

**EFFECTS OF JIGSAW COOPERATIVE LEARNING STRATEGIES ON
STUDENTS' INTEREST AND PERFORMANCE IN SOCIAL STUDIES IN
TARABA STATE, NIGERIA**

MATTHEW ABIODUN MICHAEL
FACULTY OF EDUCATION
Department of Adult and Continuing Education
FEDERAL UNIVERSITY WUKARI
abiodunmichael@fuwukari.edu.ng

&

AKUSYAKUBU
Department of Social Studies
Kogi State College of Education, Ankpa

&

LAMI ABDULLAHI
Department of Social Studies
Kogi State College of Education, Ankpa

ABSTRACT

This study is aimed at finding the effects of Jigsaw cooperative learning strategies on students' interest and performance in social studies. The study was Quasi-experimental Non-randomized Pretest- Posttest Control Group Design. The target population for this study consisted of all the 2,024 Upper Basic II Social Studies students in Wukari Local Government Area of Taraba State, Nigeria during the 2020/2021 academic session in Taraba State, Nigeria. Purposive sampling technique was used to obtain a sample of six schools. The sample for the study was 74 Upper Basic II Social Studies students from the six selected secondary schools. Six intact classes were used for the study. The instrument used for data collection was "Social Studies Interest and Performance Test" (SOSIPT). The researcher trained the teachers in the experimental group on the technique of JCLS before the treatment. The instrument was pilot tested to ascertain the reliability. The reliability co-efficient alpha was 0.78. Data was analyzed using mean and standard deviation to answer the research questions while Analysis of Covariance (ANCOVA) was used to test the null hypotheses at 0.05 significant level. The result of the study show that there is significant difference in the mean performance scores of students in Social Studies taught using Jigsaw cooperative learning and conventional Strategies and there is significant difference in the students' mean interest scores in Social Studies taught using Jigsaw cooperative learning and conventional Strategies. The researcher concluded that

JCLS is an effective teaching method, which Social Studies teachers should be encouraged to use and should be implemented in all teachers' education programmes in Nigeria and other African nations.

KEYWORDS: Jigsaw Strategy, Learning Strategy. Conventional Strategy, Upper Basic Students, Social Studies, Interest, and Performance

Background to the Study

Beginning from the late 1950s, well-meaning Nigerians namely Herbert Malculay, Tafawa Balewa, Obafemi Awolowo and the conscience group of the nation began to express Concerns about the yawning gap between the needs and aspirations of the people and the Type of education system provided by the British in Nigeria. According to Fafunwa (1974), the education system in Nigeria, instead of developing positive knowledge, attitudes, values and skills in the society in which the African child lives, tends to alienate him from his cultural environments. Fafunwa describes the British education as been theoretical and as Such irrelevant to the philosophy and goals of the Nigerian society.

Akinlayi (2013) opined that the trends continued until early 1970s, and that no Emphasis was placed on either teaching pupils how to live together and participate in the Life of the society, or on teaching them to be 'sociate' one they have become 'literate' and 'numerate'. It was felt that acute personal awareness and needs can never be satisfied by specialists curriculum of the school based specially and exclusively on textbooks and traditional teaching methods.

The introduction of Social Studies, was characterized by the desire to use the subject to address contemporary national problems. According to Utulu (2016) the school has an Obligation to provide a curriculum designed to develop effective living in the society, Utulu maintains further that such a curriculum is expected to equip the learner with skills, understandings, attitudes, habits and appreciations that will help contribute to this goal. The Nigerian Social Studies Programme is not an exception in this as it has a set of goals and objectives which one can confidently describe as being of direct relevance to the philosophy and objectives of Nigerian education.

Furthermore, the dynamic nature of human environment is fortunately a major concern of Social Studies. This also forms part of its philosophical background as it is meant to encourage learners to understand better and cope with the ever occurring changes in the political, social, economic and other facets of life, so as to effectively face the challenges and opportunities in a world of rapid change.

Zaria (2011) avers that the philosophical background of Social Studies equally creates vantage opportunity for the discipline to package a content that is integrated in nature, with its products becoming integrated individuals who can stand the test of time as traders, teachers, engineers, doctors, bankers, politicians, or whatever they choose to become. It also encourages the making of learners to be socially relevant, economically viable and politically honest in a rapidly changing world.

In line with the foregoing, the National Policy on Education (2013) has vividly expressed the philosophy of Nigerian education as being based on the integration of individuals into a sound and effective citizens with equal education opportunities for all.

Specifically, education is aimed at building main objectives as building a free and democratic society, a just and egalitarian society, a united, strong and self-reliant nation, a great and dynamic economy and a land of bright and full opportunities for all citizen.

According to the National Council for Social Studies (NCSS) (2010) in the United States of America defined Social Studies as an integrated study of the social sciences and humanities to promote civic competence and help young people develop the ability to make informed and reasoned decisions as citizens of culturally diverse, democratic society in an interdependent world. (NCSS 2010). This implies that the goal of Social Studies purely revolves around citizenship education, education for cultural integration and sustainable living.

Social Studies is viewed as a discipline which attempts to modify or change the Learners behaviours in the directions of acceptable values and attitudes through a process of studying human beings relationship with his or her environment and with the desire to provide solutions to various complementing problems in order to ensure his/her survival, having been equipped with the necessary tools such as values, attitudes, skills and knowledge (Singh, 2013).

Over the years, Social Studies occupied an important position in the school curriculum in Nigeria. The subject has been recognized as an effective tool for citizenship education in the country (Afolabi, Abidoye&Afolabi, 2011). Abidoye (2015) opines that social Studies is a subject that equips learners with critical and problem-solving skills which enable students to tackle problems and issues that may arise in their socio-economic life. That is why, the Federal Government of Nigeria (FGN) (2013), in the National Policy on education, listed social studies among core subjects for the Basic Education Curriculum.

The Federal Ministry of Education (2007) in the policy document for the implementation of the Upper Basic Education Social Studies curriculum as cited in Afolabi, (2011) states the overall objectives of teaching social studies are to: develop in students the ability to adapt to changing environment, teach students to become responsible and disciplined individuals capable of, and willing to contribute to the development of their society, inculcate in students the right type of values, make students have compassion for other people, appreciate their culture, history and foundation factors that make them human, develop in the students the capability to recognize the dimensions of being human in different cultural and social contexts and develop in the students a sense of solidarity and sharing based on a sense of security in one's own identity.

With these objectives in mind, Mezicobi, Fubara and Mezicobi (2015) contend that the teaching of Social Studies in schools will help students at all levels to develop the ability to adapt to their changing environment. The authors maintains that Social Studies emerges as a school subject of prime importance for study in order to modify the dysfunctionality of the past inherited educational system and experiences. Akintunde (2014) also opines that since Social Studies is interested in everything about man in relation to all aspects of his environment; the subject incorporates all aspects of reforms and innovations geared towards the sustenance of man's environment.

In achieving the aforementioned objectives of Social Studies, the subject prepares young people to be more humane, rational, responsive and responsible participating citizens in a world that has become increasingly interdependent. In support of this notion, Folade (2017) asserts that social studies enable man to learn about the challenges of

survival in their environment. The introduction of Social Studies according to Folade was meant to involve pupils in more meaningful and purposeful learning activities based upon investigation, examination and observation of their own immediate neighbourhood, embodying both social, physical, economic, political, cultural, religious, scientific and technological environments. By so doing, pupils are given an early opportunity of knowing about the societal problems, experience them and make decision on appropriate solution and practical social action that would be beneficial to themselves and the entire society.

In spite of all the laudable objectives and benefits of teaching Social Studies in the school curriculum, the teaching of the subject has been affected by poor teaching strategies. These strategies according to Shamija (2011) does not connote sheer passing on of, or impacting of, desirable knowledge to a passive learner recipient who must on demand regurgitate the rote memory acquired and stored knowledge, hence poor performance in the subject. Shamija further maintains that effective teaching of Social Studies may involve a negligible measure of cognitive knowledge particularly the lower order knowledge. Social Studies teaching, more than any other subject, emphasizes higher level knowledge and affective and character development. In this circumstances, therefore, teaching in Social Studies refers to a predominantly student controlled or directed interactive learning performance oriented activities inside and outside the formal classroom situation in which the learner actively participates and make a conscious and deliberate effort to induce and acquire significant learning under the teacher.

Amid the pervasiveness of a multitude of negative values, poor attitude to work, disrespect to constituted authority and absence of a sense of patriotism. The introduction of Social Studies a value laden subject was thought to provide a value re-orientation platform to inculcate socio-civic and affective competence in our people. All these are hindered by poor teaching strategies in Social Studies (Mezieobi, Fubara&Mexieobi, 2015).

In Nigeria, there has been reduction in the number of students wishing to continue with Social Studies. Efforts have been made from various contributions of Social Studies educators and professional associations like Social Studies and Civic Educators Association of Nigeria (SOSCEAN) towards making Social Studies simple and interesting to students.

In order fully achieved the aims of education as enunciated in the National Policy on Education (2013), educational activities should be learner centered for maximum self. Development and self-fulfilment and teaching should be practical, activity-based, experiential and information and communication technology supported, Different strategies like peer tutoring, concept mapping, mind mapping, gamification, and inquiry strategies among others which are more interactive have been suggested and empirical studies have been carried out on their effect on students' performance and interest. However, the researcher is interested on the effect of Jigsaw cooperative learning strategy on students interest and performance in Social Studies.

The jigsaw method is an effective way to increase student engagement through group work that facilitates peer-to-peer learning. Teams of students are assigned to investigate different aspects of the same problem or issue. Each team, might, for example, analysed a different but related data set or read an article on different aspects or viewpoints on the same topic. Once each team member thoroughly understands his/her team's aspect

of the problem, new groups are formed, with at least one representative from each original team. Each individual then explains his/her team's aspect of the problem to the new group. In this way, every student learns every aspect of the problem. Each group then uses the combined information to evaluate a summary issue.

As a form of cooperative learning, the jigsaw method is a teaching strategy that helps students to develop skills for working effectively in teams, an important competency for socio-environmental synthesis (S-E synthesis). Grounded in social interdependence theory (Deutsch, 1949; Johnson & Johnson, 2005), cooperative learning is an established educational approach robustly supported by over 1,200 research studies (Johnson & Johnson, 2009). The central tenet of cooperative learning is that rather than competing with each other or being indifferent to each other, students engaged in cooperative learning "work together to maximize their own and each other's learning" (Johnson & Johnson 2005).

Therefore, when used as part of instructional strategy is potent at increasing students' interest, performance, knowledge (Adodo, 2013) and also has the potentials to enable students engage in reflective thinking (Madu&Metu, 2012). These strategies recognize individual differences in learners and encourage them to create their own knowledge at their own pace. This study compares the effect of the teaching strategies in order to determine students' interest and performance in Social Studies.

Statement of the Problem

Despite the importance of Social Studies education as a pre-requisite to enhance nation's growth and development: students learning outcomes in the subject had been so disappointing. This is manifested in students' negative values such as poor academic performance, lukewarm attitude to work, disrespect to constituted authority and absence of a sense of patriotism among others. This has been a concern to various authorities particularly the Social Studies specialist over the years new strategies that could improve the teaching of the subject to enhance students interest and performance were ignore. The different instructional strategies employed in teaching the subject had yielded little improvement. However, Jigsaw cooperative learning strategy have been used to improve learning outcomes in other subjects with relative success. It is on this note that this study aims at investigating the effects of Jigsaw cooperative learning strategy on students' interest and performance in Social Studies.

Purpose of the Study

The purpose of this study is to investigate the effects of Jigsaw cooperative learning strategy on students' interest ad performance in social studies. Specifically, the study is design to achieve the following objectives;

1. Examine the effects of Jigsaw cooperative learning and conventional strategies on students' performance in Social Studies
2. Examine the effects of Jigsaw cooperative learning and conventional strategies on student's interest in Social Studies.

Research Questions

The study is guided with the following research questions:

1. What are the effects of Jigsaw cooperative learning and conventional strategies on students' mean interest scores in Social Studies?
2. What are the effects of Jigsaw cooperative learning and conventional strategies on students' mean performance scores in Social Studies?

Hypotheses

1. There is no significant difference in the mean interest scores of students in Social Studies taught using Jigsaw cooperative learning and conventional Strategies
2. There is no significant difference in the students' mean performance scores in Social Studies taught using Jigsaw cooperative learning and conventional Strategies

Significance of the Study

The study may be considered significant to the students, social studies teachers, general public, policy makers and future researchers

Review of Related Literature:

The study is anchored on Deutsch 1962, Johnson and Johnson 1989 Social interdependence' exists when individuals share common goals and each individual's outcomes are affected by the actions of the others. It may be differentiated from social dependence (i.e., the outcomes of one person are affected by the actions of a second person but not vice versa) and 'social independence' (i.e., individuals' outcomes are unaffected by each other's actions). There are two types of social interdependence: cooperative and competitive. The absence of social interdependence and dependence results in individualistic efforts.

Conceptual Framework

Jigsaw cooperative learning is a concept that grew out of the field of social psychology. Because of its unique characteristics and effectiveness, it is commonly adopted as a teaching strategy in special education whereby students engage in collaboratively designed activities to achieve a common goal or task. Various theories have been associated with cooperative learning; and they have framed the context in which cooperative learning serves as an intragroup learning method that is outcome oriented. For instance, social interdependence theory has contributed to the development of cooperative learning theory. Kurt Levin – in the mid-1930s – was one of the first to introduce the concept of group dynamics and to show how each individual in the group contributes to a common goal, thus becoming a dynamic whole. This theory was fully conceptualized by Morton Deutsch, in 1949. He is recognized as the theorist who fully conceptualized social interdependence theory and provided the fundamental concepts for cooperative learning. The primary principle supporting the theory is the notion that “humans are primarily concerned with developing organized and meaningful views of their world by perceiving events as integrated wholes rather than a summation of parts or properties” (Johnson and Johnson, 1989: 287). As a result, individuals within a group rely upon each other to achieve common goals. Deutsch penned two types of social interdependence: positive interdependence and negative interdependence. He referred to positive interdependence as the phenomena when

individuals believe they can only achieve goals when there is an interactive group working toward a common goal. Negative interdependence exists when individuals believe they can accomplish goals only when their competitors fail to obtain their goals.

The cooperative learning strategy as used in education, generally – and, specifically, in special education – relies heavily upon the concept of positive interdependence. When operationalized, the social interdependence theory translates into a viable instructional method that requires the participation of several group members. The social identification theory is another theory that informs the cooperative learning-teaching strategy. This theory suggests that members of the group experience a collaborative awareness. Lau (1989) reported that group identification is essential to the social interdependence and social identification theories. During collaborative awareness, each member is aware of the group dynamics and responds as a contributor. To implement cooperative learning groups, group and social identifications are necessary. In group identification, individuals have a working relationship with each member in the group and there is a collective awareness of collective group membership; whereas, in social identification, individuals perceive themselves as being a part of a social group. Two key concepts come into play when considering cooperative learning: (1) task interdependence, and (2) outcome interdependence. Task interdependence implies that individuals collectively share the task, and all experience a mutual benefit. In order to complete the task, cooperation and input from several individuals are critical. Outcome interdependence – which is defined as “the degree to which the significant outcomes an individual receives depend on the performance of others” (Wagerman, 1995: 147) – encompasses the results achieved from efforts contributed by each of the group members. In theory, there are a variety of dynamics during group interaction. When cooperative groups are convened, there is a specific job that needs to be done, and the function of that job requires the participation of a group wherein each member is assigned a specific task (Johnson and Johnson, 1989). In this article, the focus is on how cooperative learning can be utilized to help students with special needs.

Research Design

The study adopted the non-equivalent pre-test, post-test, control group design to verify the relative effectiveness of Jigsaw Cooperative Learning Strategy (JCLS) on students' interest and performance in Social Studies. According to Emaikwu, (2010) the non-equivalent pre-test, post-test, control group design is a type of quasi-experimental design. The choice of the design is because the researcher does not intend to distort the normal academic plan of the sampled schools.

The target population for this study consisted of all the 2,024 Upper Basic II Social Studies students in Wukari Local Government Area of Taraba State, Nigeria during the 2020/2021 academic session in Taraba State (Source: Ministry of Education, 2021). The choice of UBE schools was because they are owned by the government, which makes/monitors implementations of educational policies, uses uniform curriculum and have most trained, qualified and experienced teachers. Upper Basic II students are deemed best for the study because they are more stable than Upper Basic I students who are newly admitted and Upper Basic III students who are in an exit/transitional class faced with preparation for Basic Education Certificate Examination (BECE). Thus, such involvement

may be a distraction to their schedules. The sample consisted of 74 Social Studies students in six intact classes in three selected secondary schools in Wukari Local Government Area of Taraba State using purposive sampling technique.

The instrument used for data collection was a Social Studies Interest and Performance Test (SOSIPT), which consisted of twenty structured multiple choice questions. The instrument was given to two experts from Social Studies and one Measurement and evaluation in the Department of Arts and Social Sciences, Faculty of Education, Benue State University, Makurdi and Social Studies teachers to establish the face validity of the instruments. Their corrections were followed in selecting the items included in the instrument. Field testing was carried out by administering the instruments on some students from an intact class of a co-educational secondary school different from the selected schools used for the study. Test retest method was used to determine the reliability of the instrument. The reliability coefficient of the instrument was found to be 0.78.

The researcher visited the chosen schools to seek for permission in using the students as well as some facilities in the schools. This was followed by the administration of the SOSIPT as a pre-test, the experimental groups and control groups. Treatments were introduced to the experimental groups. Students in experimental group A were taught using the JCLS, while the control group B were taught using the conventional strategies. Two topics (Family and Social institutions) were taught concurrently in all the six schools using the appropriate treatment in each school for a period of four weeks. Then the SOSIPT was re-structured and administered to the two groups in the 4th week of the post-test to serve as a retention test. The research questions were answered using mean and standard deviation while Analysis of Covariance (ANCOVA) was used to test the null hypotheses at 0.05 level of significance. This method helps to remove the initial differences among research respondents and to control the extraneous variables.

Results

Data were presented, analysed and interpreted based on the research questions and hypotheses. In all cases, the decision rule is that null hypotheses are not accepted if the p-value is less than 0.05. On the hand, hypotheses are accepted if the p-value is greater than 0.05.

Research Question 1

What are the effects of jigsaw cooperative learning and conventional strategies on students' mean interest scores in Social Studies?

Table 1 Mean and standard deviation of students' mean interest scores in Social Studies taught using jigsaw cooperative learning and conventional strategies

Groups		Pretest	Posttest	Mean Gain
Jigsaw cooperative	Mean	64.16	73.04	8.88
Strategy	N	25	25	

Conventional Strategy	Mean	63.81	63.43	0.38
	N	21	21	
	Std. Deviation	7.91286	5.78421	

Table 1 shows that the mean and standard deviation performance using JCLS and conventional strategies are 64.16, 62.22, 63.81 with the corresponding standard deviation of 9.07, 6.64 and 7.91 respectively during pretest. While during the posttest the mean performance for JCLS and conventional strategies are 73.04, 71.63, 63.43 with the corresponding standard deviation of 6.75, 7.75 and 5.78 respectively.

The Table further reveals the mean gain of JCL as 8.88, and conventional strategies 0.38. Thus, the experimental group achieved higher than the control group, meaning the use of jigsaw cooperative learning strategies enhance maximum interest than the conventional strategy.

Research Question 2

What are the effects of jigsaw cooperative learning and conventional strategies on students' mean performance scores in Social Studies?

Table 2 Mean and standard deviation of students' mean performance scores in Social Studies taught using jigsaw cooperative learning and conventional strategies

Groups		Pretest	Posttest	Mean Gain
Jigsaw cooperative Strategy	Mean	64.16	72.64	8.48
	N	25	25	
	Std. Deviation	5.91	6.97	
Conventional Strategy	Mean	56.81	60.33	3.52
	N	21	21	
	Std. Deviation	5.91	6.97	

Table I shows that the mean and standard deviation performance using JCLS and conventional strategies 64.16, 62.22, 56.81 with the corresponding standard deviation of 9.07, 6.64 and 5.91 respectively during pretest. While the performance for JCLS and conventional strategies is 72.64, 72.59, 60.33 with the corresponding standard deviation of 6.95, 5.69 and 6.97 respectively.

The Table further reveals the mean gain of JCLS 8.48. and conventional strategy 3.52. Thus, the experimental group retains higher than the control group, meaning the use of jigsaw cooperative learning strategies enhance higher performance conventional strategy.

Hypothesis 1

There is no significant difference in the mean interest scores of students in Social Studies taught using jigsaw cooperative learning and conventional Strategies.

Table 3 ANCOVA test of students' mean interest scores in Social Studies taught using jigsaw cooperative learning and conventional strategies

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2171.655 ^a	3	723.885	21.642	.000
Intercept	1509.910	1	1509.910	45.142	.000
Achievement Pretest	966.493	1	966.493	28.895	.000
Groups	418.671	2	209.335	6.259	.003
Error	2307.906	69	33.448		
Total	359664.000	73			
Corrected Total	4479.562	72			

a. R Squared = .483 (Adjusted R Squared = .462)

Table 3 shows that $F = 6.269$ $df = 2, 72$; $p = .003$. Since P-value of 0.003 is less than 0.05 the null hypothesis is accepted. This means there is significant difference in the mean performance scores of students in Social Studies taught using jigsaw cooperative learning and conventional Strategies.

Hypothesis 2

There is no significant difference in the students' mean performance scores in Social Studies taught using jigsaw cooperative learning and conventional Strategies.

Table 4 ANCOVA test of students' mean performance scores in Social Studies taught using jigsaw cooperative learning and conventional strategies

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2739.322 ^a	3	913.107	25.321	.000
Intercept	2214.804	1	2214.804	61.419	.000
Achievement Pretest	482.760	1	482.760	13.387	.000
Groups	1313.650	2	656.825	18.214	.000
Error	2488.185	69	36.061		
Total	353609.000	73			
Corrected Total	5227.507	72			

a. R Squared = .524 (Adjusted R Squared = .503)

Table 4 shows that $F = 8.21$; $df = 2$; $p = .00$. Since P-value (.00), is less than 0.05 the null hypothesis is accepted. This means that there is significant difference in the students' mean performance scores in Social Studies taught using jigsaw cooperative learning and conventional Strategies.

Discussion

The findings of the study revealed that there was no significant difference in the mean interest of Social Studies students before they were taught Social Studies using JCLS

and the conventional strategies. This suggests that the two groups were quite homogenous at the start of the study. It implies that students used for the study have relatively equal background knowledge of Social Studies. The result of hypothesis one which states that there is no significant difference in the effect of JCLS and the conventional strategies of teaching on students' academic interest in Social Studies showed that the two teaching strategy used have effect on the academic interest of the students in their groups as the post-test mean scores in each group are higher than the respective pre-test mean scores. This is an indication that the treatments given improved the interest of the students.

The result also showed that the students in the JCLS group performed better than those in the CLS group and then the control group. This is in agreement with Olubodun (2016) who opined that JCLS improved the performance of Mathematics students, and Oluwatos and Bello (2015) that JCLS is an effective tool for improving the performance of student in Physics. It has been argued that conventional teaching method is content centred in which teachers remain more active, more cognitive and less effective (Singh 2004). According to Mezieobi, Fubars and Mezicobi (2015), the strategy is concerned with the recall of factual knowledge and largely ignores higher levels of cognitive outcomes, the teacher seeks to transfer thoughts, and meanings to the learners leaving little room for student-initiated questions, independent thought or interaction between students learning process. The use of interactive techniques and strategies help the student to become more engaged in learning and retain more information, thus giving them satisfaction. It is therefore necessary to provide interesting classes for students so that teachers can have positive feedback from them.

Furthermore, the result of hypothesis two shows that student that were taught using jigsaw cooperative learning strategies retain more than those in the conventional class. This finding agrees with Olubodun (2016) who discovered that teaching with jigsaw cooperative learning strategies enhanced students to retain more. Also, Adodo. (2013) found out that jigsaw cooperative learning strategy is a potent strategy which increases students' performance, knowledge. This is because the method gives room for learners to participate, which enables them to understand and retain higher when situation demands. This method is in line with the Chinese adage which says when hear, I forget, when I see I remember but when I do I understand.

Conclusion and Recommendations

The study had been able to show that JCLS is more effective in improving the academic interest of students in Social Studies when compared and conventional teaching strategies, though the difference is not something worry about. This implies that JCLS has the capacity to help students associate ideas, think creatively, and make connections that might not be achievable in the conventional note taking strategy. Again, the approaches used in this study do not differ in the ways they enhance the performance ability of Social Studies concepts by learners. This implies that this could improve on the learners' performance ability in the same proportion. It therefore entails that JCLS would be one of the most effective learning strategies that could be employed by teachers to overcome many of the problems encountered in teaching and learning of Social Studies. In similar manner, JCLS could also be used to effectively teach and learn Social Studies but where the facilities needed for JCLS are available; it should be utilized to be able to obtain maximum

output by learners. Based on the findings of this study and the conclusion reached, the following recommendations are made:

1. Following the findings of this study that JCLS significantly improves learning, it is recommended that Social Studies teachers should adopt the strategy and other participatory strategies during instruction so that learners could be guided to learn meaningfully.
2. Social Studies educators and researchers should gear their efforts towards understanding the characteristic, strength and weaknesses of the individual learners so as to help in designing the appropriate instructional programmes to meet their needs.
3. Seminars, workshops and conferences should be organized by the ministry of education for Social Studies teachers to educate them on how to implement jigsaw cooperative learning strategies in school.

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