

EFFECTS OF COOPERATIVE LEARNING STRATEGY ON ACADEMIC ACHIEVEMENT AND RETENTION OF SECONDARY SCHOOLS STUDENTS IN FINANCIAL ACCOUNTING IN ADAMAWA STATE

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ABSTRACT

This study examines the effects of cooperative teaching strategy on academic achievement and retention of secondary school students in financial accounting in Adamawa State, Nigeria. The study adopted Mixed method as a design which composed of quasi- experimental design of pre-test, posttest nonequivalent control group and interview session. The population of the study consisted of 555 SSII students offering financial accounting in government senior secondary schools in Adamawa State. Out of these populations a sample sized of two intact classes of 90 students were used for the study. These schools were purposively selected and randomly divided into experimental and control groups. The students in the experimental group were taught using cooperative teaching strategy while those in the control group were taught using conventional teaching method. Two instruments were used for the data collection. These instruments were: Accounting Achievement Test (AAT) and Focus Group Interview (FGI). The data collected were analyzed using both descriptive and inferential statistics. The descriptive statistics such as mean and standard deviation were used to answer the research question 1,2, and 3 while research question 4 was answered using a deductive approach. Inferential statistics such as independent sampled t-test was used to test the null hypotheses were tested at 0.05 level. The study revealed that: Cooperative teaching strategy has positive effect on academic achievement and retention of secondary school students in financial accounting. Therefore, the study recommended that the education ministries and boards should organize seminars, workshops and conferences as well

as in-service training to educate and train financial accounting teachers on the use of cooperative learning strategy as a teaching method.

Keywords: Cooperative Strategy, Academic Achievement, Retention

1. INTRODUCTION

The primary purpose of teaching at any level of education in Nigeria is to bring a fundamental change in the learner. To achieve this objectives, various teaching strategies such as discussion method, demonstration method, lectures method, and Socratic method among others have been adopted to accelerate students learning process. Meanwhile, these teaching strategies were evolved from the learning theories such as behaviorism and constructivism all in attempt to facilitate the process of knowledge transmission. Kpolovie (2010) reported that teachers' activities and methodology in a class have impact on general behaviors of students. The author added that teaching method adopted by teachers is a powerful psychological trait as well as knowledge emotion which produce a positive feeling and a sense of being captivated to work hard and effectively.

In Nigerian secondary schools, behavioral approach is the most common teaching method practice by teachers. In this approach, students were mostly passive listeners and the classroom environment is mostly dominated by teachers (Iqbal, 2011). Generally, Nigerian scholars agreed that the conventional teaching method adopted at secondary school level does not only lead to low student's achievement but also incapacitate students from developing required skills necessary for creative thinking (Oke, 2005, Kolawole, 2007, Igboanugo, 2013). This is because conventional teaching approach is teacher- centered which involved only showing, telling and observing rather than the ideal practice of learning by doing approach that would involve both the teachers and the students respectively. This made Adamu and Jibrin, (2012) to submit that conventional teaching approach has negative effects on academic achievement of students in business mathematics.

To address this problem, the National Policy on Education (FRN, 2008), stressed for a paradigm shift from the behaviorism to constructivism approach of teaching. This policy categorically demands for the adoption of another teaching strategy that would involve students in their own knowledge construction, placing them at center of

learning activities and teacher as facilitator. Adamu and Kusa (2018) also reported that there is need to shift from behaviorism instructional strategy to constructivism teaching approach. Therefore, considering the general criticism of scholars on the conventional (behaviorism) teaching approach adopted in Nigeria secondary schools, has made one to understand why scholars agitate for an instructional approach that will enhance student's performance. Hence, the selection of cooperative teaching strategy for this study. The cooperative teaching strategy was chosen for this study because, it is one of the student centered approaches that has been documented in the existing literature as an effective approach for helping students to acquire knowledge on their own, effective communication skills and practical learning skills (Johnson & Johnson, 2008; Slavin, 2011).

Cooperative teaching strategy involved deliberate use of heterogeneous small groups of students who work together in a team for the purpose of learning. The team usually comprises of students with different background such as sex, academic abilities, religious and social among others who work together towards solving their academic problems under the supervision of their teacher. Cooperative teaching is theoretically based on the work of psychologists like Levi Vigotsky, and Jean Piaget who proposed that children should actively construct their knowledge in a social context (Conway, 1997). This implies that, students should not only take information or ideas from their teachers; but also, to create something new from the information or ideas they received. This means it is an act of intellectual processing of information and ideas through a social setting. According to Aziz and Hossain (2010), cooperative learning strategy helps students learns together in groups in order to maximize their learning with great interest and motivation. In another study conducted by Aziz and Hossain (2010), also revealed that students in cooperative learning class perform extremely better than those in non-cooperative learning approach.

Since cooperative learning strategy suggested that a classroom is supposed to be a place where students learn by generating their own idea through active participation in the learning process rather than waiting for instructors to impart the knowledge to them (Boghossian, 2006). Therefore, it is in line with the philosophy for teaching of financial accounting. Because is one of the subjects that cannot be learn by simple memorization of its basic rules and principles; but rather, it requires full participation of students in the learning activities (Akintelure, 1998). According to National

Examination Council (2004), one of the purposes of teaching financial accounting at the secondary school level in Nigeria is to enable students appreciate the basic accounting practices, principles, and their application in the contemporary business activities, as well as to prepare them to further their study beyond secondary school level (Francis, 2014). This can only be achieved through a sound teaching method like cooperative learning strategy. Because it is imperative for the survival of both private and public sectors of our economy as it provides them with competent and the required manpower that would assist them in policy formulation, investment decision as well efficiency management of their various resources.

Statement of the Problem

Financial accounting is one of the Commercial subjects offered at the secondary school level whose main purpose is to equip students with necessary knowledge of basic concepts and principles of practicing accounting profession and subsequently to become self-reliant. Unfortunately, there has been persistent low students' enrolment and poor academic achievement in financial accounting. A survey of six schools from 2013 to 2018 under this study revealed that less than 6.70% of social science students registered financial accounting at SSCE level and only 35.66% students that passed the examination at credit level. This shows that financial accounting is not a popular subject among secondary school students in Adamawa State (School survey, 2019).

In addition, the researcher equally had a discussion with both teachers and students in some of the schools within the zone. The outcome of the discussion revealed that one of the major problems affecting most of the accounting students is lack of proper understanding of the subject as a result of poor teaching approach used by the financial accounting teachers. To this effect, several studies such as Ogunu (2000), Afe (2001), Uchefuna (2001), Kibos (2002) and WAEC (2006 & 2014), have all concord to the fact that inappropriate instructional strategy adopted by financial accounting teachers is responsible for poor student's enrolment, low academic achievement and retention among financial accounting students in secondary schools.

Consequently, the effect of academic failure is not only frustrating to the students and their parents, but it also dangerous to the survival of our communities. This is because many of these students who could not further their education beyond

secondary school often involve into all sort of criminalities thereby making our communities vulnerable with the exception of few. Therefore, if nothing is done, the nation quest for professional accountant for economic development might be an illusion.

Purpose of the study

The general purpose of this study was to investigate the effects of cooperative learning strategy on academic achievement and retention of secondary schools financial accounting students in Adamawa State, Nigeria. While, specific objectives of the study were to:

1. determine the difference in mean academic achievement scores of financial accounting students in the experimental group and those in the control group prior to the treatment.
2. determine the effect of cooperative learning strategy on academic achievement of Secondary School students in Financial Accounting in Adamawa State, Nigeria
3. determine the effect of cooperative learning strategy on academic retention of Secondary School students in Financial Accounting in Adamawa State, Nigeria
4. explore the opinion of secondary school students on their general assessment of cooperative learning strategy with specific reference to retention and understanding of financial accounting in Adamawa State.

Research Questions

The study answered the following research questions:

1. Find the difference in the mean academic achievement scores of financial accounting students in experimental group and those in control group prior to the treatment?
2. What is the effect of cooperative learning strategy on academic achievement of Secondary School students in Financial Accounting in Adamawa State, Nigeria

3. What is the effect of cooperative learning strategy on academic retention of Secondary School students in Financial Accounting in Adamawa State, Nigeria
4. Fine the opinion of secondary school students on their general assessment of cooperative learning strategy with specific reference to retention and understanding of financial accounting in Adamawa State, Nigeria

2. RESEARCH HYPOTHESES

In line with the research questions, the following null hypotheses were formulated and tested using independent t-test.

HO₁: There is no significant difference between the mean academic achievement scores of financial accounting students in experimental group and those in control group prior to the treatment.

HO₂: There is no significant effect between the mean academic score of Secondary School students taught Financial Accounting using cooperative learning strategy and those taught using conventional learning strategy in Adamawa State, Nigeria.

HO₃: There is no significant effect between the mean retention score of secondary School students taught Financial Accounting using cooperative learning strategy and those taught using conventional learning strategy in Adamawa State, Nigeria

3. METHODOLOGY

The design adopted for this study is a mixed method design. This type of design allowed the researcher to combine the element of both quantitative and qualitative data within a single investigation in order to permit synergistic utilization of data than doing it individually (Creswell, 2009). The first design is a quasi-experimental design of non- equivalent pre-test post control group. This is where intact classes were used instead of randomization.

Table 1
Pre-test Posttest Nonequivalent Group Design

Groups	Pre-test	Treatment	Posttest
Group 1	O1	X1	O2
Group 2	O3		O4

Source: Field Study, 2019

Group 1: Experimental Group (cooperative learning strategy)

Group 2: Control Group (conventional learning method)

The symbols are represented as follows:

O1 and O3: Represent Pre-test

O2 and O4: Represent Posttest

X1: Represent Treatment Level (Cooperative Learning Strategy)

The second design is the qualitative design which is the used of interview technique that help us to understand the opinions of the respondent in terms of their feelings, attitude and impression on the subject matter (Pope & Mays, 1995). The population of this study consisted of 555 SSII financial accounting students in government senior secondary schools from Yola Metropolis, Adamawa State. Out of these population, a sample size of 90 students from two intact classes were selected. One of the intact class was used for the experimental group and the second class was used for the control group respectively. The experimental class had 56 students while the control class hade 34 students respectively. Two instruments were used for the data collection. These instruments were Accounting Achievement Test (AAT) and Focus Group (FG) interview session. The AAT instrument was adopted from past SSCE and NECO examination past questions papers. 50 multiple questions were selected. These questions were made to represent the Pre and Posttest achievement test exercise for the study. Two weeks after the exercise, the instrument was reshuffled and re-administered for a retention test. These selected multiple questions items were standard test instrument; therefore, they did not require further validation (Okoli, 2000).

The instruments were pilot tested at Government Day Secondary School Jalingo Taraba State, using 30 students. The school was assumed to have similar characteristics and background to the study area. The result obtained from the pilot study was analyzed using spilt-half method. And the result from the two halves was analyzed using Spearman Brown which gave a reliability coefficient of 0.825. meanwhile the difficulties and discrimination index coefficient stood at 82.88 and 0.82. According to Tracy (2016) for an instrument to be considered reliable, it must have an alpha value of above 0.50 to 1. As such all were adjudged reliable. The experimental study exercise lasted for five weeks. The collected information was analyzed using descriptive and inferential statistics. Under the descriptive statistics mean and standard deviation were used to answered the research questions 1,2 and 3 while research question 4 was answered using deductive approach. The inferential statistics such as t-test was used to test the null hypotheses at 0.05 level of significant in order to determine the marginal differences between the variables. On the other hand, the qualitative data were analyzed using deductive approach to explain the opinions of the respondents.

Experimental Procedure

The researcher was assisted by the research assistants from the selected schools in administering the research instruments such as: AAT (that is pretest of the instrument) to the students. The test lasted for 90 minutes. This enabled the researcher generate data on the pre-treatment academic background of the students. The scripts for AAT were collected and marked by the researcher based on the drawn marking scheme. The marked scripts were further analyzed to determine the position of the two groups before the treatment.

The next stage of data collection, the researcher taught the students independently. Students that form the experimental groups were taught using cooperative leaning method. Using salvin`s (1994) Student Team- Achievement Division (STAD) instructional technique. In this technique, the researcher divided the students into eight heterogeneous sub- groups of four to six members as the case may be. After which, the treatment follows as:

On the first day, the researcher presented the lesson using a cooperative learning strategy for one period of 45 minutes. Then the students were asked to copy the summary note on the chalkboard, which contain some exercise to be attempted by

the students before the next class. On the second day, worksheets covering the content of the lesson taught on the first day were provided to each cooperative group. The students work within their team for 25 minutes to discuss the content of the exercise and make sure that all the team members have attempted the previous exercise and it is well understood. Furthermore, the students took an individual test for the remaining 20 minutes and were not allowed to help one another. After the test, their scripts were collected and marked. Meanwhile, the researcher encourages competition within the groups by extending gifts to the groups that emerged the best. The researcher made some observation and clarification on the written test. This continued throughout the period of data collection.

On the other hand, students in the control group were taught using the conventional teaching method. In the control group the researcher adopted the behavioral approach which is the teacher centered approach. In this approach the teacher transmits the facts and explanations to the students by providing a task and solving it on the board. The instructions of the two groups were guided by the drawn lesson plans. This process continued for the period of five (5) weeks of the research work.

4. RESULTS AND DISCUSSION

Research Question One

What is the difference between the mean academic achievement scores of financial accounting students in the experimental group and those in the control group prior to the treatment?

A descriptive statistic used to determine the mean difference between student's mean academic achievement scores in the experimental and control groups prior to the treatment. Table 2 showed that the mean response for the experimental group stood at ($M= 46.28, SD = .332$) while that of control group stood as ($M = 45.91, SD = .321$) with the mean difference between the two groups at (0.37) which is a very negligible. The result therefore suggested that the two groups of the students had an equality entry level of the participant.

Table 2
Mean Analysis on the difference of Academic Achievement Scores between students in experimental group and those in control group prior to the treatment

Groups	N	Mean	Std. Deviation	Mean Difference
Experimental	56	46.28	.332	0.37
Control	34	45.91	.321	
Total	90			

Source: Field Study, 2019

Research Question Two

What is the effect of cooperative learning strategy on the academic achievement scores of Secondary School students in Financial Accounting in Adamawa State, Nigeria?

A descriptive statistic was performed to find out the effect of cooperative learning strategy on the academic achievement of secondary school students in financial accounting. The result in Table 3 below revealed that the post-test means achievement scores of experimental group stood at ($M = 67.88$, $SD = 3.160$) and that of control group as ($M = 48.81$, $SD = 4.616$), while the mean difference between the two groups stood at (19.07%) in favor of the experimental group. This indicates that, there is a large difference between the mean performance of students taught financial accounting with cooperative teaching strategy than those taught with conventional teaching method. Hence, the result favored the students in cooperative class.

Table 3
Analysis on the Effect of Mean Academics Achievement Scores between Experimental and Control Groups of Secondary Financial Accounting in Adamawa State

Groups	N	Mean	Mean Difference	Std. Deviation
Experimental	56	67.88	19.07	3.160
Control	34	48.81	-	4.616
Total	90			

Source: Field Study, 2019

Research Question Three

What is the effect of cooperative learning strategy on the retention ability of Secondary School students in Financial Accounting in Adamawa State, Nigeria?

A descriptive statistic was used to find out the effect of cooperative learning strategy on mean retention ability of secondary school's students in Financial Accounting by comparing the retention test scores of experimental and control groups. The result in Table 4, reveals that the post-test for the retention test scores of the experimental group stood at ($M = 60.85$, $SD = 3.474$) and that of the control group as ($M = 46.42$, $SD = 4.759$), while the mean difference between the two groups stood at (14.43%). This indicates that, there is a very large difference in the mean retention ability between financial accounting students taught with cooperative teaching strategy and those taught with a conventional teaching method. The result is in favor of students in the cooperative class.

Table 4

Analysis on the Effect of Mean Retention Test Scores between Experimental and Control Groups of Secondary Financial Accounting in Adamawa State

Groups	N	Mean	Mean Difference	Std. Deviation
Experimental	56	60.85	19.07	3.160
Control	34	46.44	-	4.616
Total	90			

Source: Field Study, 2019

Test of Null Hypotheses

Null Hypotheses One

There is no significant difference between the mean academic achievement scores of financial accounting students in the experimental group and those in the control group prior to the treatment.

The outcome of the *independent-samples t-test* in Table 5 showed that the mean academic achievement score of $M = 46.28$ for students in experimental group with the standard deviation of .332. The students in the control group had mean of $M = 45.91$ with the standard deviation of .321. The t -value obtained was .220 and $p = .827$. The obtained p -value was greater than 0.05. This finding suggested that there was no significant difference in the mean academic achievement scores between students in the experimental group and those in the control group prior to the treatment. The hypothesis was retained.

Table 5
Analysis of Independent *Samples t*-test on the Responses of Academic Achievement Scores of Financial Accounting Students in Experimental Group and those in Control Group Prior to the Treatment

Levene's Test for Equality of Variances								
Variable	Groups	N	F	Sig.	T	Mean	SD	Sig. (2-tailed)
Interest	Ex.	56	0.11	.994	.220	46.28	3.32	.827
	Cont.	34				45.91	3.12	

Source: Field Study, 2019

Null Hypotheses Two

There is no significant difference between the mean academic achievement score of Secondary School students taught Financial Accounting using cooperative learning strategy and those taught using conventional learning strategy in Adamawa State, Nigeria

The outcome of the *independent-samples t*-test in Table 6 indicates that there exists a significant difference between the mean academic score of experimental and control groups. The result shows that experimental with (M = 67.88, SD = 3.160), control group (M = 48.81, SD = 4.616), $t(100) = 24.650$, and $p = .000$. Since the computed p-value is less than the alpha value of 0.05, level of significance the null hypothesis was therefore rejected. This finding suggested that cooperative learning strategy has a significant effect academic achievement of secondary school students in financial accounting.

Table 6
**Analysis of Independent Samples *t*-test on Academic Achievement Scores
between Experimental and Control Group of Secondary Financial
Accounting Students in Adamawa State**

Levene's Test for Equality of Variances								
Variable	Groups	N	F	Sig.	T	Mean	SD	Sig. (2-tailed)
Posttest	Ex.	66	5.040	.270	24.650	67.88	3.160	.000
	Cont.	36				48.81	4.616	

Source: Field Study, 2019

Null Hypotheses Three

There is no significant difference between the mean retention score of secondary School students taught Financial Accounting using cooperative learning strategy and those taught using conventional learning strategy in Adamawa State, Nigeria

The statistical evidence presented the *independent-samples t-test* in Table 7 indicates that there is a statistically significant difference in the mean retention of students taught financial accounting using cooperative learning strategy and those taught using conventional methods. The result further shows that experimental group with (M = 60.85, SD = 3.474), control group (M = 46.42, SD = 4.759), $t(100) = 17.539$, $p = .000$. Since the computed p-value is less than the alpha value of 0.05, level of significance the null hypothesis was therefore rejected. This finding suggested that the retention ability of students exposed to cooperative learning strategy is significantly better than that of their counterparts in conventional learning strategy.

Table 7
Analysis of Independent Samples *t*-test on the Retention Test Scores between Experimental and Control Group of Secondary Financial Accounting Students in Adamawa State

Levene's Test for Equality of Variances								
Variable	Groups	N	F	Sig.	T	Mean	SD	Sig. (2-tailed)
Retention	Ex.	56	6.729	.395	17.539	60.85	3.474	.000
	Cont.	34				46.42	4.759	

Source: Field Study, 2019

Qualitative Analysis Using Deductive Approach

Theme One: Students' Achievement in financial Accounting

Figure 1 below, shows the perception and views of the participants regarding their achievement in financial accounting when they were exposed to cooperative learning strategy with two dimensions developed from the interviews. These are: (1) teammate, and (2) teacher. Three participants (2, 4, and 5) opined that their achievement in financial accounting was better when they were exposed to cooperative learning strategy because of their teammates. Participant 1, 3 and 4 on the other hand, attributes their achievement in financial accounting to their teacher.

Participant 2, for instance, mentioned that: *"I learned very well when working in small learning groups because even if I don't know the answer my teammates help me out of that problem. Therefore, working in the group makes me feel I can do better"* (Participant 2,).

Similarly, participant 4 went further to explain that, *"I can learn better in financial accounting when taught using cooperative learning strategy, because our teacher teaches us the lesson and he asked us to work in a small group of mixed learning ability to make sure that everyone in the group understands the lesson. So, we worked hard with our group members to understand teachers' lesson and undertake our given task"* (Participant 4).

In the same vein, participant 5 highlighted that, “Yes, *I can learn better using cooperative learning strategy because anything that I cannot achieve alone, my group members help me to achieve it because in cooperative learning strategy we assist and support each other to achieve our learning objective*” (Participant 5).

On the other hand, Participant 1 mentioned that: Of course, *I can do better when taught using cooperative learning strategy. Because our teacher encourages us to work hard and learn together as a group regardless of our gender difference, background, and put all our heads together to see that we understand our learning materials*” (Participant 1). The same view was expressed by Participant 3 and 6.

From the above discussion, it has been identified that cooperative learning strategy improved the achievement of secondary school students in financial accounting because the students worked together as teams to share their ideas with one another, support, and encourage one another’s effort to ensure that everyone has understood the lesson and has achieved the learning objective. More importantly, in cooperative learning strategy, all the students participated in the learning activities by contributing their share for the success of their group.

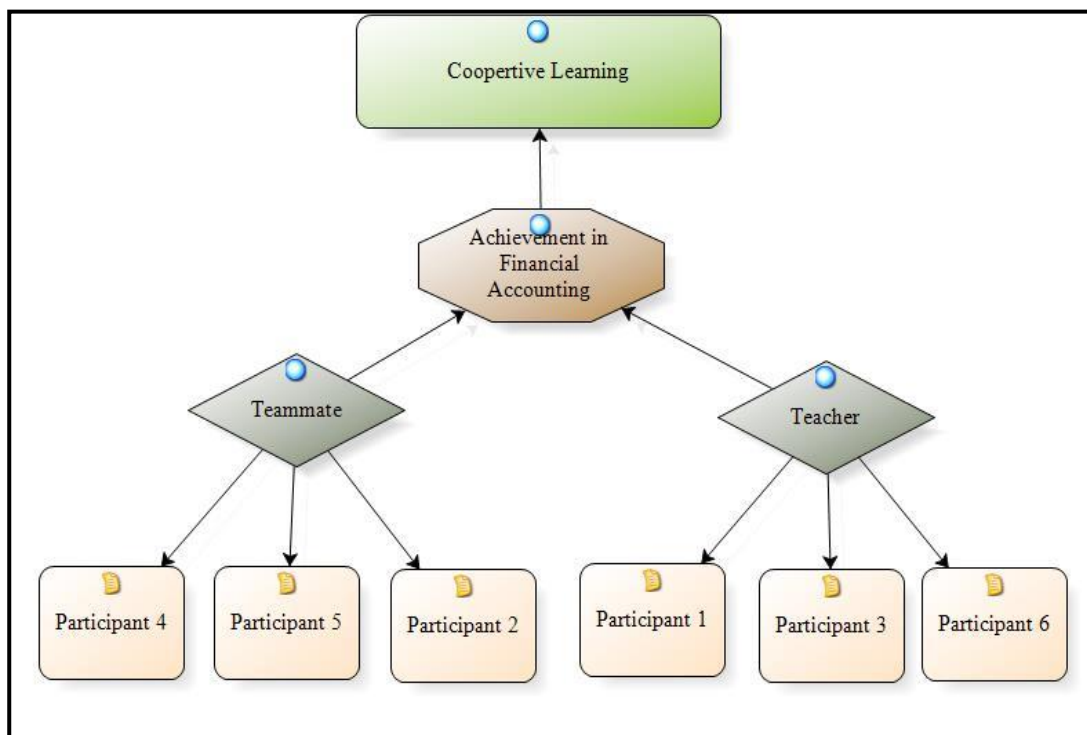


Figure 1: Model for Students' Achievement in financial Accounting

Discussion of the major findings

From the findings of the research questions 1 in Table 2 revealed that no significant differences exist between the mean scores of both experimental and control groups prior to the treatment. This is supported by its corresponding hypotheses in Table 5 respectively. The test of the null hypotheses revealed that, the null hypotheses was retained. This is because the calculated p-value was greater than the alpha value at 0.05 level of significance. Thereby suggesting that all the all the participant into the study had an equal entry level. This finding corroborated with the findings of Olayiwola (2007) who asserted that pre-test of an instrument is necessary to determine the groups entry point level and the impact of treatment. This means pre-test of the instrument was to show the equality level of the participant upon entry

into the study. This is to provide a baseline upon which comparison are made with the post-test of the instrument. This is why the pre-test scores of the control group is then compared with the posttest scores of the treatment group to assess the influence of the treatment condition. If a significant difference is obtained, it is assumed that the difference is due to the treatment condition.

From the research question two in Table 3 and the test of null hypothesis 2 in Table 6 as well as the analysis of qualitative information revealed that cooperative learning strategy improve student's academic achievement of secondary school students in financial accounting. This finding is in line with the findings of Inuwa, Abdullahi and Hassan, (2017) who reported that the academic achievement of financial accounting students who were exposed to the cooperative learning approach were significantly better than the academic achievement of the financial accounting students who were exposed to the conventional teaching approach. Again, in other studies conducted by (Johnson & Johnson, 2005; Akinbobola 2006, Tanel & Erol, 2008; Moore, 2008; Sahin, 2010.), also revealed that students taught using the cooperative learning method performed better than those taught using the conventional method. This implies that the positive effect of cooperating learning method on student's academic achievement was as a result of its positive interdependence attribute, which made it possible for students to see their success as a consequence of their contribution in the group. In the qualitative analysis, the students submitted that this act of interdependency within the groups afford them the opportunity to exchange ideas on a given task among themselves and this made it possible for the students with low intellectual ability as well as the slow learners among them to gain from members of the group. This again, made every student to be confidence and secured in participating in all the group activities, hence the improved students' academic achievement. This assertion is supported by the finding of Zakaria, Solfitri, Daud and Abidin (2013), who claimed that cooperative learning strategy helps students in many other ways, such as improving their self-concept, self-confidence, polishing their social skills as well as increasing their classroom participation.

From the research question seven in Table 4 and the test of null hypothesis seven in Table 7 as well as the analysis of qualitative information revealed that cooperative learning strategy improve student's retention ability of secondary financial

accounting students. This finding is consistent with the previous studies conducted by (Gubbad, 2007; Majoka & Mahmood, 2007 and Tran, 2014), they reported that students who were taught by learning together (cooperative learning) had a greater retention of information taught in the psychology course than those taught through a lecture-based method. This implies that the experimental group, who were taught with a cooperative learning approach, usually has a higher participation rate in the learning process which eventually led to greater long term achievement (that is retention on what is learned). This assertion consisted with what the students submitted during their interviewed session with the researcher. The students admitted that, those in the experimental group ought to have more retention ability than those students in the control group. Because, they were equipped with skills of teaching one another through the discussion mechanism embedded as a component of this type of learning approach. This affords the students the opportunity to elaborate their ideas on the concept taught in the class. This finding validates the results of some earlier studies conducted by (Moore, 2008 and Sahin, 2010), who indicates that cooperative learning promotes greater long-term achievement than individual learning. This means that the learning activities based on the divided learning tasks, has the potentiality of improving student's retention ability. This is because, the students were personally involved in the learning process, which in turn contributed to their learning gains, achievement and retention on what is learned in the class. This assertion is consistent with the findings of Sadker and Sadker, (1997), who reported that cooperative learning is a powerful tool for motivating learning and has a positive effect on the classroom climate which encourages greater achievement, foster positive attitudes, higher self-esteem, develop collaborative skills and promote greater social support among student.

5. CONCLUSION

Based on the findings of this study it was concluded that cooperative learning strategy is the most effective method in teaching financial accounting in secondary schools. This is because it helps in improving student's academic achievement and retention ability, thereby contributing to the intellectual, social and psychological development of secondary school students in financial accounting. This implies that cooperative learning strategy is more appropriate for teaching financial accounting than the conventional teaching method. Because, by implication, the continue use of

conventional teaching approach for teaching financial accounting in our secondary schools will not only affect the students but also the overall educational objective of the State, if not properly check the nation quest for professional accountant for economic development might be an illusion.

6. RECOMMENDATIONS

Based on the findings of the study, the following recommendations are made:

1. Education ministries and boards should organize seminars, workshops and conferences as well as in-service training to educate and train financial accounting teachers on the use of cooperative learning strategy as a teaching method. Since it improved student's retention ability in financial accounting.
2. School management should discourage financial accounting teachers from using conventional instructional strategy which has been criticized for increasing students anxiety in the subject.
3. School management should provide enabling environment for teachers to use cooperative learning strategy for teaching financial accounting in secondary schools. Since it is found to be the best for improving student's academic achievement in financial accounting.

REFERENCES

- Adamu, I. & Jibrin, A. H. (2012). Effects of Flipped and Conventional Teaching Approaches on Performance and Retention Ability of Students in Advance Financial Accounting in Abubakar Tafawa Balewa University Bauchi, Nigeria. *Journal Psikologi Malaysia*, 31 (1) 12-20.
- Adamu. I and Kusa, G. W. (2018). Effect of Peer-Tutoring Learning Teaching Method on Academic Performance of Financial Accounting Students in Federal Unity Colleges, in North-Eastern Nigeria, *Journal of Advanced Research in Social Sciences*, 1 (1):7-15,
- Afe, J. O. (2001). *Reflections on becoming a teacher and the challenges of teacher's education*. Inaugural Lecture Series 64. Benin City: University of Benin, Nigeria.

- Akinbobola, A. O. (2006). Effects of cooperative and Competitive learning strategies on Academic Performance of students in physics. *Journal Research in Education*, 3(1), 1-5.
- Akintelure, S. L (1998). *Comprehensive book keeping and accounts for senior secondary school: sure-bet for WAEC*. Lagos: Johnson publishing Ltd.
- Aziz, Z. & Hossain, M.A., (2010). A Comparison of Cooperative Learning and Conventional Teaching on Students Achievement in Secondary Mathematics. *Procedia Social and Behavioral Science*, 9, 53-62.
- Boghossian, P. (2006). Behaviorism, constructivism, and Socratic pedagogy. Australia: Wadsworth.
- Conway, J., (1997). Educational technology effects on model of instruction copland. <http://coplandudeedu/conwayeds66htm>.
- Federal Republic of Nigeria (2004). National Policy on Education. (Revised Edition). Lagos: Federal Ministry of Education.
- Francis NP. (2014). Climate change and implication for senior secondary school financial accounting curriculum development in Nigeria. *Journal of Education and Practice*, 5(26):153- 157.
- Gubbad, A.A.M.A, (2010), Effect of Cooperative Learning on the Academic Achievement and Retention of the Mathematics Concepts at the Primary school in Holly Makkah. *Journal of Education Science and Islamic Studies*. 22, 13-23.
- Igboanugo, B. I. (2013). Effects of peer teaching on student's achievement and interest in difficult chemistry concepts. *International Journal of Educational Research*, 72(2) 61-71.
- Inuwa, U., Abdullahi, Z., and Hassan, H., (2017). Assessing the effect of cooperative learning on financial accounting achievement among secondary school's students. *International Journal of Instruction*, 5(3), 1308-1470. Wwww. E-iji.net

- Iqbal, M. (2011). Effective of cooperative learning on academic achievement of secondary school students in Mathematics. (Doctoral dissertation) Retrieved from: <http://eprints.hec.gov.pk/cgi/search/advanced>.
- Johnson, D. W., & Johnson, R. T. (2008). Social interdependence theory. *Theory into Practice*, 39(2), 67-73.
- Johnson, D. W. & Johnson, R.T. (2005). New developments in social interdependence theory Genetic, Social, and General Psychology Monographs, 131(4), 285-358. DOI: 10.3200/MONO.131.4.285- 358. Retrievable from: https://www.researchgate.net/publication/6609956_New_Developments_in_Socia
- Kiboss, (2002) in Yusuf, A. (2006). Book-keeping and Accounting Education General Objectives of Book- keeping and Accounting. Kano: Adamu Joji Publishers.
- Kolawole, E. (2007). Effects of competitive and cooperative learning strategies on academic performance of Nigerian students in mathematics. *Educational Research and Review*, 3(1), 33-37. Retrieved September 03, 2014, from <http://www.academicjournals.org/ERR>
- Kpolovie, P. J. (2010). Effects of information proceSSIng styles and types of learning on students 'learning. *Nigerian Journal of Empirical Studies in Psychology and Education*. 1(11), 6-16.
- Majoka, M.I and Mahmood, M.S.T., (2007), Effects of Cooperative Learning on Academic Achievement and Retention of Secondary Grader Mathematics Students. *Journal of Educational Research, Department of Education JUB, Parkistan: 10, (1)*.
- Moore, K. D. (2008). Effective instructional strategies: From theory to practice. Thousand Oaks, CA: Sage Publications.
- National Examination Council (2004). Regulations and Syllabus for Senior Secondary School Certificate Examination. Minna: NECO.

- Ogunu, M.A (2000). Strategies for effective supervision of instruction in UBE programmers. In Awabor. D. & Aghenta J.A (E D). *Proceedings of the 15th annual congress of the Nigerian academy of education*, Benin city, Ambik press Ltd, 155
- Oke, M. (2005). An overview of some practical approaches/teaching strategies for teaching and learning of genetic concepts. STAN Biology Panel Series.7-10.
- Okoli, C.E. (2000). *Introduction to Educational and Psychology Measurement*, Lagos: Behenu Press and Publishers Ltd.
- Olayiwola, A.O. (2007). *Procedures in Educational Research*. Kaduna: Hani Jam publishers.
- Sadker, M.P. and Sadker, D. M. (1997) *Teachers, schools and society*. New York: The McGraw Hill Company, Inc
- Sahin, A. (2010). Effects of Jigsaw III technique on achievement in written expression. Asia Pacific Educ. Rev, Education Research Institute, Seoul National University, Seoul, Korea. <http://dx.doi.org/10.1007/s12564-010-9135-8>
- Slavin, R. E. (1994). *Co-operative learning: Theory, research, and practice*. (2nd edition), Boston: Allyn and Bacon.
- Slavin, R.E. (2011). Instruction Based on Cooperative Learning. In R.E. Mayer & P.A. Alexander (Eds.), *Handbook of Research on Learning and Instruction* (pp. 344- 360). New York: Taylor & Francis.
- Tanel, Z., & Erol, M. (2008). Effects of Cooperative Learning on Instructing Magnetism: Analysis of an Experimental Teaching Sequence. *American Journal of Physics and Education*, 2(2), 124-136.
- Tran, V.D. (2014), Effects of Cooperative Learning on the Academics Achievement and knowledge Retention. *International Journal of High Education*. 3(2).
- Tracy, B. (2016). *The 100 Absolutely Unbreakable Laws of research in Business* Benin City, Nigeria: Joint Heirs Publications.

- Uchefuna, M.C. (2001). *A Study of clinical supervision and teacher's effectiveness in Umuahia and Abia Educational Zones of Abia State*. M.Ed Thesis Port Harcourt: University of Port Harcourt, Nigeria.
- West African Examination Council (2004). *Chief examiners report: May/ June West African senior school certificate examination*. Lagos: WAEC.
- West African Examination Council (2006). *Chief examiners report: May/ June West African senior school certificate examination*. Lagos: WAEC
- Zakaria, E., Solffitri, T., Daud, Y., Abidin, Z.Z. (2013). Effect of cooperative learning on secondary school students' mathematics achievement. *Creative education*, 4(2), 98-100. Retrieved from: <http://www.scir.org/journal/ce>.