teacher presents a verbal discourse on a particular subject, theme or concept to the learners, the teacher deliver preplanned lessons to the students with little or no instructional aids (Nwagbo & Chikelu, (2011). Olowoye (2009) stated that the lecture method is the most prevalent teaching method some teachers often employed in teaching. Arends (2010) pointed out that though the lecture method facilitates the transmission of large amount of information to students in an efficient manner, it does not encourage students to participate actively in the learning process. In support of this Francisco, Nicoli and Trautmann (2008) stated that the lecture method seems to deprive students from taking charge of their own learning, hence student performance continues to decline in Social Studies due to lack of students' active participation in the teaching-learning process. In order to achieve the creativity and overall national development, teaching strategy that can motivate secondary school students for better performance in Social Studies is imperative. Social Studies teachers are therefore expected to possess the adequate pedagogical knowledge, capabilities and disposition needed to create the kind of learning experiences and school environment that are envisioned to favour learners towards meaningful, integrative, value-based, challenging and active instruction. In other words, teachers should employ teaching method that have its roots in constructivism that is method that will enable the learner construct his/her own understanding (Samba, Achir, & Ogbeba 2010). Among the strategies aimed at meeting the principles of constructivism and characterizing powerful Social Studies are cooperative and questioning instructional strategies.

Co-operative instructional strategy is a method of teaching in which students work together in small heterogeneous group to complete a problem, project or any other instructional goal, while teachers act as a guide or facilitator. This strategy is characterized by the following: Learners positively depend on each other, engage in face to face interaction, assessed individually and held accountable for equally sharing and contributing to the mastery of learning goals, develop appropriate collaborative and interpersonal skills to teach and encourage each other to learn and reflect and assess the effectiveness of growing, for future learning (Uwameiye, 2016). Cooperative instructional strategy has become popular due to many reasons. cooperative instructional strategy adds variety to the teacher's repertoire. It helps teachers manage large classes of students with diverse needs. It improves academic achievement and social development. It prepares students for increasingly interactive workplaces. However, one of its most powerful, long-lasting effects may be in making school a more humane place to be by giving students stable supportive environments for learning. Teachers who teach social studies content through cooperative instructional strategy promote learning because such strategy produce greater academic learning and better inter-group relationships among diverse ethnic and ability groups. In contrast to conventional lecturing method learning environments, a cooperative instructional strategy is structured so that all members of the group dependent on each other to complete an assignment successfully. The result is a group product and the group as a whole shares the reward. Studies of cooperative learning experiences shared by ethnically or otherwise mixed groups consistently indicate numerous positive cognitive and affective outcomes. These include enhanced academic learning, improved self-esteem and more frequent social interactions among majority/minority member outside of the learning group, enhanced feelings of trust and acceptance by peers and teachers, expression of more altruistic feelings, and increased acts of cooperative behavior in other settings (Brandt and Meek, as cited in Yusuf, 2014)

Questioning is a major form of human thought and interpersonal communication. It involves employing a series of questions to explore an issue, an idea or something intriguing. Questioning is the process of forming and wielding that serves to develop answers and insight. Arslan (2016) consider questioning as an important form of instructional strategy as it act as motivational stimuli and has arousal and associative outcome. Questioning method help the teacher to keep student actively involved in lessons, have the opportunity to openly express their idea and thoughts. Questioning instructional strategy is one of the primary and most influential teaching method that teachers use to enhance teaching and leaning in the classroom (Cotton, 2009). Studies Edwards and Bowman (2016) shows that questioning instructional strategy is an indispensable part of classroom interaction.

According to Aagard (2013) teacher questioning is an important part of classroom teaching and learning and is the only short way to gauge what student know and learn. In other words, one of the teachers' primary instructional strategies consists of using different types of questioning to determine whether students understand. The dynamic classroom communication influence students' perceptions and participation in classroom activities. Questioning instructional strategy enable the teacher to monitor and adjust the patterns of classroom communication in order to create an environment that is conducive to both classroom learning and knowledge acquisition. In classroom settings, questioning is an instructional cues or stimuli that convey to students the content elements to be learned and directions for what they are to do and how they are to do it. Questioning instructional strategy has been shown to be an important and integral part of learning, and questions asked by teachers can become indices of quality teaching. Through the use Questioning instructional strategy teachers elicit students' explanations, elaborations of previous answers and ideas, and predictions that contradict students' intuitive ideas about natural phenomena. Questioning instructional strategy enables a teacher to provoke students thought and creative thinking (Roth, 1996).

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

#### *Statement of the Problem*

In recent times the teaching and learning of Social Studies have been faced with numerous problems that is capable of impeding the realization of its objectives. One of such problems is the low academic performance. Over the years, student performance in Social Studies have been so low that Social Studies has the highest percentage failure and the lowest percentage pass at the Basic Education Certificate Examination (BECE) for the past 3years (2015-2017) at the upper basic education level (Ministry of Basic and Secondary Education Examinations Department, 2018). This could be as a result of the teachers' use of ineffective methods and strategies in Social Studies teaching which among other factors have contributed to the students' poor academic performance at the upper basic education level. The available literature on methods of teaching in Social science education suggests the need to employ new and innovative teaching strategy such as cooperative instructional strategy and questioning. Therefore, the problem of this study is posed as a question; "what will be the effects of cooperative instructional strategy and questioning instructional strategy on upper basic eight Social Studies students' academic performance in Delta State?"

#### *Purpose of the Study*

The main purpose of this study is examined the effect of cooperative instructional strategy and questioning instructional strategy on academic performance of upper Basic Social Studies students in Delta State. Specifically, the study sought to:

1. Find out whether Upper Basic Social Studies students taught with cooperative instructional strategy perform better than those taught with conventional lecturing instructional strategy.
2. Ascertain whether Upper Basic Social Studies students taught with questioning instructional strategy perform better than those taught with conventional lecturing instructional strategy.
3. Ascertain whether Upper Basic Social Studies students taught with cooperative instructional strategy perform better than those taught with questioning instructional strategy.
4. Determine the difference in the mean performance scores among the three groups of upper Basic Social Studies students taught using cooperative instructional strategy, questioning instructional strategy and conventional lecturing instructional strategy.
5. Find out if there is a significant difference in the performance of male and female upper Social Studies students taught using cooperative instructional strategy and questioning instructional strategy.
6. Ascertain the interaction effect of instructional strategies and scoring ability on students' academic performance in Social Studies.

#### *Hypotheses*

The following null hypotheses were formulated to guide the study and tested at 0.05 level of significance.

Ho<sub>1</sub>: There is no significant difference in the academic performance of Social Studies students taught with cooperative instructional strategy and those taught with conventional lecturing instructional strategy.

Ho<sub>2</sub>: There is no significant difference in the academic performance of Social Studies students taught with questioning instructional strategy and those taught with conventional lecturing instructional strategy.

Ho<sub>3</sub>: There is no significant difference in the academic performance of Social Studies students taught with cooperative instructional strategy and those taught with questioning instructional strategy.

Ho<sub>4</sub>: There is no significant difference in the mean performance scores among the three groups of Social Studies students taught using cooperative instructional strategy, questioning instructional strategy and conventional lecturing instructional strategy.

Ho<sub>5</sub>: There is no significant difference in the performance of male and female students taught using cooperative instructional strategy, questioning instructional strategy and conventional lecturing instructional strategy in Social Studies.

Ho<sub>6</sub>: There is no significant interaction effect of instructional strategies and students scoring ability on students' academic performance in Social Studies.

#### *Significance of the study*

The outcome of this study may be of immense benefit to teachers, students, curriculum planner, Ministry of Education, school administrators and researchers.

The outcome of this study may be of benefit to teachers as it may awaken their consciousness on the efficacy of the utilization of cooperative instructional strategy and questioning instructional strategy in the teaching of Social Studies. It may enable the current serving teachers to see the need to undergo in-service training on how to use these methods for effective teaching of Social Studies. The outcome of the study may be of benefit to teacher as it will open opportunities to the teachers to wisely choose from the two instructional strategies, the one that will enhance teachers' productivity than the other.

The result of this study will serve as a reference point for Curriculum planners as it may enable them to plan towards a robust and effective implementation Social Studies curriculum. The outcome of the study may be of benefit to ministry of Education particularly federal ministry of Education as it may help her to determine the appropriate method of teaching social studies, to watch out for when planning harmonized universal Basic Scheme of work.

The study may be of benefit to the student. Student performance may be enhanced since the teacher who would come across the study must have benefitted from how any of the two strategies may better improved the performance of the teachers. On the part of school administrators, the study may enable them to know the value of this instructional strategy so as to encourage teacher to update their knowledge and skills through seminars, workshop and conferences.

The study may be useful to researchers in the field of Social Studies, the result of finding conclusion, recommendation drawn in the study may help in their future investigation. The relevant information contained in this study has become a source for their reference and could inspire as new strategy for studying issues affecting the improvement of test scores achievement in Social Studies in particular and other areas of discipline in general in the educational system.

#### *Scope and Delimitation of the Study*

This study is set to determine the effect of cooperative instructional strategy and questioning instructional strategy on academic performance of upper basic II Social Studies students in Delta State. The study covered instructional strategies at three treatment levels such as cooperative instructional strategy (experimental), questioning instructional strategy (experimental) and conventional teaching instructional strategy (control) in relation to gender and students scoring ability. The study covered all the public secondary schools in the three senatorial districts of Delta State. The study was however delimited to three Secondary Schools, one each from each of the three senatorial districts of Delta State.

## II. METHOD AND PROCEDURE

A quasi-experimental, equivalent pre-test, post-test, control group design using a 3x2x3 factorial design was adopted for the study. The population of this study comprises a total 77,295 upper basic eight students in all the 471 Delta State Public Secondary Schools for the 2017/2018 session. The choice of upper basic eight as population for the study was because the upper basic nine is considered too busy preparing for the Basic Education Certificate Examination (BECE) and upper basic seven is considered not matured enough since they are still fresh in the system. The sample was 204 upper basic eight students from three purposively selected secondary schools in Delta state. The three different schools selected were randomly assigned to the various group: Cooperative instructional strategy; Questioning strategy and conventional lectures method as control. Each group consisted of 68 students making a total of 204 sampled students. Treatments were given to the three groups for four weeks. A Social Studies Achievement Test (SSAT) with reliability coefficient of 0.77 was used to, measure students' performance before and after treatments. The student's pre-test and post test scores were analysis using Mean, Standard deviation, T-test and Analysis of variance (ANOVA).

## III. RESULT AND DISCUSSION OF FINDINGS

Data in this study were analysed in line with the hypotheses formulated for the study. The results were presented in Table one to six.

#### *Testing of Hypotheses*

Ho<sub>1</sub>: There is no significant difference in the academic performance of social studies students taught with cooperative instructional strategy and those taught with conventional lecturing method.

Table 1: T-Test Comparison of the Pretest and Post-Test Academic Performance of Social Studies Students taught with Cooperative Instructional Strategy and those taught with Conventional Lecturing Method.

	Instructional strategies	N	Mean	SD	df	t-cal.	t-crit.	Alpha level.	Remark
Pretests	Cooperative	68	4.98	2.17	134	0.81	1.98	0.05	Not significant
	Conventional Total	68 136	4.69	2.07					
Post-test	Cooperative	68	19.48	5.18	134	10.27	1.98	0.05	Significant
	Conventional Total	68 136	11.68	3.54					

Table 1 shows that the experimental (cooperative instructional strategy) group pretest and post test mean scores are 4.98 and 19.48 with standard deviation scores of 2.17 and 2.67 respectively. Also, the control group (conventional lecturing method) has pretest and post test mean scores as 4.69 and 11.68 with standard deviation scores of 2.07 and 3.54 respectively. This gives t-value calculated as 0.81 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 was 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.

However, in the post test analysis the calculated t-value (10.266) is greater than the critical t-value (1.98) ( $t=10.266$ ,  $df=134$ ,  $\alpha$  level=0.05). The null hypothesis was

therefore rejected. This implies that there is a significant difference in the academic performance of social studies students taught with cooperative instructional strategy and those taught with conventional lecturing method. This indicates that there is a significant difference between the mean performance scores of the experimental group (19.48) and the control group (11.68) at 0.05 level of significant. Consequently, it could be deduced from the study that the use of cooperative instructional strategy enhanced the performance of student in social studies better than the conventional lecturing method.

$H_{02}$ : There is no significant difference in the academic performance of social studies students taught with questioning instructional strategy and those taught with conventional lecturing method

Table 2: T-test Comparison of the Pretest and Post-test Performance of Social Studies Students taught with Questioning Instructional Strategy and those taught with Conventional Lecturing Method

	Instructional strategies	N	Mean	SD	df	t-cal.	t-crit.	Alpha level.	Remark
Pretests	Questioning	68	5.01	1.98	134	0.93 <sup>ns</sup>	1.98	0.05	Not significant
	Conventional Total	68 136	4.69	2.07					
Posttest	Questioning	68	18.78	4.33	134	10.47 <sup>s</sup>	1.98	0.05	Significant
	Conventional Total	68 136	11.68	3.54					

Table 2 shows that the experimental pretest and post test mean scores are 5.01 and 18.78 with standard deviation scores of 1.98 and 4.33 respectively. Also, the control group has pretest and post test mean scores as 4.69 and 11.68 with standard deviation scores of 2.07 and 3.54 respectively. The mean performance gain for the treatment group was 13.76 while the mean gain in the control group was 6.98. The mean gain score of students taught using cooperative instructional strategy is greater than students in questioning instructional strategy. This shows that there is difference in the academic performance of Social Studies students taught with questioning instructional strategy and those taught with conventional lecturing method. Questioning instructional

strategy enhances students' academic performance better than the conventional lecturing method. This gives t-value calculated as 0.93 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.

However, in the post test analysis the calculated t-value (10.47) is greater than the critical t-value (1.98) ( $t=10.47$ ,  $df=134$ ,  $\alpha$  level = 0.05 level). The null hypothesis was therefore rejected. This implies that there is a significant difference in the academic performance of

social studies students taught with questioning instructional strategy and those taught with conventional lecturing method. This indicates that there is significant difference between the mean performance scores of the experimental group (18.78) and the control group (11.68) at 0.05 level of significant. Consequently, it could be deduced from the

study that the use of questioning instructional strategy enhanced the performance of student in social studies better than the conventional lecturing method.

Ho<sub>3</sub>: There is no significant difference in the academic performance of social studies students taught with cooperative and those taught with questioning instructional strategy.

Table 3: T-test Comparison of the Pretest and Post-test Performance of Social Studies Students taught with Cooperative and those taught with Questioning Instructional Strategies

	Instructional strategies	N	Mean	SD	df	t-cal.	t-crit.	Alpha level.	Remark
Pretests	Cooperative	68	4.98	2.17	134	-0.08 <sup>ns</sup>	1.98	0.05	Not significant
	Questioning Total	68 136	5.01	1.98					
post-test	Cooperative	68	19.48	5.18	134	0.86 <sup>ns</sup>	1.98	0.05	Significant
	Questioning Total	68 136	18.78	4.33					

Table 3 shows that the experimental pretest and post test mean scores are 4.98 and 19.48 with standard deviation scores of 2.17 and 2.67 respectively. Also, the questioning group has pretest and post test mean scores as 5.01 and 18.78 with standard deviation scores of 1.98 and 4.33 respectively. The mean performance gain for the treatment group was 14.50 while the mean gain in the control group was 13.76. This gives t-value calculated as -.082 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.

In the post test analysis, the calculated t-value (0.86) is also less than the critical t-value (1.98) (t=0.86, df=134, alpha level=0.05). The null hypothesis was therefore accepted. This implies that there is no significant difference in the academic performance of social studies students taught with cooperative instructional strategy and those taught with questioning instructional strategy. The two groups were found to be marginally equivalent after the treatment. This indicates that both cooperative and those taught and questioning instructional strategy enhances student’s performance.

Ho<sub>4</sub>: There is no significant difference in the mean performance scores among the three groups of Social Studies students taught using cooperative instructional strategy, questioning instructional strategy and conventional lecturing instructional strategy.

Table 4: Analysis of Covariance (ANCOVA) Students taught using Cooperative, Questioning and Conventional Lecturing Instructional Strategies in Delta State

Source	Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2537.029	2	1268.515	65.519	.000
Intercept	56533.412	1	56533.412	2919.965	.000
Instructional strategies	2537.029	2	1268.515	65.519	.000
Error	3891.559	201	19.361		
Total	62962.000	204			
Corrected Total	6428.588	203			

Table 4 result show that F (65.519) is significant at .000 for the methods, at 2 and 203 degree of freedom (DF). This is because 0.000 is less than 0.05 significant level set for the hypotheses,  $F(2, 201) = 65.519, p < 0.0001$ . Hence, Ho<sub>4</sub> is not accepted. There is a significant difference in the mean performance scores among the three groups of Social Studies students taught using cooperative instructional strategy,

questioning instructional strategy and conventional lecturing instructional strategy.

Ho<sub>5</sub>: There is no significant difference in the performance of male and female students taught using cooperative instructional strategy, questioning instructional strategy and conventional lecturing instructional strategy in Social Studies.

Table 5: Analysis of Covariance (ANCOVA) of Performance of Male and Female Social Studies Students taught using Cooperative, Questioning and Conventional Lecturing Instructional Strategies in Delta State.

Source	Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	2550.824	5	510.165	26.049	.000
Intercept	56533.412	1	56533.412	2886.615	.000
Treatment Methods	2537.029	2	1268.515	64.771	.000
Gender	9.490	1	9.490	.485 <sup>ns</sup>	.487
Treatment Methods * Gender	4.304	2	2.152	.110	.896
Error	3877.765	198	19.585		
Total	62962.000	204			
Corrected Total	6428.588	203			

ns- not significant

Table 5 shows  $F(485)$  is not significant at .487 for the gender at 1 and 203 degree of freedom (df). This is because 0.487 is more than 0.05 significant earlier set for hypothesis.  $F(1, 203) = 0.485, p = .487$ . Therefore, the hypothesis Ho5 is accepted. That is there is no significant difference in the performance of male and female students taught using cooperative instructional strategy, questioning instructional strategy and conventional lecturing instructional

strategy in Social Studies. This indicates that gender did not mediate on the 'performance when taught using cooperative, questioning and conventional lecturing instructional strategy in social studies.

Ho<sub>6</sub>: There is no significant interaction effect of instructional strategies and students scoring ability on students' academic performance in Social Studies.

Table 6: Analysis of Covariance (ANCOVA) of the Interaction Effect of Instructional Strategies and Students Scoring Ability on Students' Academic Performance in Social Studies.

Source	Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	69.955	6	11.659	0.502	.806
Intercept	5029.663	1	5029.663	216.444	.000
Pretest	15.756	1	15.756	0.678	.412
Instructional strategies	9.639	1	9.639	0.415	.521
Scoring ability	32.196	2	16.098	0.693 <sup>ns</sup>	.502
Instructional strategies * scoring ability	2.758	2	1.379	0.059 <sup>ns</sup>	.942
Error	2997.663	129	23.238		
Total	52850.000	136			
Corrected Total	3067.618	135			

ns- not significant

Table 6 revealed that the treatment with cooperative instructional strategy and questioning instructional strategy did not produce statistical significant difference on the mean gain scores of the low, medium and high - scoring students,  $F(2, 135) = 0.693, p = .502$ . The table also indicated non-significant interaction effect of instructional strategies and scoring ability on students' academic performance  $F(2, 135) = 0.059, p = .942$ . This is because the significance of p-value is greater than 0.05. The null hypothesis was not rejected. This means that there is no significant interaction effect of instructional strategies and students scoring ability on students' academic performance in Social Studies.

#### IV. DISCUSSION ON FINDINGS

The major purpose of this study was to investigate the effect of cooperative instructional strategy and questioning on student performance. The first findings in this study is that the students taught using cooperative instructional strategy had mean gain score significantly different from those students taught using conventional instructional strategy. The finding revealed that students' performance was better enhanced when students were taught using cooperative instructional strategy. This finding is in line with Yusuf, (2014), who found that students taught using cooperative instructional strategy had enhanced performance which made the students different and to outscore their counterparts in the other groups. The finding of this study on the superiority of

cooperative instructional strategy is however contrary to the finding of Johnson and Johnson (1992) who reported that conventional instructional strategy was superior to cooperative instructional strategy in laboratory work. The second findings of this study also shows that the students taught using questioning instructional strategy had mean gain score significantly different from those students taught using conventional instructional strategy. the study reveals that the use of questioning as instructional strategy enhanced performance of student in social studies better than the conventional teaching method. This findings is in line with Mutai (2012) who found that oral questioning, as a teaching strategy, affects the performance of students in English language. The third finding in this study shows that there is no significant difference in the academic performance of social studies students taught with cooperative and those taught with questioning instructional strategy. The performance score of students were equally enhanced by cooperative instructional strategy and questioning strategy. This shows that both strategies are students centre and relevant tool to facilitate classroom discussion in the classroom.

The result of this study also indicates that there is a significant difference in the mean performance scores among the three groups of Social Studies students taught using cooperative instructional strategy, questioning instructional strategy and conventional lecturing instructional strategy. This finding is in accordance with that of Aluko and Olorundare (2010) and Adeyemi (2018) that indicate that a significant difference in the performance of chemistry students exposed to cooperative instructional Strategy, discussion instructional strategy, questioning instructional strategy and conventional teaching method. The study further shows that there is no significant difference in the performance of male and female students taught using cooperative instructional strategy, questioning instructional strategy and conventional lecturing instructional strategy in Social Studies. The study revealed that gender did not mediate on the 'performance when taught using cooperative, questioning and conventional lecturing instructional strategy in social studies. These findings agreed with the findings of Adamson (1997) and Ojo (1997). According to their findings, gender did not have any significant effect on their interaction. This finding is also in line with that of Nnorom (2015) who found that that there is no significant difference between the male and female students mean score on BAT

Lastly, the study shows that there is no significant interaction effect of instructional strategies and students scoring ability on students' academic performance in Social Studies. The study corroborated that of Yusuf (2014) that there was no statistically significant difference in the performance of students on the basis of scoring ability in the treatment group using cooperative instructional strategy. This finding however disagreed with Okebukola (1985) who

observed that scoring ability had influence on students when taught using cooperative instructional strategy.

## V. CONCLUSION

From the results obtained in the study on the effects of cooperative instructional strategy and questioning in Social Studies, it was concluded that:

- Students taught Social Studies using cooperative instructional strategy performed better than their counterparts taught Social Studies using the conventional lecture method.
- Students taught Social Studies using questioning instructional strategy performed better than their counterparts taught Social Studies using the conventional lecture method.
- The academic performance of social studies students taught with cooperative instructional strategy and those taught with questioning instructional strategy are marginally the same.
- Among the three groups of Social Studies students taught using cooperative instructional strategy, questioning instructional strategy and conventional lecturing instructional strategy, Students taught Social Studies using cooperative instructional strategy questioning instructional strategy performed better than their counterparts taught Social Studies using the conventional lecture method.
- The performance of male and female students taught using cooperative instructional strategy, questioning instructional strategy and conventional lecturing instructional strategy in Social Studies were marginally equal.
- Instructional strategies (cooperative instructional strategy and questioning instructional strategy) and scoring ability (low, medium and high ability ) do not have significant interaction effect on students' academic performance.

## VI. RECOMMENDATIONS

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

- Social Studies teachers should endeavour to expose students to cooperative instructional strategy and questioning so as to promotes and encourages social interaction, active engagement in learning, self-motivation, learning by doing and learning by experience in the classroom.
- The curriculum planners should ensure that they incorporate cooperative instructional strategy and questioning instructional strategy in Social Studies curriculum, as it will help to promote students' academic performance in the subject.
- 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 gender unbiased.

- In view of the fact that both cooperative instructional strategy and questioning instructional strategy were more effective in teaching Social Studies and enhancing student's academic performance, the Ministries of Education should ensure that textbook authors incorporate both cooperative instructional strategy and questioning instructional strategy in the instructional methods for secondary schools.
- 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 cooperative and questioning could be adopted.

#### ACKNOWLEDGEMENTS

This research was produced from the author's unpublished master dissertation "effect of cooperative instructional strategy and questioning instructional strategy on academic performance of upper basic social studies students in Delta State", a research carried out in the Department of Social Science Education (Social Studies, Unit), Faculty of Education Delta State University, Abraka.

#### REFERENCES

- [1] Aagard, S. A. (2013). Oral questioning by the teacher: Influence on student achievement in eleventh grade chemistry. *Dissertation Abstracts International*, 34, 63A.
- [2] Abakpa, B. O. & Iji, C. O. (2011). Effect of mastery learning approach on senior secondary school students' achievement in geometry. *Journal of Science Teachers Association of Nigeria*, 1(2), 34-35
- [3] Abdullah, A.M. (2010). The effect of co-operative learning on the academic achievement and retention of the Mathematics concepts at the primary school in Holy Makkah. *Journal of Kind Saud University*, 22(2), 13 – 23.
- [4] Adeyemi, B.A.(2018). Relative effects of discussion and questioning instructional strategies on middle school students' social studies learning outcomes in Osun State, Nigeria. *Journal of CUDIMAC*, 5 (1), 40-50
- [5] Ajaja, O. P & Eravwoke, O.U. (2010). Effects of cooperative learning strategy on junior secondary school students' achievement in integrated science, *Electronic Journal of Science Education*, 14(1), 1-18
- [6] Aluko, K.O.& Olorundare, A.S.(2010). Effects of cooperative and individualistic instructional strategies on students' problem solving abilities in secondary school chemistry in Ilesa, Nigeria. *African Research Review* 1(1), 1-8
- [7] Arends, R.(2010) *Learning to teach*. New York, NY: McGraw-Hill, Inc.
- [8] Arslan, M. (2016). The role of questioning in the Classroom. *Hasan Ali Yücel Eğitim Fakültesi Dergisi* Sayı 81-103
- [9] Cotton, K (2014). *Monitoring student learning in the classroom*. Portland, OR: Northwest Regional Educational Laboratory.
- [10] Dania, P.O. (2014). Effect of gender on students' academic achievement in secondary school social studies. *Journal of Education and Practice*, 5(21), 78-84
- [11] Edwards, S., & Bowman, M. A. (1996). Promoting student learning through questioning: A study of classroom questions. *Journal on Excellence in College Teaching*, 7 (2), 3-24.
- [12] Inomesia, E.A. (2010). *Teaching of science in Nigerian secondary schools: the beginning, the present and the future*. being a lecture delivered at the twentieth in the series of inaugural lectures of Delta State University, Abraka: University Press.
- [13] Johnson, D.W. & Johnson R.T. (1999). *Learning together and alone. Co-operative competitive and individualistic learning*. Boston, M.A. Allyn and Bacon.
- [14] Mbang, E. B., Okobia, A. O. & Oyibe, O. A.(2014). Effective pedagogy for teaching of social studies and civic education in junior secondary schools in cross River State. *Nigerian Journal of Social Studies and Civic Education*, 6 (2), 174-182.
- [15] Mutai, N.C. (2012). A critical review of oral questioning technique in secondary school English language teaching in Eldoret Municipality, Kenya. *Journal of Emerging Trends in Educational Research and Policy Studies*, 3(3), 323-330.
- [16] Nnorom, N.R. (2015). Effect of cooperative learning instructional strategy on senior secondary school students' achievement in Biology in Anambra State, Nigeria. *International Journal for Cross-Disciplinary Subjects in Education (IICDSE)*, 5 (1). 2424-2427.
- [17] Olowoye, B. (2009). Comparative study of the effect of study technology mode of instruction on the academic performance of university students in Nigeria: Implication for academic staff capacity development. *Int. J. of Research in Education*, 6(1&2). 28-43
- [18] Onyejekwe, A.N. (2016). The differential effects of three teaching methods on senior secondary students' achievement and interest in history. Unpublished doctoral thesis, faculty of Education, University of Nigeria, Nsukka.
- [19] Osakwe, E. (2009). *Navigating the nation through today's shame to tomorrow's fame: Social Studies as pilot*. 17th in the series of Inaugural Lectures Delta State University, Abraka.
- [20] Osakwe, E. (2010). *Social Studies and integrated national development in Nigeria*. Ibadan: Kraft Books Limited.
- [21] Roth, W. M. (1996). Teacher Questioning in an Open-Inquiry Learning Environment: Interactions of Context, Content, and Student Responses. *Journal of Research in Science Teaching*, 33, 709-736
- [22] Samba, R. M. O., Achir, E. E. & Ogbeba, J., (2010). Teacher awareness and utilization of innovative teaching strategies in Benue state. *Nigeria Educational Research* 1(2) 032 – 038.
- [23] Uwameiye, B.E, (2016). Co-operative learning strategy and students 'academic Achievement in Home Economics. *International Journal of Academic Research in Progressive Education and Development*.5(2), 120-127.
- [24] Uwameiye, R. & Aduwa-Ogiegbaen, S. E. O. (2006). Effect of reciprocal peer tutoring on the academic achievement of students in Introductory Technology. *International Journal of Instructional Technology and Distance Learning*, 3(6), 41-47.
- [25] Yamane, T. (1967). *Statistics, An introductory analysis*, 2nd Ed., New York: Harper and Row.
- [26] Yusuf, A. (2014). Effect of cooperative instructional strategy on students' performance in Social Studies. *Journal of Arts and Social Sciences Education*. 1(1). 1-8.
- [27] Yusuf, A., Muhinat B. B., & Adesegun, O. O. (2018). In search of a more effective strategy: Using the 5E instructional strategy to teach Civic Education in senior secondary schools in Ilorin, Nigeria. *Journal of International Social Studies*, 8(1), 62-85
- [28] Yusuf, M. O., Gambari, A.I. & Olumori, C. O. (2012). Effectiveness of computer-supported cooperative learning strategies in learning physics. *International J. Soc. Sci. Education*, 2(2), 94-109. Available online at <http://www.ijssse.com>