

Effects of Self-Directed Learning on Achievement of Social Studies Students in College of Education Zing, Taraba Nigeria

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Abstract

The study examined the effects of self-directed learning strategy on achievement of Social Studies students' in College of Education Zing. The study adopted the non-equivalent group, pre-test-post-test quasi-experimental design. One hundred and eighteen (118) NCE II students offering Social Studies as teaching subject and the Social Studies major in College of Education, Zing Taraba State, Nigeria, constitutes the sample size for the study selected simple random sampling technique. The instrument used for the data collection was Social Studies Achievement Test (SSAT) with a reliability coefficient of 0.75, obtained using test and re-test techniques. The data collected were analysed with mean and standard deviation for all research questions and t-test for independent samples and ANCOVA was used to test hypotheses formulated for the study at 0.05 level of significance. Self-directed strategy was found to be effective in improving the achievement of students in Social Studies as indicated in the Post-test result that there is significant difference between the mean score of students in the experimental and control groups in Social Studies. On the effect of self-directed learning strategy across gender, the findings revealed that achievement of male students who were exposed to self-directed learning strategy did not significantly differ from that of the female students. Based on the findings, it was recommended that School administrators, teachers and government should emphasis more on the application of self-directed learning strategy alongside other conventional methods. Doing so, will improve the academic achievements of students in all area of academic endeavors. And Irrespective of gender of students, self-directed learning strategy should be employed at all time.

Keywords: Social Studies, Strategy, Self-directed strategy, achievement, and students

Introduction

The development of any country is determined by the level of scientific, technological, and social advancement. This advancement is a result of their educational standards. Education, on the other hand, is purposefully meant for the realization of human aspirations, which leads to self-actualization, good social human relationships, self-reliance, economic efficacy, national unity, and social and political progress, among others. The goals education must be given some degree of seriousness so that they can be beneficial to status, gender, creed, or colour.

The laid-down goals of education have an achievable means, which is education, and it is based on this agreed foundation and global goals of education that social studies emerged as a subject. Social studies as a subject portrays our culture and ways of social interaction. The discipline views man as an integrated being and can be used to purge ills and vices to make the country better. In the College of Education, teaching is oriented towards clarification, discussions, explanation, demonstration, and evaluation. Despite the usage of these methods, there seems to be no significant change in students' achievement in social studies. The poor achievement is a great concern to scholars and other stakeholders. In the college of education, some local materials used do not meet international standards; some books do not carry international standards and are highly recommended for usage in school; the language used in the class do quite contradict the culture of the students; therefore, when using assessment to test the achievement of the students, the result becomes worrisome.

Vijay (2014) states that many critical issues are related to poor achievements among students in class. These are: understanding of the subject matter by the students; teaching methodology; evaluation methods adopted by the teacher for the class; the learning environment; time allotted to a course; the students being exposed to advanced work; the quality of the lecture; the semester and lesson planning system; and revision and recapitalization and methods, are some of those factors that can easily affect students' achievement. Jekayinfa (2005) is of the opinion that students' achievement may continue to fluctuate in social studies unless the teaching methods and materials selected are relevant to the age, interests, aspirations, and capabilities of the students. Students with poor achievement have a more negative attitude towards learning and believe that school and learning will not help them be successful in the future. Based on the factors identified that influence poor achievement is variables that has to be taken care of by teacher of social studies during teaching and learning processes. Adoption of a strategy that can tackle this problem of low achievement should be initiated by the teacher. A student-centered strategy that can guide the students to find solutions to real-world problems through cooperative group work is required. A self-directed teaching strategy engages is a strategy that the child thinks independently of the teacher or with little guidance from the teacher to perform complex classwork and academic activities.

Self-directed learners portray a higher awareness of their responsibility, especially toward goals they have set for themselves, by making learning meaningful and result-oriented and consistently monitoring their own achievements. A self-directed strategy opens up a student to high achievement and a positive attitude. Student who is self-directed is curious, especially about contemporary issues, and willing to find ways of doing things. Self-directed strategy allows the

student to see contemporary problems as challenges that desire change therefore making learning more pleasurable. In a self-directed class, there are steps that the students should adopt to facilitate their learning process easier. Uwaterloo.ca (2020) gave four-step processes: assessing readiness to learn, setting learning goals, engaging in the learning process, and evaluating learning. A carefully observed self-directed process produces student whose ability is stimulated; critical thinking and creativity are displayed, and reasons and solve problems independently or with little help outside. The idea of students cramming and regurgitating information for examination purposes has made many achieve poorly and develop a negative attitude towards Social Studies. This therefore, forms the basis for the research on the effect of self-directed strategies on the attitude and achievement of social studies students in the College of Education Zing.

Statement of the problem

The fluctuating and falling standard in achievement among students of social studies in the College of Education, Zing, is caused by the interplay of various factors. Central to the study by Vijay (2014) was lack of understanding of the subject matter by the students, inadequate teaching methodology, the evaluation methods adopted by the teacher for the class, the learning environment, the time allotted to a course and the students being exposed to advance work, the quality of the lecture, the semester and lesson planning system, and revision and recapitalization methods. Even when the above study pointed out the various factors, it could not clearly state the influence of self-directed learning strategies on attitude and students' achievement.

Furthermore, the poor academic achievements of NCE students could lead to a negative attitude towards Social Studies as a course, and academic achievement in the colleges of education determines whether the students will proceed to university for a higher degree or be able to secure a teaching job. NCE students' academic achievement also determines the quality of education that will be passed on to the students by the potential teachers at the primary and secondary school levels.

Students' academic achievement is affected by several factors, which include students' learning skills, parental background, peer influence, teachers' quality, and learning infrastructure, among others. Government efforts to achievement have led to a series of interventions like scholarships, the training of lecturers, the provision of infrastructure, and so on. Yet, academic achievement in the colleges of education in Nigeria is on the decline due to the low quality of teachers turning out every year. The importance of having qualified teachers in the field of teaching learning is one of the determinants the success of any program and this is conditioned by the ability of the teacher to teach. If there is failure at this point, the whole structure fails. Hence, the implementation, selection, preparation, and supervision of education will be affected.

This forms the basis for the need to use modern strategy of teaching, such as self-directed learning strategies, to help correct students' and boost their achievements. Although people have worked on methods such as the inquiry method, concept mapping, and discussion method to improve attitude and achievement, a self-directed strategy, due to its nature, which is student-centred, will

help improve achievement. The idea of a self-directed strategy encourages that the ideas of students to be understood and remains very clear to them. Therefore, this study examined the effect of self-directed strategy learning on the achievement of social studies students in the College of Education, Zing, Taraba State.

Objectives

The aim of the study is to examine the effects of self-directed strategy on attitude and achievement of students in College of Education, Zing; specifically the objectives of the study are to:

1. Determine the achievement mean scores of NCE II Social Studies students in the experimental and control groups before and after exposure to treatment
2. Examine whether the achievement of male and female Social Studies students differ before and after the intervention

Research questions

1. What is the achievement mean scores of NCE II Social Studies students in the experimental and control groups before and after exposure to treatment?
2. What is the achievement mean scores of male and female NCE II Social Studies students in the experimental and control groups after exposure to treatment?

Hypotheses

1. There is no significant difference between the achievement mean scores of NCEII Social Studies students in the experimental and control groups before and after exposure to treatment
2. There is no significant difference between the achievement mean scores of male and female NCEII Social Studies students in the experimental and control groups after exposure to treatment

Literature review

Self-directed learning means one's ability to create or make out something from his internal capacities void of outside influences and also being able to engage in social relationship without forgetting his real identity. The individual who is engaged with self-directed learning never loses focus of what he is and what are his targets. The student faces whatever goal he has set out to achieve no matter the complex or difficult nature of the task. In addition to this, Borich (2011) is of the view that self- directed learning technique is an approach to both teaching and learning that actively engages students in the learning process to acquire higher-order thinking skills. He stated that in this perspective, the technique used in teaching and learning situation involves getting students to unleash their imaginative and intuitive capacities through learning. This definition identifies the learner as a master of his situation though not completely without the help of a teacher.

According to Petro (2017) self-directed learning can be as diverse as simply discovering new information and thinking critically about it, actively participating and contributing to learning community, or designing your own learning path and selecting resources, guides and information. In view of that Social Studies that is regarded as a problem solver desired that a technique which

is problem solving oriented be used. Self-directed learning techniques engage the student to identify a problem and evaluate the problem by finding solution through their analysis. This explains the critical thinking ability of the child, with the help of the teacher as a guide, facilitator total control of the learning process with self-directed in the Social Studies classroom stimulates, creativity, critical thinking, cooperation and group work among students(Abeshi,2015). These desired characteristic leads to result oriented classroom activities.

There are various processes identified by scholars in using self-directed technique Boric (2011) outlined some reasons to consider when using self-directed technique in the class these are:- Getting students to unleash their imaginative and intuitive capacities, Students should accept responsibility for their own learning, encourage students to go beyond content given, to think critically, reason and problem solving, engaging students in project and using the goals of Self-Directed Learning using differentiated instruction.

Oyibe, Azubuike, Edinayeng and Effiong (2015) stated that, one of the challenges for social studies teacher is or to meet the individual need of students in a class characterized by multiple levels of ability, achievement and social development. They further stated that social studies teacher, therefore should be well equipping, organized, resourceful, and be able to develop effective independent learning skills in the students through a product orientated instructional process. During lesson presentation, the teacher should give enough opportunity to all students, this can be done by encouraging the lesser ones and giving them adequate guide in the right direction. Using self-directed in the classroom demands that the teacher recognizes the historical background of the students in the class. This background includes his family background, the type of environment from which the child comes from, and the Socio Economic and educational background of the students parent because they are some of the determinants of child's performances and achievements in school.

Academic achievement is considered as one of the most important and classical impression about students' progress in science education. This is not only because higher achievement indicates higher technical skills that is currently in short supply, but also because higher achievement is valued in the society as an indicator of higher chance to get high-status occupations and high ability to pursue higher education (Okoye & Okecha, 2018). This implies that the nature of students' achievement in Social Studies can be foster only if there is a good understanding of the rule of law.

Students' achievement is regarded as a crucial indicator of excellent academic performance, and educational efforts are always aimed towards achieving high levels of school achievement. On the factors influencing students' achievement, several studies focused on investigating the students, school, and family factors in influencing students' achievement. In respect of students' factors, academic achievement is significantly influenced by the students' attributes, such as intelligence, motivation, and attitudes among others (Al-Agili, Mamat, Abdullah, & Maad, 2017). Besides, there were students who entered the class with adverse perceptions and low expectations of the subject and their capacity to succeed. Therefore, it could be indicated from the students' perception that they were not confident of their abilities and this would affect their achievement. In terms of family factors, it was well known that student and

family backgrounds were constantly the indicators of the high percentage of the student outcome variance (Mohamed, Samah, Samsuddin, & Ali, 2019). The influencing factors of such academic results also included students' gender, socio-economic background, previous skills, attitudes, ambitions, and learning beliefs. Previous studies on the subject on students' academic performance indicated that there exist several factors that influence students' academic performance, but students' and lecturers' attitudes, students' academic self-efficacy and students-lecturers' interaction remained the key determinant of academic achievement (Li, 2017; Maina, 2018; Tenaw, 2019; Fan, 2020). Lecturing is a collaborative process that involves interaction between students' and the lecturers that at the end brings about change in the students behaviour.

Methodology

Quasi-experimental Design with non-equivalent group, pre-test-post-test design in which intact classes was assigned was adopted. This is because intact classes were used as experimental and control group. The study considered NCE II students offering Social Studies as teaching subject and the Social Studies major in College of Education, Zing Taraba State. A simple random sampling technique was used to select 118 NCE II students out of the 217. Social Studies Achievement Test was constructed and used for data collection. A Test-retest method was used for internal consistency test and a reliability coefficient of 0.75 was obtained. The analysis was carried out descriptively using simple tables and while ANCOVA was used to test hypotheses formulated for the study at 0.05 level of significance.

Result

Research Question one:

What is the achievement mean scores of NCE II Social Studies students in the experimental and control groups before and after exposure to treatment?

Table 1

The Results of the Analysis of the Pretest and Posttest Means Scores of Social Studies Students in College of Education Zing.

Group	N	\bar{X}	SD	Means gain	\bar{X} -DIFF
Experimental	Pretest	41.05	10.62	23.11	
	Posttest	64.16	10.41		16.38
Control	Pretest	38.28	12.55	9.5	
	Posttest	47.78	10.59		

The results of the analysis from Table 1 above showed that the experimental group had a pretest means scores of \bar{X} 41.05, SD = 10.62 and a posttest mean scores of \bar{X} 64.16, SD = 10.41 with a means gain of 23.11 while the control group had a pretest means scores of \bar{X} 38.28, SD = 12.55

and a posttest means scores of \bar{x} 47.78, SD = 10.59 with means gain of 9.5. The results further indicate a mean difference between the experimental and control group of 16.38. The result showed that the posttest means scores of the two groups increased but that of the experimental group of 23.11 is higher than that of the control group of 9.5. This implies that self-directed learning strategy improves NCE II students' achievement more than the conventional lecture method.

Research Question two:

What is the achievement mean scores of male and female NCE II Social Studies students in the experimental and control groups after exposure to treatment?

Table 2
The Results of the Posttest Achievement Mean Scores of Male and Female Social Studies Student in College of Education, Zing Taraba State.

Group	N	\bar{x}	SD	\bar{x} - Diff
Male	42	67.50	13.80	1.69
Female	46	69.19	8.11	

The result of analysis from table 2 revealed that males had a posttest means scores of 67.50, SD = 13.80, while females had a posttest means scores of 69.19, SD = 8.11 with mean scores difference of \bar{x} - diff 1.69. The results indicate that the achievement mean scores of females were higher than that of mates. This implies that self-directed strategy improves female students achievement mean scores in Social Studies more than male students.

Testing of Hypotheses:

Hypothesis one:

There is no significant differences in the achievement mean scores of Social Studies students between the experimental and control groups in College of Education in Zing, Taraba State, Nigeria

Table 3
Summary of ANCOVA Analysis of the Posttest Means Scores Between the Experimental and Control Group.

Source	Type III Sum of square	AT	Mean Square	F	Sig	Partial extra Square
Corrected model	37139.8919	2	18569.945	249.787	.000	.734
Intercept	7921.824	1	7921.824	106.558	.000	.371
Pretest	5835.543	1	5835.543	78.495	.000	.302
Group	27.474.332	1	27474.332	369.561	.000	.671

Error	1456.109	181	74.343
Total	827,996.000	184	
Corrected Total	50596.00	183	

a. R Squared = 734 (Adjusted R Squared = 731)

Research of Sidak Pos Hoc Comprise of the Difference Between Post Achievements Mean Scores of Students in the Experimental and Control Group.

Experimental	Control	x –diff	Students error	p-value
64.16	47.78	16.38	3.45	0.000

Analysis of covariance (ANCOVA) was conducted to determine if a significant difference exist in the posttest mean scores of NCE II Social Studies in the experimental and control group in College of Education Zing, Table 7 shows that $F(1,181) = 369.561$, $p < 0.05$, partial $\eta^2 = 671$. Since the P-value of 0.000 is less than 0.05 level of significance with effect size of 67.100, the null hypothesis which states that there is no significance difference in Social Studies students achievement in the experimental and control group was rejected indicating that there is a significant effect of self-directed strategy on Social Studies students achievement that results further revealed an adjusted R squared value of 731 which means that 73.1% of the variation in the dependent variable which is achievement is explained by the variation in the treatment of self-directed strategy while the remain 26.9% is due to other factors not included in this study. The Sidak post hoc test in table 8 confirms that the corrected differences between the experimental and control group was statistically significant (I-J) = 16.38) we can conclude that self-directed strategy improve Social Studies students achievement in College of Education Zing.

Hypothesis two

There is no significant difference between the achievement mean scores of male and female NCEII Social Studies students in the College of Education, Zing.

Table 4:

Summary of ANCOVA Analysis of the Posttest Achievement Mean Scores between Male and Female Students in College of Education Zing Taraba State

Source	Type III sum of square	Df	Mean square	F	Sig	Partial Eta squared
Corrected model	55697.567a	2	2848.783	26.408	.000	.395
Intercept	8697.755	1	8697.755	80.627	.000	.499

Pretest	59.466	1	59.466	.5511	.460	.009
Group	2090.514	1	2090.514	19.379	.000	.193
Error	8738.004	81	107.877			
Total	359268.00	84				
Corrected Total	14435.571	83				

a R squared=398 (Adjusted R squared 380)

The result of the analysis from table 4 showed that male had a posttest mean scores x 67.50, SD=13.8 while female ha 69.19, SD=8.11 $F(1, 81) = 19.379$ $p > 0.05$. Since the p-value 0.193 is higher than 0.05 level of significant, the null hypothesis was retained. This indicate that the achievement of male students' does not significantly differ from that of the female students hence students' gender does not affect students achievement in Social Studies after exposure to treatment.

Discussion of findings

The purpose of this study was to determine the effect of self-directed strategy on achievement of Social Studies students in college of education zing Taraba state, Nigeria.

Based on the result of the findings, this study indicated that there is a significant difference in the achievement means scores of social studies student in the experimental and control group after disposure to self – directed learning and conventional lecture method. This is in agreement with the findings by Haobin, Wipada, Areewan and Beverly (2018) who find that self -directed learning strategy improves the achievement of Basic science and technology students better than conventional teaching method. The implication is that when students are properly exposed to self-directed learning will help in improving their achievement in Social Studies in Collage of Education in Zing Taraba state.

On the findings of difference between the achievements mean scores of male and female NCEII Social Studies students in the College of Education, Zing, the findings revealed that there is no significant difference in the achievement means scores of male and female after disposure to self-directed strategy. This is also in disagreement with the findings, by Nold (2018) who fund a different in the achievement of students and in according with the findings by Rach Shanda who fund different in the achievement of students after disposure to problem based learning and achievement in Basic science.

Conclusion

Self-directed learning strategy appears as one of the effective learning strategy in the field of social studies. It helps correct students' and boost their achievements. Although people have worked on methods such as the inquiry method, concept mapping, and discussion method to improve attitude and achievement, a self-directed strategy, due to its nature, which is student-centred, will help improve achievement. The idea of a self-directed strategy encourages that the ideas of students to

be understood and remains very clear to them. The School administrators, teachers and government should emphasis more on the application of self-directed learning strategy alongside other conventional methods. Doing so, will improve the academic achievement of students in all area of academic endeavors. And Irrespective of gender of students, self-directed learning strategy should be employed at all time.

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