

Effect of Cooperative Learning Strategy on Students Performance in Social Studies

Ajaja, Raphael & Dr. Mezieobi S.A.

Department of Curriculum Studies and Educational Technology
University of Port Harcourt, Rivers State

Abstract

This study investigated the effect of cooperative learning strategy on Students' performance in Social Studies. The study adopted a quasi-experimental research design. The sample for the study consisted of one hundred and twenty-two (122) Junior Secondary School II Social Studies students, selected from two secondary schools in Obio/Akpor Local Government Area, Rivers State. The instrument for data collection was a multiple type objective test titled: Social Studies Performance Test (SSPT). The instrument was validated by two experts and had a reliability index of 0.87 obtained through the use of Pearson product moment correlation. Two research questions and two hypotheses were formulated to guide the study. The collected data were analyzed using adjusted mean and standard deviation to answer the research questions, while Analysis of Covariance (ANCOVA) was used to test the null hypothesis at alpha level of 0.05. The result of the study showed that students performed highly using cooperative learning instructional strategy irrespective of ability level. The results of the study also indicated that both the male and female students benefitted equally from the cooperative learning strategy. Based on the findings and the conclusion of the study, it was recommended that Social Studies teachers should adopt cooperative learning strategy as an effective learning strategy in order to improve students' performance, social interaction skills and foster meta-cognition in students. Also, the school management should organize workshops and seminars to expose teachers and students constantly to the use of the strategy for maximum school output.

Keywords: *Cooperative learning strategy, Students' performance, Social Studies.*

Introduction

Social Studies is an integrated subject that is geared towards equipping an individual with basic knowledge, skills, attitudes and values needed in guiding him/her in solving personal and societal problems. It aims at producing a responsible citizen who is well informed, concerned, participatory, reflective, productive and willing to contribute to national development (Mezieobi, 2014). Njok and Sunday (2014) shared the same opinion when he stated that the purpose of Social Studies succinctly is to develop reflective, competent and concerned citizen. As such, the main task of the Social Studies teacher is to ensure that students understand and make meaning out of whatever they learn in class.

The broad objectives of Social Studies in Nigeria is to give direction to effective instruction and to develop a capacity to acquire certain basic skills essential for forming sound judgment and to ensure the acquisition of relevant body of knowledge and information which is an essential pre-requisite to personal development and positive contribution to the betterment of the society as a whole (Okobia, 1985). The realization of these broad objectives lies in the quality of instruction at schools, which explains the rationale on which the teaching of Social Studies as a discipline in the Nigerian schools is conceived.

However, the review on students' achievement in Social Studies in Junior Secondary School Certificate Examination (JSSCE) showed that students' performance in Social Studies

was poor (Opoh, Adams & Akai, 2017). This persistent failure was blamed on constant usage of traditional method by Social Studies educators (Mezieobi, 2014), since the introduction of the subject into the Nigerian school curriculum. The limitation experienced with the traditional teacher-centred methods led to the development of innovative strategies of teaching Social Studies like cooperative learning strategy.

Cooperative learning is a teaching strategy that organizes students in small groups so that they can work together to maximize the learning of others. In particular, the cooperative learning approach to education is the place where students are organized in pairs or in small groups to help each other in learning the assigned material (Trowbridge, Bybee, & Powell, 2000; Ajaja and Eravwoke, 2012). Akinbobola (2008) also defined cooperative learning as a way of learning in which students of different ability levels work together in small groups to achieve a goal. It involves the use of a variety of learning activities to improve the understanding of a topic. Students in a group interact with each other, share ideas and information, seek for additional information and make decisions about their discoveries for the whole class. There are four basic elements in the cooperative learning strategy. These basic elements include: (1) small groups must be structured for positive interdependence; (2) there must be face-to-face interactions, (3) individual responsibility and (4) use of interpersonal skills and small groups. It is known that cooperative learning actively involves students in the learning process and seeks to improve the critical thinking, reasoning and problem solving skills of the learner (Borich, 2004).

Jacobson and Baribor (2012) reiterated that group work arouse students' learning interest, cultivate their exploring ability and creative thinking and improve their team spirit and social communication skills. Group work can help students become more active in their learning. When working with peers in a group, students are encouraged to articulate their ideas and question the ideas of others. According to Şimek, Byilar and Kucuk (2013), cooperative learning is a process aimed at facilitating the achievement of a specific end product or objective through people working together in groups. Similarly, Ruel and Bastianns (2003) see cooperative learning as a method of instruction that allows students the independence of the use of mental processes to contribute to knowledge. Naseem and Bano (2013) believe that when students of different cognitive, intellectual and physical levels are exposed to solving a given task, they have the opportunity to interact and work as a team. They say it improves learning attitudes, interpersonal skills and the concept of self. Teacher dependency also decreases. Therefore, the teacher's role changes from providing information to facilitating student learning. Therefore, the teacher remains in the background and becomes a guide, a facilitator, an illuminator or a "torch bearer". The tasks of cooperative learning are usually intellectually demanding, creative, open and involve higher-order thinking tasks. Cooperative learning can therefore give weak students the opportunity to learn and achieve the maximum (Ajaja, 2018). Furthermore, cooperative learning involves group work among students, resulting in positive interdependence. Typically, in cooperative learning, academic assignments are structured or divided so that everyone can participate fairly and all students are responsible (Candler, 2013).

It has been found that cooperative learning is very useful in different areas, prominent among them are: (i) helping students to acquire from the curriculum the basic cooperative attitudes and values they need to think independently inside and outside the classroom (Borich, 2004). Steven and Slavin (1995) stressing the importance of cooperative learning and noted that if all the above benefits of cooperative learning were not sufficient, the fact that it was related to the increase in students' academic performance at all ability levels is another reason

for its use. Obviously, cooperative learning actively involves students in the learning process and seeks to improve their critical thinking, reasoning and problem-solving skills (Webb, Trooper & Fall, 1995).

A review of the studies on the effects of cooperative learning on student performance indicated that all researchers made similar findings. Ajaja (2018), Crosby and Owens (1993), Bramlett (1994), Steven and Slavin (1995), Mégnin (1995), Webb, Tropper and Fall (1995) found that the cooperative learning is not limited to a particular ability level or sex, but to all who engage in it. Similarly, Glassman (1989) and Johnson, Johnson and Stanne (1986) found that cooperative learning emphasizes status and respect for all members, regardless of gender. More importantly, the study by Crosby and Owens (1993) found that different cooperative learning strategies can be employed to help low ability students to improve achievement, who had difficulties making success in the traditional classroom. Ajaja and Eravwoke (2012) reaffirmed the ability of cooperative learning when used as an instructional strategy to bring about significant improvement in students achievement in school science subject and a non-significance in achievement scores between male and female students in the cooperative learning group.

Statement of the problem

The study was necessitated by the declining performance in Social Studies education at the junior secondary school level in Nigeria. This abysmal performance was attributed to wrong use of teaching approaches in Social Studies such as traditional method. This attitude contributed to the ineffective teaching and learning of the subject. Therefore, the present study intends to determine if cooperative learning strategy has varying effect on students' performance in Social Studies?

Aim and Objectives of the Study

The aim of the study was to examine the effect of cooperative learning strategies on students' performance in Social Studies.

Specifically, the study sought to:

1. Examine the effect of cooperative learning strategy on the academic performance of students in Social Studies.
2. Compare the effects of cooperative learning strategy on the academic performance of male and female students in Social Studies.

Research Questions

1. What are the mean achievement scores of students taught Social Studies using cooperative learning strategy and those taught using traditional method?
2. What are the mean achievement scores of male and female students taught Social Studies using cooperative learning strategy

Research Hypotheses

1. There is no significant difference between the mean achievement score of students taught Social Studies using cooperative learning strategy and those taught using traditional method.
2. There is no significant difference between the mean achievement score of male and female students taught Social Studies using cooperative learning strategy.

Methodology

The design of the study is quasi experimental group design. Specifically, the non-equivalent control group design. The design is considered appropriate because it establishes a cause-effect relationship between the independent variable (strategy) and the dependent variable (achievement). This design was adopted because it was possible to have a complete randomization of the subjects. Thus, intact classes were used as experimental and control groups, since it is not possible to disrupt existing classes in a school. The population of the study consists of all the 5689 junior secondary two (JSS II) Social Studies students in the state owned secondary schools in Obio/Akpor Local Government Area, Rivers State. A total of 122 junior secondary two (JSSII) Social Studies students consisting of (52) male and (71) female students constituted the sample for the study, through purposive sampling technique. Data was collected through Social Studies Performance Test (SSAT), which consist of twenty-five (25) multiple choices objective questions, with options (A-E). The instrument was validated by two experts in Curriculum Studies and Educational technology, University of Port Harcourt. A reliability coefficient of 0.87 was obtained for the study using Pearson product moment correlation. The treatment exercise lasted for four weeks before the post-test. Mean and standard deviation were used to answer the research questions, while the null hypotheses were tested with analysis of covariance (ANCOVA) at 0.05 level of significance.

Results

Research Question 1:

What are the mean achievement scores of students taught Social Studies using cooperative learning strategy and those taught using traditional method?

Table 1: Mean and standard deviation of pretest and post-test scores of students' exposed to concept mapping strategy and those taught with traditional method.

Group	N	Pre-test		Post-test		Gained mean
		Mean	SD	Mean	SD	
Cooperative learning	69	9.16	4.29	19.08	7.57	9.92
Traditional method	53	8.66	2.06	14.10	2.99	5.44

Results in Table 1 show that the group taught Social Studies using cooperative learning strategy had a pretest mean of 9.16 with a standard deviation of 4.29 and a posttest mean of 19.08 with a standard deviation of 7.57. The difference between the pretest and posttest mean was 9.92. The group taught Social Studies using traditional method had a pretest means of 8.66 with a standard deviation of 2.06 and a posttest mean of 14.10 with a standard deviation of 2.99. The difference between the pretest and posttest means was 5.44. However, for each of the groups, the posttest means were greater than the pretest means with the group taught using cooperative learning strategy having a higher mean gain. This is an indication that cooperative learning strategy has more effect on students' achievement in Social Studies than the traditional method.

Research Question 2:

What are the mean achievement scores of male and female students taught Social Studies using cooperative learning strategy?

Table 2: Mean and standard deviation of pretest and post-test scores of male and female students' exposed to cooperative learning strategy.

Gender	N	Pre-test		Post-test		Gained mean
		Mean	SD	Mean	SD	
Male	30	7.71	2.22	14.10	2.99	6.39
Female	39	9.28	1.71	15.66	1.99	6.38

Results in Table 2 showed that the male students taught Social Studies using cooperative learning strategy had a pretest mean of 7.71 with a standard deviation of 2.22 and a posttest mean of 14.10 with a standard deviation of 2.99. The difference between the pretest and posttest means for the male group was 6.39. The female students taught Social Studies using cooperative learning strategy had a pretest mean of 9.28 with a standard deviation of 1.71 and a posttest mean of 15.66 with a standard deviation of 1.99. The difference between the pretest and posttest means for female group was 6.38.

H₀₁: There is no significant difference between the mean achievement score of students taught Social Studies using cooperative learning strategy and those taught using traditional method.

Table 3: Analysis of Covariance (ANCOVA) of the significant difference in the mean performance scores of students taught Social Studies using cooperative learning strategy and those taught using traditional method.

Source	Type III Sum of Squares	Df	Mean Square	F	P	Sig.
Corrected Model	6451.862 ^a	2	3225.931	32.297	.000	P<0.05
Intercept	13666.634	1	13666.634	136.828	.000	P<0.05
Pretest	119.919	1	119.919	1.201	.276	P>0.05
Group	6451.557	1	6451.557	64.592	.000	P<0.05
Error	9089.244	117	99.882			
Total	235200.000	122				
Corrected Total	15541.106	121				

The result in Table 3 showed significant difference in the mean performance scores of students taught Social Studies using cooperative learning strategy and those taught using traditional method. An F-ratio of 64.592 was obtained with associated probability value of .000. Since the associated probability value of .000 was less than 0.05 set as level of significance, the null

hypothesis (H_{01}) was therefore rejected. This indicates a significant difference between students taught with cooperative learning and traditional method, in favour of cooperative learning strategy.

H₀₂: There is no significant difference between the mean achievement score of male and female students taught Social Studies using cooperative learning strategy.

Table 4: Analysis of Covariance (ANCOVA) of the significant difference in the mean performance scores of male and female students taught Social Studies using cooperative learning strategy.

Source	Type III Sum of Squares	Df	Mean Square	F	P	Sig.
Corrected Model	36138.670 ^a	2	18069.335	149.677	.000	P<0.05
Intercept	11592.043	1	11592.043	96.022	.000	P<0.05
Pretest	1.991	1	1.991	.016	.898	P>0.05
Gender	7.932	1	7.932	.515	.474	P>0.05
Error	10865.029	64	120.723			
Total	380485.000	69				
Corrected Total	47003.699	68				

The result in Table 4 show the mean performance scores of male and female students taught Social Studies using cooperative learning strategy. An F-ratio of .515 was obtained with associated probability value of .474. Since the associated probability value of .474 was greater than 0.05 set as level of significance, the null hypothesis (H_{02}) was therefore retained. This implies that gender does not determine students' performance when taught using cooperative learning strategy.

Discussion of findings

Results in Table 1 showed higher achievement mean scores of students taught Social Studies with cooperative learning strategy compared with their counterparts in traditional method. The result in Table 3 also show a significant difference in the mean performance scores of students taught Social Studies using cooperative learning strategy and those taught using traditional method. This finding is in consonance with Jacobson and Baribor (2012) who observed that group work could arouse students' learning interest cultivate their exploring ability and creative thinking and improve their team spirit and social communication skills. Ajaja (2018) noted that cooperative learning can give weak students the opportunity to learn and achieve maximally. Similarly, the study by Crosby and Owens (1993) found that different cooperative learning strategies can be employed to help low ability students to improve achievement, who had difficulties making success in the traditional classroom. Şimşek, Yılar and Kucuk (2013) also defined cooperative learning as a process meant to facilitate the accomplishment of a specific end goal through people working together in groups. Ruel and Bastianns (2003) also observed that cooperative teaching strategy allow the students the independence to use his/her mental processes to contribute to knowledge. Steven and Slavin

(1995) stressing the importance of cooperative learning noted that cooperative learning increase in students' academic performance at all ability levels.

Table 2 revealed that the achievement mean scores of the male and female students taught Social Studies with cooperative learning strategy were the same. Also, the result in Table 4 revealed that gender is not a significant factor in determining students' performance in Social Studies using cooperative learning strategy. This finding harmonizes with Ajaja (2018), Crosby and Owens (1993), Bramlett (1994), Steven and Slavin (1995), Mégnin (1995), Webb, Tropper and Fall (1995) who found that the cooperative learning is not limited to a particular ability level or sex, but to all who engage in it. Similarly, Glassman (1989) and Johnson, Johnson and Stanne (1986) found that cooperative learning emphasizes status and respect for all members, regardless of gender. Ajaja and Eravwoke (2012) reaffirmed the ability of cooperative learning when used as an instructional strategy to bring about significant improvement in students achievement in school science subject and a non-significance in achievement scores between male and female students in the cooperative learning group.

Conclusion

The results of the study showed that students performed highly using cooperative learning instructional strategy irrespective of ability level. The results of the study also indicated that both the male and female students benefitted equally from the cooperative learning strategy.

Recommendations

1. Social Studies teachers should adopt cooperative learning strategy as an effective learning strategy in order to improve students' performance, social interaction skills and foster meta-cognition in students.
2. The school management should organize workshops and seminars to expose teachers and students constantly to the use of the strategy for maximum school output.

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