

SELF CONTROLLED LEARNING METHOD AND ITS EFFECT ON SECONDARY SCHOOL STUDENTS' ACHIEVEMENT AND INTEREST IN SOCIAL STUDIES

Egbo Chinonye Emmanuella (Msc) and Ene Ndirika Harriet (Phd)

Department of Guidance and Counselling Faculty of Education, Enugu State
University of Science and Technology (Esut), Enugu State, Nigeria

DOI: <http://dx.doi.org/10.37500/IJESSR.2021.4406>

ABSTRACT

This study investigated self-controlled learning method and its effect on Junior Secondary School student's achievement and interest in social studies. Quasi-experimental design was used for the study. A total of 612 JSSII students from twelve intact classes in six secondary schools in Agbani education zone of Enugu State were used for the study. The schools were made up of 3 public and 3 private schools. Two research questions and one hypothesis guided the study. Instruments used for data collection included the Social Studies Achievement Test (SOSAT) made up of 42 multiple choice questions and the Social Studies Interest Scale (SOSIS) made up of 30 items scored on a four point scale. The instruments were validated by three research experts. SOSAT had a reliability co-efficient of .89 obtained using Kuder Richardson formular 20 (KR-20) formula while SOSIS had a reliability co-efficient of .81 obtained using Cronbach's Alpha method. SOSAT and SOSIS were administered to the subjects at the beginning of the study as pretest. After a treatment period of six weeks, SOSAT and SOSIS were administered to the subjects for post test achievement and interest scores respectively. Research questions were answered using mean and standard deviation. Analyses of Covariance (ANCOVA) was used to test hypotheses at .05 level of significance. Major findings of the study showed a significant improvement in the achievement and interest of students taught social studies with self-controlled learning method differ significantly in their achievement. It was recommended that Self- controlled Learning method and other Learner Autonomy Constructivists' Models be used for social studies at Junior Secondary School.

KEYWORDS: Learning Media, Digital Map Media, Critical Thinking Skills

INTRODUCTION

Education is the processes of giving intellectual, moral and social instructions or a process involving training or giving information on a particular subject. Okeke (2013) added that, education is the aggregate of all the processes by which a child or young adult develops the abilities, attitudes, and other forms of behaviour which are of positive value to the society in which he lives. Therefore, education prepares the recipients for a long valuable life through the values, knowledge attitudes, competences and skills imparted on the recipients.

Utilization of appropriate skills, abilities and competences both mental and physical as equipment for the individual to live in and contribute to the development of his society, (FRN, 2013).

Specifically, the broad goals of secondary education, according to the National Policy on Education are to prepare the individual for useful living within the society and high education. Hence, secondary education among other things, is expected to provide trained man power in the applied sciences, technology and commerce at sub-professional grades; foster national unity with an emphasis on the common ties that unite us in our diversity; raise a generation of people who can think for themselves, respect the views and feelings of others, respect the dignity of labour, appreciate those values specified under our board national goals and live as good citizens and provides technical knowledge and vocational skills necessary for agricultural, industrial, commercial and economic development, (FRN, 2013).

Unarguably, one of the ways of achieving these laudable goals of secondary education is by teaching and learning of social studies. According to Mbu (2012), social studies is an area of school curriculum designed specifically for the study of man and how his problems are solved. Mbu argued further that social study is not geography; it is neither history nor government. It is not economics; it is not an amalgam of the social sciences rather social studies borrows ideas from all social science subjects to understand, analyze and react to situations. Social studies deals with how man can fit into the society by utilizing the necessary attitudes, values and skills. Social studies focuses on the use of critical and reflective thinking to solve man's problems.

Njor (2013) advised that it is very necessary to include social studies in the school curriculum because of its general importance in the development of citizens. Unfortunately, research evidences such as Ikeje (2011) and Jegede (2012) report that secondary school students do not achieve satisfactorily in this all-important subject, social studies. He further hinted that secondary school students' interest in social studies is far below the much-desired level. The challenge of this study therefore, is to proffer possible ways of enhancing secondary school student's achievement and interest in social studies. Al-Gazir (2013) defined achievement as the process of bringing out or accomplishing something through effort, skill or course. Bell and Thompson (2012) averred that academic achievement generally suggest an achievement relating to education and scholarship. Pedro (2013) defined academic achievement as a result-oriented construct that encapsulates the extent of performance of a described task. Achievement in this study refers to achievement in secondary school social studies as shall be measured with Social Studies Achievement Test (SSAT). Students' achievement in social studies cannot be discussed fully in isolation with students' interest in social studies.

Obviously, interest is a very strong factor in teaching and learning of social studies in secondary schools. Derbuck (2012) defined interest as the feeling of wanting to know about something or someone, a quality eliciting curiosity or holding the attention of someone. To Kwame (2013) interest is a disposition, attitude and feeling of an individual towards an activity which shows behaviorally, the

extent the person like to participate in an activity. Al-Gazir (2013) averred that interest is an indispensable factor for learning because it engages the attention, concern and curiosity of the individual. Evidently, secondary school students are vibrant and curious youngsters who should be directed to have the right kind of attitudes and inward state of mind towards social studies. Interest in this work shall be measured with Social Studies Interest Scale (SSIS).

In their separate studies, Kalomba (2011), Chung (2012) and Hameed (2013) all implicated teaching methods as a major factor that can enhance or inhibit secondary school students' achievement and interest in social studies. In specific terms, these research experts blamed students' poor achievement and interest in social studies on teachers' use of ineffective and non-efficient teaching methods. Perhaps the most popular method of teaching in secondary school today is the expository or lecture method. According to Ika (2013) expository or lecture method is one of the earliest teaching method in use, dating back to the period of Ancient Greek philosophers and the Jewish Rabbis usually surrounded by their students who listened to their 'words of knowledge and wisdom'. Major attribute of expository methods is that the teacher stands in front of the class and gives out his message to a listening class. It is usually described as a teacher-centred approach. In most cases, students are passive in expository or lecture classes. The method has received a lot of criticisms, yet some factors still justify its use. Factors which justify the use of expository method include large classes, limited time for teaching or short lesson period, inadequate or shortage of facilities such as teaching aids and even shortage of qualified personnel.

Al-Gazir (2013) posits that one of the most effective and efficient constructivists' models is Self-controlled Learning Method (SCLM). Consequently, self-controlled learning method shall be adopted for this study, in other words, the study shall determine the effects of self-controlled learning method on secondary school students' achievement and interest in social studies. Pintrich (2000) in Al-Gazir (2013) described self-controlled learning method as an active constructive process whereby learners set goals for their learning and then attempt to monitor, regulate, and control their cognition, motivation and behavior, guided and constrained by their goals and the contextual features in the environment. Hence, in self-controlled learning, students are actively involved and have clear intentions to be engaged in learning. There is also a purposeful focus of learning on the achievement of a goal.

It is therefore stating the obvious to say that this study which shall investigate the effect of self-controlled learning method on public and private school students' achievement and interest in social studies is most appropriate.

Statement of the Problem

Frankly, the benefits of citizenship education offered by social studies are innumerable. It is therefore disheartening seeing the poor state of secondary school students' achievement and interest in this all important subject. Research experts have blamed this ugly menace on many factors, chief among which

is teachers' adoption of ineffective teaching methods and strategies. Research experts alleged that most secondary school teachers adopt teacher-centered strategies.

Interestingly, research evidences have consistently recommended the use of learner-centered teaching strategies where learners are granted reasonable level of autonomy. Learner autonomy strategies, such as self-controlled learning method have been found to enhance students' achievement and interest in secondary school subjects including social studies. However, there are still conflicting research findings on the efficacy of this method on students, therefore, the need for this study.

Purpose of the Study

This study investigated Self- controlled Learning method and its effect on secondary school students,

1. Achievement in social studies;
2. Interest in social studies;

Research Questions

The following research questions guided the study;

1. What are the mean social studies achievement scores of the students in both experimental and control groups both in pretest and posttest?
2. What are the mean social studies interest scores of the students in both experimental and control groups both in pretest and posttest?

Hypothesis

1. There is no significant difference between the mean social studies achievement scores of students in the experimental and control groups.

METHOD

The research design adopted is quasi-experimental design where a pretest–posttest, non-equivalent groups were used. According to Kreks (2012), quasi experimental design is also known as non-randomized design and is used where randomization is not possible. The area covered in this study was Agbani Education Zone of Enugu State consisting of Nkanu East, Nkanu West and Enugu South Local Government Areas. The population for the study consisted of all Junior Secondary School two (JSS 2) students in the sixty four (64) public and private secondary schools in Agbani Education Zone of Enugu State, numbering nineteen thousand, three hundred and fifty eight (19,358) students (Post Primary School Management Board, Agbani Zone, 2021).

A sample of six hundred and twelve (612) Junior Secondary School two (JSS 2) students was used for the study. The sample consisted of three hundred and thirty four (334) public schools' students and two hundred and seventy eight (278) private schools' students. Also, the sample was composed of three hundred and twenty two (322) students in experimental group and two hundred and ninety (290) students in the control group. The sample was drawn from twelve intact classes in the three public and

three private secondary schools randomly drawn from the three Local Government Areas in Agbani Education Zone.

By purposive sampling, the researcher drew all the private and public schools in each of the local government areas that had at least two streams in the JSS2. Thus, six clusters were formed as follows;

By simple balloting, one school was drawn from each cluster. Hence, six schools were drawn. Also, by simple balloting, two JSS 2 intact classes were drawn from each of the six schools. Hence, twelve intact classes were drawn. Six of these intact classes were randomly drawn and assigned to experimental group while the other six were assigned to control group. Hence, in each school there is one experimental class and one control class.

The following instruments were used for data collection after dully validatd by three research assistants.

a. Social Studies Achievement Test (SOSAT)

SOSAT was used to collect pretest and posttest achievement scores. This instrument was developed by the researcher. It is made up of Forty two (42) multiple choice questions with four options each, (Appendix A). The items were drawn using a table of specification to ensure adequate coverage of the content area covered in the study as well as maintain even spread across the different levels of the cognitive domain to be tested, (Appendix E).

SOSAT was administered to JSS 2 students in a school outside the schools slated for the study and the students were not timed but they were left to answer the questions conveniently. The time taken by the first student to finish and the time taken by the last student to finish were recorded. The average of these two timings was calculated and used for SOSAT; hence 1 hour 15 minutes is allotted for students to answer SOSAT.

b. Social Studies Interest Scale (SOSIS)

This instrument was also developed by the researcher (Appendix B). SOSIS is made up of 30 – items with a 4 – point rating scales namely; Strongly Agreed (SA), Agreed (A), Disagreed (D) and Strongly Disagreed (SD). SOSIS was used to collect pretest and posttest interest scores.

Since the items of the SOSAT are dichotomously scored, Kuder-Richardson's formula 20 (KR-20) was used to determine the reliability. A reliability coefficient of .89 was obtained for the instrument. (Appendix G). Similarly, SOSIS yielded a reliability of .81 using Cronbach Alpha's method since the items are not dichotomously scored. (Appendix H).

Experimental Procedures

With the aid of a training manual (Appendix N), the researcher trained the six regular social studies teachers in the six secondary schools used in the study for a period of two weeks on the use of self-regulated learning strategy. Fore-most, SOSAT and SOSIS were administered to all the subjects of the study as pre-test. Thereafter, the treatment was administered for a period of six weeks. Experimental group in each school was taught the selected social studies topics with self-regulated learning strategy, while the control group was taught the same topics with expository method.

At the expiration of the treatment period, the SOSAT was re-arranged and administered to all the subjects as post-test. The SOSIS was as well administered to all the subjects for post interest scores. All the tests administered were scored by the researcher using already made marking scheme. The researcher also provided all lesson plans used by the regular teachers in each school for each group and for each lesson. SOSAT and SOSIS were administered to all the subjects of the study before the commencement of the experiment to collect pre-test data. After six weeks of treatment, SOSAT was re-arranged and administered to all the subjects to collect posttest achievement scores. Also, SOSIS was administered to all the subjects of the study to collect the post interest scores.

Discussion of result

Research Questions were answered using mean and standard deviation while test of hypotheses was done with Analysis of Covariance (ANCOVA) at .05 level of significance.

Decision Rule:

Scoring for Achievement scores:

An individual's mean score was given by

$$\left[\frac{x}{42} \frac{100}{1} \right] \%$$

Where x = number of items scored correctly.

Scoring for Interest scores:

Positively directed items were scored as follows

SA – 4 points, A - 3 points, D- 2 points, SD - 1 point

Negatively directed items were scored as follows

SA – 1 point, A - 2 points, D - 3 points, SD - 4 points

An individual's mean Interest score = $\left[\frac{x}{120} \frac{100}{1} \right] \%$

Where x = the individual's total score.

Mean: In compliance with the normal practice in secondary schools, A mean of 45 was regarded as pass mark. However, for the purpose of determining the effects of the independent variables on the various groups in the study, a higher mean was interpreted to indicate higher achievement or interest. **Standard deviation:** A lower standard deviation was interpreted as indicating a more reliable mean with very little or no extreme scores. While a higher standard deviation implied the existence of more extreme scores, thus, an unreliable mean which is not a true representation of the groups' ability.

Hypotheses (ANCOVA):

When f -calculated was less than the f -critical (at .05 level of significance), the hypotheses were accepted as stated, otherwise, they were rejected as stated.

Research Question 1:

What are the mean social studies achievement scores of the students in both experimental and control groups both in pretest and posttest?

Table 1: Mean Achievement scores of experimental and control groups in pretest and posttest.

Group	N	Pretest		Posttest	
		Mean	SD	Mean	SD
Experimental	322	33.13	13.32	63.53	9.37
Control	290	25.05	13.10	47.33	9.72

In table 1, the pretests mean achievement score and standard deviation of the experimental group was 33.13 and 13.32 respectively and the posttests were 63.53 and 9.37 respectively. For the control group, the pretest mean achievement score and standard deviation were 25.05 and 13.10 respectively while the posttest were 47.33 and 9.72 for mean achievement scores and standard deviation respectively.

There was not much difference between the two groups in the pretest but there was an appreciable difference in the posttest. The experimental group scored much higher. The standard deviation scores of both groups in both pretest and posttest did not differ significantly.

Research Question 2:

What are the mean social studies interest scores of the students in both experimental and control groups both in pretest and posttest?

Table 2: Mean Interest scores of Experimental and control groups

Group	N	Pretest		Posttest	
		Mean	SD	Mean	SD
Experimental	322	30.00	11.21	61.85	9.10
Control	290	31.02	10.88	46.90	11.81

In the pretest, experimental group had a mean interest score of 30.00 with a standard deviation of 11.21 while the control group had a mean interest score of 31.02 and a standard deviation of 10.88 hence, the groups seemed not to have differed at this point. However, in the posttest, the mean interest score and standard deviation of the experimental group were 61.85 and 9.10 respectively. While those of the control group were 46.90 and 11.81 for mean and standard deviation respectively. This result indicates that the experimental group showed more interest than the control group.

Research Question 3

What are the mean social studies achievement scores of public and private schools’ students in both experimental and control group both in pretest and posttest?

Table 3: Mean Achievement scores of public and private schools’ students in pretest and posttest.

Group	N	Pretest		Posttest	
		Mean	SD	Mean	SD
Public (Experimental)	170	34.63	12.72	62.45	9.43
Public (Control)	164	25.64	14.18	48.83	10.04
Private (Experimental)	152	31.70	13.95	64.55	9.21
Private (Control)	126	26.02	12.04	46.05	9.57

From table 3 above public experimental and private experimental seem not to have differed in both pretest and posttest. Similarly public control and private control seemed to have achieved equally as shown by their mean achievement scores. The test of hypotheses 3 and 5 further validated the result.

Research Question 4:

What are the mean social studies interest scores of public and private schools’ students in both experimental and control group in both pretest and posttest?

Table 4: Mean Interest scores of public and private schools’ students in pretest and posttest.

Group	N	Pretest		Posttest	
		Mean	SD	Mean	SD
Public (Experimental)	170	29.10	10.11	61.45	8.11
Public (Control)	164	30.44	11.18	44.10	10.24
Private (Experimental)	152	30.56	9.20	60.99	8.11
Private (Control)	126	31.00	11.00	47.00	9.01

From table 4 above the mean interest scores of public experimental and private experimental seem not to have differed in both pretest and posttest. Similarly public control and private control seemed to have showed equal interest as shown by their mean interest scores. The test of hypotheses 4 and 6 further validated the result.

Hypothesis 1:

There is no significant difference between the mean social studies achievement scores of students in the experimental and control groups.

Table 5: ANCOVA analyses of the students’ Achievement scores.

Source	Sum of Squares	DF	Mean Square	F	Sig.	Remark
Corrected Model	17.996	3	5.999	1.684	0.011	
Intercept	72011.601	1	72011.601	2311.4	0.19	
Ownership	6.065	1	6.065	.035	.853	Not Sig
Method	9053.854	1	9053.854	51.518	.000	Sig
Ownership*Method	217.286	1	217.286	1.236	.268	Not Sig
Error	26468.1725	385	68.7485	3.161		
Total	516323.000	389	1327.3085			
Corrected Total	11474.333	387				

Teaching methods, as main effect gave an f value of 51.518 and this significant at .000. Since .000 is less than .05, this means that at .05 level, the f value of 51.518 is significant. Therefore, hypotheses 1 is rejected as stated, indicating that there is a significant difference between the mean achievement scores of the experimental and control groups.

Ownership * Method	142.908	1	142.908	3.291	.258	
Error	16717.47	385	43.422			
Total	494336.000	389	1270.7866			
Corrected Total	8299.785	387				

CONCLUSIONS

Based on the findings of this study it was concluded that students in the experimental group taught social studies with Self-controlled Learning method achieved higher than their counterparts in the control group who were taught the same topics with expository method. Hence, Self-controlled Learning method promotes students' achievement in social studies. Also, students in the experimental group taught social studies with Self-controlled Learning method showed more interest than their counterparts in the control group who were taught the same topics with expository method. Hence, Self-controlled Learning method enhances students' interest in social studies.

Recommendations

1. Self- controlled Learning method should be used in teaching social studies in our secondary schools.
2. Social studies teachers should be trained through intensive seminars, workshops and in-service trainings on the use of Self-controlled Learning method for teaching and learning of social studies in particular.
3. Methodology in Social Studies Teacher Education should be upgraded to include more Learner Autonomy Constructivists Models.

REFERENCES

- Agbo, G. (2014) Effect of static and non-static CAIs on students' achievement and interest in mathematics in Enugu State. http://www.African_quarters.org/journal 3(2). 77-91. Retrieved 21/11/2016s.
- AL-Gazir, M.U (2013), Effect of Constructivist Approach on the Interest and Achievement of High School students in Trigonometry. <http://www.interscience.wiley.com/cgi-bin/abstract/7832608288/ABSTRACT>. Retrieved 05/12/2016.

- Bell, U. & Thompson, K.L. (2012) Efficacy of SRLS in promoting students' Achievement and Retention in Social Sciences. <http://www.interscience,wiley.com/cgi-bin/abstract/783268288/ABSTRACT>. Retrieved 05/12/2016
- Chung, G (2012) Efficacy of Self-Regulated Learning Strategy in promoting creative and critical thinking among secondary school students. www.edu.support.net/newsletter.448010322/ABSTRACT. Retrieved 08/05/2016.
- Clauss, P. (2012). Effect of Computer Aided Instruction Modes on 5th grade pupils' achievement in Basic Science. [http://www.African_quarters.org/journal 5\(2\). 230- 241](http://www.African_quarters.org/journal5(2).230-241). Retrieved 05/11/2016.
- Derbuck, H. (2012) Efficacy of CAI modes in promoting creative and critical thinking among secondary school students. [www.edu.support.net/newsletter. 448010322/ ABSTRACT](http://www.edu.support.net/newsletter.448010322/ABSTRACT). Retrieved 08/05/2016.
- Federal Republic of Nigeria (2013) *National Policy on Education*. Abuja: NERDC Press.
- Ika, C.M., (2013) Constructivism: A Pragmatic Approach. *Association for Promotion of Creative Education Journal*, 3(1). 35-42.
- Ikeje, V.I. (2011) Effect of student-centered method on students' achievement and interest in social studies in Ikwuano L.G.A. of Abia State. www.mathscorner/tcl.com. Retrieved 08/05/2016.
- Jegede S.T (2012) Effect of Self-Regulated Learning Strategy on students, achievement and interest in social studies www.edu.support.net/newsletter.448010322/ABSTRACT. Retrieved 08/05/2016.
- Kalomba, U.L. (2011) Pedagogy in Secondary School social studies. <http://www.mathsedu.org.com>. Retrieved 10/01/2016
- Kreks, M.C. (2012). Topical issues in educational research. www.amazonbooks.com. Retrieved 16/12/2016.
- Kwame, H.Y . (2013) Furthering Application of Learned Materials among students of Public and private Secondary schools. <http://www.interscience,wiley.com/cgi-bin/abstract/7832608288/ABSTRACT>. Retrieved 05/12/2016.
- Mbu, C.M. (2012). Improving Secondary School Students' Achievement and Retention. *Academic Research Journal* 3(11) pg 303-310. <http://www.scholar/ib.vt.edu/iejour/ijev/1472/haynie/.html> Retrieved 02/02/2016
- Njor G.H. (2013) Simulations and Animations in Science Teaching: An introduction. *Journal of Quality Education*.1(1),18-20.www.Llickconnect.com retrieved 02/02/2016

- Ojim, D. (2012) A comparative study of the mean interest, achievement and retention scores of public and private schools student in Nigeria. <http://www.scholar/ib.vt.edu/iejour/ijev/1472/haynie/.html> Retrieved 02/02/2016.
- Okeke, S.T. (2013) Effect of SRLS on Students. Achievement, Interest and Retention in JSS Classes. www.edu.support.net/newsletter.448010322/ABSTRACT. Retrieved 08/05/2016.
- Pedro, V.i. (2013) Effect of SRLS of students' achievement and retention in Sciences. www.mathscorner/tcl.com. Retrieved 08/05/2016.