

EFFECTS OF COOPERATIVE LEARNING ON SECONDARY SCHOOL STUDENTS' ACHIEVEMENT IN FINANCIAL ACCOUNTING IN ANAMBRA STATE, NIGERIA

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Abstract

The prevalent poor academic performance of secondary school students in their Financial Accounting external examinations (WAEC and NECO) is becoming a source of worry. Sequel to this phenomenon, this study therefore, investigated the effects of cooperative learning on students' achievement in financial accounting in Anambra State. Two research questions were raised and answered while two hypotheses were tested at 0.05 level of significance. Quasi experimental research design was adopted for the study. A total of 79 senior secondary students participated in the study. An instrument titled Financial Accounting Achievement Test (FAAT) was used for data collection. The instrument does not require validation and reliability test because it was modelled from WAEC past questions. The arithmetic mean was used to answer the research questions while Analysis of Covariance (ANCOVA) was used in testing the hypothesis at 0.05 level of significance. The findings from the study revealed that students who were taught Financial Accounting using cooperative learning performed higher than the students taught using conventional method at post-test. The outcome of the study also revealed that male and female students taught using cooperative learning were not significantly different in their achievement in Financial Accounting. It was therefore recommended that Nigerian government and other stakeholders should advocate the use of cooperative learning in teaching financial accounting, with a view to improving students understanding and achievement in the subject.

Keywords: Cooperative Learning, Achievement and Financial Accounting

INTRODUCTION

There are better ways to learn than through the traditional methods of instruction which cooperative learning is one of such methods that enables students to have active control over their own learning and also enhance their academic achievement. Cooperative learning is a teaching method which provides opportunity for students to develop skills and knowledge in group interactions and teamwork. The students try to make sense of what is taught by trying to fit it with experience (Sharan, 2010). Co-operative learning refers to instructional methods in which teachers organize students into small groups, which then work together to help one another learn academic content. Olatoye, Aerogba,

and Aanu (2011) opined that Cooperative learning has been proved to be effective in helping students retain more information, improve their self-esteem, reduce conflict and improve academic achievement.

Academic achievement is defined as the outcome of the extent to which a student, teacher or institution has achieved their educational goals. Academic achievement is commonly measured by examinations or continuous assessments but there is no general agreement on how it is best tested or which aspects are most important (Okafor, 2007). Students' achievements at their final examination in Financial Accounting have been negatively skewed consecutively for the past few years (2011 to 2013).

Accounting as a business language is defined by Ama (2002) as a set of themes, concepts (or ideas), and techniques by which financial data are processed into meaningful information for reporting, planning, controlling and decision making purposes, or simply the process of recording, classifying, reporting and interpreting the financial data of an organization, to management and other interested users. Accounting education on the other hand is concerned with the acquisition of knowledge, skills and attitudes that will enable the learner record, classify, summarize and interpret business and financial information to aid one in planning, financing, controlling as well as making sound economic decision in the face of alternative courses of actions (Osisoma,2000).To Osisoma, accounting education is an art of acquiring skills and knowledge in recording, classifying and summarizing, in significant manner in terms of money, transactions and events which are part, at least, of a financial character and interpreting the result thereof. Whichever way accounting and accounting education are defined, they only concern with body of discipline acquisition of knowledge and skills that provide the ingredients for economic decisions.

The intention of the Federal Government to introduce business education (accounting education inclusive) in the Nigeria schools was to provide the citizens with appropriate skills for employment, abilities and competence that will enable them play citizenship roles, be self-reliant and be able to enroll in advanced business education programme. This shows that curriculum for accounting education at the secondary school level equips one to secure better job, establish self-business and as well pursue higher academic career at the tertiary institution. Looking at the above objectives the standards which secondary school accounting education programme are expected of cannot be over emphasize because the attention of priority given to the subject matter is predicted on the perceived importance attached to it. According to Okoroma (2000), standard in education is a level or quality that can be acceptable in order to earn a passing grade and as well pursue higher academic career at the tertiary institution. Therefore, knowing the importance of accounting in today's business enterprises, teachers are entrusted with the task of not just our students achieving excellent grades in their examination, but also make them become

lifelong learners, independent learners and promote their thinking skills. In view of this, Parnham (2001), stated the key aim for those who provide learning must be to make it easier for the people to learn.

From the foregoing, there is urgent need for improvement in the teaching of accounting at the secondary school level because secondary school is a proper place for solid development for higher studies, acquisition for business skills and as well a sine qua-non to education and economic development. Although there could be other intervening factors, the way a subject is taught generally can effect student's assimilation and retention. It is on this basis that this study was conceived to see whether the application of a new teaching method by accounting teachers could improve the performance of students.

Statement of the Problem

The ever- increasing poor performance of students in financial accounting in secondary and post-secondary schools is a serious concern and unpalatable signal to the development of the economy (Oloide in Ezeagba 2014). This continues to militate against the objectives for which financial accounting was included in the curriculum of the senior secondary school, which among others is to provide the students with basic knowledge in accounting concepts and principles through efficient selection of content and sequencing. These laudable objectives are not being achieved as the performance of students in financial accounting has been consistently poor.

Research questions

1. What is the difference in the post-test mean achievement scores of students taught financial accounting using cooperative learning and those taught using conventional method?
2. What are the differences between the post-test mean achievement scores of male and female students taught financial accounting using cooperative learning?

Hypotheses

1. There is no significant difference between the post-test mean achievement scores of students taught financial accounting using cooperative learning and the post-test mean achievement scores of students taught financial accounting using conventional method.
2. There is no significant difference between the post-test mean achievement scores of male and female students taught financial accounting using cooperative learning.

Methodology

A quasi-experimental research design was adopted for the study. It involved the manipulation of two teaching methods (cooperative Learning and conventional method) in the process of teaching and learning to observe the effects on financial accounting

students' achievement. The study was carried out in Awka-North Local government of Anambra state. The population consisted of 184 SS2 students offering financial accounting in the area. A sample of 79 out of 184 SS2 students from two out of eight secondary schools offering financial accounting in Awka North was used for the study. Financial Accounting Achievement Test was the instrument used for the study. The instrument did not require validation and reliability test because they were taken from WEAC past questions which are standardized already. Pre-achievement and post achievement test were administered to the students in both the experimental and control group before and after the experiment. Mean and Analysis of Covariance were used in analyzing the data collected based on the research questions and hypotheses.

Table 1: Mean Achievement Scores of Students' in Financial Accounting in both Experimental and Control Groups.

Group	N	Post-test \bar{x}_2	Mean gain \bar{x}_g	Decision
Exp. Group (E)	39	57.67	30.72	High mean gain
Control group (C)	40	26.95		

Information contained in Table 1 show that post-test mean scores of experimental and control groups are 57.67 and 26.95 respectively. The mean gain arrived at was 30.72, this showed that the experimental group had a higher post-test mean score than the control group. This result shows the superiority of cooperative learning to the conventional method. Hence this finding is attributed to effectiveness of the cooperative learning used.

Table 2: Mean Achievement Scores of Male and Female Students in Financial Accounting in Experimental Group.

Gender	N	Post-test \bar{x}_2	Mean gain \bar{x}_g	Decision
Male	15	56.40	2.05	low mean gain
Female	24	58.45		

Table 2 revealed that post test mean scores of male and female students in the experimental group were 56.40 and 58.45 respectively. The mean gain derived was 2.05 this showed that female students had a slight higher post-test mean score than male students in the experimental group.

Statistical Results of Test of Hypotheses

Hypothesis 1

There is no significant difference between the post-test mean achievement scores of students taught financial accounting using cooperative learning and the post-test mean achievement scores of students taught financial accounting using conventional method.

Table 3: Summary of ANCOVA of CL and CM Student's Achievement Scores in Financial Accounting after the treatment

Source	Sum of square	df	Mean square	F	P value	Decision
Group	18631.41	1	18631.41	114	0.00	Rejected

The ANCOVA outcome of post-test scores of control and experimental groups in Table 3 show that at 1 df the p-value is 0.00 which is less than the level of significance (0.05). It implies that there exists enough evidence to reject the null hypothesis that there is no significant difference between the post-test mean achievement scores of students taught financial accounting using cooperative learning and the post-test mean achievement scores of students taught financial accounting using conventional method. This means that cooperative learning brings about increase in students' academic achievements.

Hypothesis 2

There is no significant difference between the post-test mean achievement scores of male and female students taught financial accounting using cooperative learning.

Table 4: Summary of ANCOVA of Male and Female CL Students' Achievement Scores in Financial Accounting after treatment.

Source	Sum of square	df	Mean square	F	P value	Decision
Genders	39.11	1	39.11	0.171	0.682	Not rejected

The ANCOVA outcome of post-test scores of male and female students in experimental group in Table 4 show that at 1 df the p-value is 0.682 which is higher than the level of significance (0.05). It implies that there exists enough evidence not to reject the null hypothesis that there is no significant difference between the post-test mean achievement scores of male and female students taught financial accounting using cooperative learning. This means that gender has no effect on cooperative learning.

Discussion of Findings

The results of research question 1 in Table 1 showed that students taught financial accounting with cooperative learning performed better than the students taught using conventional method at post-test. The result of analysis of hypothesis 1 also reflected in Table 3 indicated that there was significant difference between the post-test mean achievement scores of students taught financial accounting using cooperative learning and the post-test mean achievement scores of students taught financial accounting using conventional method. This result is in line with the findings of Ezenwora, (2007), Okafor (2007), Bukunola and Idowu (2012), and Van, (2014). They pointed out that cooperative learning had significant effect on achievement at post-test than conventional method.

Based on the result of research question 2 shown in Table 2, male and female students taught financial accounting with cooperative learning had a very low mean gain in their post-test which means that both male and female students in the treatment group scored very closely at post-test while the findings from analysis of hypothesis 2 in Table 4 showed that there was statistical insignificance between the male and female achievement scores at post-test. This means that there is no significant difference between the post-test mean achievement scores of male and female student taught financial accounting using cooperative learning method.

In conformity with the findings of this study, Asuai, Azukaego and Tooichi, (2014) revealed that gender has no significant influence on English language achievement among Senior Secondary Students in Delta State. Also Ishaya and Andeyarka (2014) reported that gender was insignificant in the academic achievement of Radio and Television Servicing Trade students in technical colleges of Taraba State.

In contradiction to the findings above Min Wang (2012) revealed that female students performed better than male students on achievement motivation of University students. This could be as a result of the differences in the area and population of study as well as experimental techniques.

Conclusion

Based on the findings of this study, the following conclusions were made:

1. There was significant difference between the post-test mean achievement scores of students taught financial accounting using cooperative learning and the post-test mean achievement scores of students taught financial accounting using conventional method.
2. There was no significant difference between the post-test mean achievement scores of male and female students taught financial accounting using cooperative learning.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. Professional association like Association of Business Educators of Nigeria (ABEN) should popularize the effective use of cooperative learning in teaching business subjects through seminars, workshop conferences and academic and non-academic publication.
2. Stakeholders in business education, like state school management board, post primary School, ministries of education, post primary school service commission, education commissions, school principals and teachers, should organize seminar, workshops, and conferences for teachers to learn the best use of cooperative learning in teaching financial accounting.

REFERENCES

- Ama, G. A. (2002). *Modern financial accounting: theories and practice* Aba. Amasons Pub. Ventures.
- Asuai, N.C. Azukaego, E.N. &Tooche. U. (2014). Impact of cooperative learning on english language achievement among senior secondary school students in Delta State. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)*: 7-76. Retrieved February 10th 2015 from Jeteraps.Scholarlinkresearch.com.
- Bukunola, J.B. & Idowu, D.O. (2012). Effectiveness of Cooperative learning strategies on Nigerian Junior Secondary Students' Academic achievement in Basic Science. *British Journal of Education, Society and Behavioral Science*. 2(3): 307-325. Retrieved 10th January 2015 from www.sciencedomain.org.
- Ezeagba, C.E. (2014). The problems in the teaching and learning of Accounting as a vocational Subject in Nigerian Secondary School. *International Journal of science& technology* Bashir DarEthopia. [http.doi:.org//10.4314stechv310.13](http://doi.org/10.4314stechv310.13) retrieved 10th June 2015.
- Ezenwora, E.I (2007). *Competitive and Cooperative Learning Approach in the Teaching of Geometric in Secondary schools*. An Unpublished M.Sc Thesis. Submitted to Education Foundations Department of Nnamdi Azikiwe University Awka: Anambra, Nigeria.
- Ishaya, T.& Andeyark, T.N. (2014). Effects of cooperative learning on academic achievement of radio and television servicing trade students in technical colleges of Taraba State Nigeria. *International Journal of Education and Research* 2(6), Retrieved 7th January 2015 from www.ijern.com
- Min wang, W. (2012), Effects of cooperative learning on Achievement Motivation of Female university students. *Asian Social science*. Doi: org / 10. 5539/ ass. V 8h/5p/o8. Retrieved 10th February 2015.
- Okafor, A.A. (2007). *Effects of Cooperative Learning and Personalized System of Instruction on Students Achievement in Mathematics of Secondary school: An Unpublished Ph.d Dissertation*. Submitted to Education Foundations Department of Nnamdi Azikiwe University Awka: Anambra, Nigeria.
- Okoroma, N.S. (2000). A critical examination of factors affecting education standard of secondary school, *Journal Education and science* 3(4) 102-101
- Olatoye, R.A., Aderogba, A.A., &Aanu, E.M. (2011). "Effect of Cooperative and Individualised Teaching Methods on Senior Secondary School Students' Achievement in Organic Chemistry. *Pacific Journal of Science andTechnology*.12(2):310-319. Retrieved 7th January 2015. from <http://www.akamaluniversityus/pjs/htm>
- Osioma, B.C. (2000). Accounting Education: A means towards self-reliance. *Journal of Association of National Accountants of Nigeria* 8(1) 28-30.

- Parnham, J. (2001). Lifelong Learning A model for increasing participation of non-traditional adult learners *Journal of secondary and higher education* 25(1)57-64doi:10.1080/03098770020030506
- Roger, T., David, W. &Johnson (1994) *An Overview of Cooperative Learning*. Baltimore: Brookers Press. Retrieved 1st August 2013 from www.wordpress.
- Sharan, T. (2010). Cooperative learning for Academic and Social Gains: Valued Pedagogy, Doi:10.1111/j.1465-3435.2010.01430x
- Van, D.T. (2014). The Effects of Cooperative learning on the Academic Achievement and Knowledge Retention. *International Journal of Higher Education*,3(2). doi:10.5430/ijhe.3n2p131.