EFFECTS OF STUDENT-LED SEMINARS ON SECONDARY SCHOOL STUDENTS' ACADEMIC ACHIEVEMENT IN FINANCIAL ACCOUNTING IN ABIA STATE

Justina I. Ezenwafor [1]&SandraOgochi Anako[2]
[1,2]Department of Technology and Vocational Education, Nnamdi Azikiwe University
ji.ezenwafor@unizik.edu.ng & ogochianako@gmail.com

Abstract
This study determinedthe effect of Student-Led Seminars (SLS) on academic achievement in Financial Accounting among secondary school students in Abia State. Two research questions guided the study and three null hypotheses were tested. Quasi- experimental research design specifically; pre-test, post-test non-equivalent control group design was adopted for the study. Population comprised the entire 1,098 students offering Financial Accounting in public secondary schools in Abia state. A purposive sampling technique was used to draw a sample of 100 SS1 Financial Accounting students. Financial Accounting Achievement Test (FAAT) was used for data collection. The face and content validity of the instrument were established using three experts, while Kudder-Richardson Formula 20 (KR-20) was used to establish the reliability of coefficient of 0.98. Mean and standard deviation were used to answer the research questions while Analysis of Covariance (ANCOVA) was used to test the null hypotheses. Findings of the study revealed among others that SLS is more effective in enhancing students' academic achievement in Financial Accounting thanthe conventional teaching methods (CTM); which also enhanced academic achievement ability of female students than males in Financial Accounting. It was, therefore, recommended among others that Financial Accounting teachers should use more of SLS in teaching the subject to facilitate better understanding and performance of students.
Keywords. Student- Led Seminars, Conventional Teaching Method, Academic Achievement, Financial Accounting, Gender.

Introduction

Education is the process by which individuals are encouraged and equipped to develop potential skills and fills the gap between literacy and illiteracy in the society. It has the ability to create opportunities for societies to grow. According to Lopez, Najafi, Rogoff and Mejia-Arauz (2012), education can be formal as in the case of structured learning or informal in the case of unstructured learning. Olawolu and Kaegon (2012) averredthat education is a positive support for empowerment as it remains the key to empower both individualsand the nation as a whole. However, the quality of education received is largely dependent on the quality of the teacher. This is why Gagliano et al. (2016) observedthat education is what a teacher imparts and learning is what a student receives.

Instruction at all levels of education, especially in secondary schools, has to be practical oriented for effective inculcation of values and acquisition of competencies necessary for success in employment, poverty eradication and self-reliance for individuals and the nation through vocational subjects like marketing, fishery and Financial Accounting among others. Financial Accounting as a vocational subject is very vital to everyday business activities.

All Rights Reserved. Website: http://www.naujtved.com.ng

According to Tunji in Behn (2012) Financial Accounting deals with financial performances from payroll, cost, capital expenditure and other obligations to sales, revenue and owner's equity. Chew and Parkinson (2013) explained that Financial Accounting is the preparation of financial statements that can be consumed by the public and the relevant stakeholders using either Historical Cost Accounting (HCA) or Constant Purchasing Power Accounting (CPPA). Financial Accounting as a subject has the objective of enabling students to know facts that will help them handle their personal financial matters and tackle accounting problems in employment.

Despite the relevance of the Financial Accounting to students, employers and the nation, severalfactors such as teacher personality, qualification and satisfaction, teaching methods adopted by teachers, use of instructional materials, and students' interest and participation among others hinder its effective teaching and learning in schools. According to Olowolagba (2018), there has been a continuous struggle to maintain the popularity of Financial Accounting in Abia State which has not been as successful as expected because student enrolment continues to dwindle as a result of the record of poor performance. In order to reverse the trend of performance and get more students to enroll in the subject, there is a need to revisit the curriculum and teaching methods adopted by teachers to bring in modern methods such as SLC that may be more effective than the popularly used conventional teaching methods (CTM).

Gender is a major factor to be considered when revisiting the curriculum and teaching method used in Financial Accounting. Galdas, Johnson, Percy and Ratner (2010) observed that gender creates differences in the societal expectations for the male and female based on the behavior and ideologies that are deemed appropriate for each. To achieve effective teaching and learning of Financial Accounting in secondary schools, there is need to consider the views of both male and female students which is where Student-Led Seminars (SLS) becomes essential to the teacher. In SLS, the teacher allows students to source for their own information while playing the role of guidance or facilitator. This method is also called Socratic Method because students are not spoon-fed information but are forced to become curios and learn the way that they deem fit for themselves while following the teacher's guidelines. Kadayam, Ishtiyaq and Venkatramana (2014), defined SLS as a teaching-learning method where the teachers understand the students and give them a chance to develop themselves at their own pace without hindering the lesson timeline. SLS can be formal or informal depending on the personality and teaching style of the teacher.

Purpose of the Study

The main purpose of this study was to determine the effect of student-led seminars (SLS) on academic achievement in Financial Accounting among secondary school students in Abia state. Specifically, the study determined the:

1. Differences in the mean achievement scores of students taught Financial Accounting using student-led seminars (SLS) and those taught using conventional teaching method (CTM).
2. Difference in the mean achievement scores of male and female students taught Financial Accounting with SLS.

All Rights Reserved. Website: http://www.naujtved.com.ng

Research Questions

The study was guided by the following research questions:

1. What are the differences in the mean achievement scores of students taught Financial Accounting using student-led seminars and those taught using conventional teaching method?
2. What difference exists in the mean achievement scores of male and female students taught Financial Accounting with SLS?

Hypotheses

The following null hypotheses were tested at 0.05 level of significance:

1. There is no significant difference in the mean achievement scores of students taught Financial Accounting with SLS and those taught with CTM.
2. Gender has no significant influence in the mean achievement scores of students taught Financial Accounting with SLS.
3. There is no significant interaction effect of teaching methods and gender on students' achievement in Financial Accounting.

Methods

The study used quasi- experimental research design precisely, pre-test post-test non-equivalent control group design. This study was conducted in Abia state using public secondary schools that offer Financial Accounting. The population comprised all the 1,098 students that offered Financial Accounting in the state the academic year; purposive sampling was used to draw a sample size of 100 students study based on student population and availability of qualified Financial Accounting teachers. SS1 students were used for this study because they were in the foundation class being taught Financial Accounting. Instrument used for data collection was Financial Accounting Achievement Test (FAAT). The face and content validity of FAAT was established by three experts from the Faculty of Education in Nnamdi Azikiwe University, Awka. The reliability of FAAT was determined using Kudder-Richardson Formula 20 (KR-20). The instrument was pilot tested using SS1 students of Financial Accounting from Nnamdi Azikiwe University, High School at Awka which is not a part of the study population. A reliability co-efficient value of 0.98 was obtained which indicated that FAAT was reliable for the study as recommended by Uzoagulu (2011) that a research instrument with reliability coefficient value of 0.70 and above is reliable.

The treatment was administered by the researchers with the help of two research assistants who are Financial Accounting teachers in the two schools used for the study. The researchers clearly briefed the research assistants about study and what they were required to do. Pre-test was administered before the start of the treatment after which the experimental group was taught with SLS while the control group was taught with CTM. Post-test was administered to the two groups at the end of the treatment.

Experimental bias was controlled by:

1. Initial group difference - the intact classes were used for the study to avoid disruption of the normal class procedures.
2. Teacher variable - the regular Financial Accounting teachers in the schools taught both the experimental and control groups to avoid any extra attention.
3. Diffusion -the schools used were located in different local government areas of the state to ensure that the experimental group has no influence on the control group.

All Rights Reserved. Website: http://www.naujtved.com.ng

Data collected for the study were analyzed using the arithmetic mean to answer the research questions. The null hypotheses were tested using analysis of covariance (ANCOVA) at 0.05 level of significance. The decision was that where the p-value is less than alpha level (0.05), the null hypothesis was rejected and vice-versa. The Statistical Package for Social Science (SPSS) version 23.0 was used in the analysis both for the research questions and hypotheses.

Results

The findings are presentatied in the following tables

Table 1. Pre-test and post-test mean achievement scores by Method

Techniquex	N	Pre-test Mean	Post-test Mean	Gained Mean	Remark
SLS	72	13.31	35.47	22.16	Effective
CTM	28	7.71	21.79	14.08	

Data in table 1 reveal that the students taught financial accounting with SLS had pretest mean score of 13.31 and post-test mean score of 35.47 with gained mean 22.16 while those taught with CTM had pre-test mean score of 7.71 and post-test mean score of 21.79 with gained mean 14.08. The post-test mean achievement score for SLS is above that of CTM, which means that SLS is more effective in enhancing students' academic achievement in Financial Accounting than CTM.

Table 2. Pre-test and Post-test mean achievement scores by Gender

Gender	N	Pre-test Mean	Post-test Mean	Gained Mean	Remark
Male	18	14.23	34.40	29.17	Effective
Female	28	12.16	35.81	23.65	

Table 2 shows that the male students taught Financial Accounting with SLS had pre-test mean achievement score of 14.23 and post-test mean score of 34.40 with gained mean of 20.17 while the female students had pre-test mean score of 12.16 and post-test mean score of 35.81 with gained mean of 23.65. The mean gain difference of 3.48 is in favor of the female students. This means that SLS is more effective in enhancing female students' achievement in Financial Accounting than males.

Table 3. ANCOVA on difference in achievement scores by Method

Source	SS	Df	MS	F	P-value	Decision
Corrected Model	3837.796[a]	2	1918.898	80.603	.000	
Intercept	16335.874	1	16335.874	686.190	.000	
Pretest	61.415	1	61.415	2.580	.111	
Method	3420.172	1	3420.172	143.665	.000	Significant
Error	2309.244	97	23.807			
Total	106256.000	100				
Corrected Total	6147.040	99				

Table 3 shows that at 0.05 level of significance, df - 1, 99; the calculated F is 143.67 with P-value of 0.000 which is less than 0.05. This means that there is significant difference in

All Rights Reserved. Website: http://www.naujtved.com.ng

post-test mean achievement scores of students taught Financial Accounting using SLS and those taught with CTM. Therefore, the null hypothesis is rejected.

Table 4. ANCOVA on the differences in achievement Scores by Gender

Source	SS	df	MS	F	P-value	Decision
Corrected Model	140.557[a]	2	70.279	3.086	.052	
Intercept	15121.014	1	15121.014	663.967	.000	
Pretest	37.088	1	37.088	1.629	.206	
Gender	79.156	1	79.156	3.476	.067	Not Significant
Error	1571.387	69	22.774			
Total	92308.000	72				
Corrected Total	1711.944	71				

It is observed in Table 4 that at 0.05 level of significance, df -1, 71; the calculated F is 3.48 with P-value of 0.067 which is more than the alpha value of 0.05. This means that there is no significant difference in post-test mean achievement scores of male and female students taught financial accounting using SLS. Therefore, the null hypothesis is not rejected.

Table 5. ANCOVA on the interaction effect by teaching methods and gender

Source	SS	df	MS	F	P-value	Decision
Corrected Model	3983.734[a]	4	995.934	43.736	.000	
Intercept	15585.017	1	15585.017	684.405	.000	
Pretest	36.919	1	36.919	1.621	.206	
Method	3453.866	1	3453.866	151.674	.000	
Gender	135.398	1	135.398	5.946	.017	
Method * Gender	4.349	1	4.349	.191	.663	Not Significant
Error	2163.306	95	22.772			
Total	106256.000	100				
Corrected Total	6147.040	99				

Data in Table 5 indicate that at 0.05 level of significance, df – 1,99 ; the calculated F is 0.19 with P-value of 0.66 which is greater than 0.05. This means that there is no significant interaction effect of teaching methods and gender in the post-test mean achievement scores of students taught Financial Accounting with SLS. Therefore, the null hypothesis is no rejected.

Discussion

Findings of the study show that SLS is more effective in enhancing students' academic achievement in Financial Accounting than CTM. Similarly, the academic achievement of students taught financial accounting using SLS differed significantly from that of students taught using CTM in favor of the treatment group. These finding concur with that of Worth (2015), which revealed that SLS afforded students control of their learning spaces in a way they had not experienced before and supported their grasp on learning outcomes. The findings also agree with the finding of Ridley (2015) that SLS enhanced the academic achievement of students. In agreement, Haritha, Phani Madhavi and Devi Madhavi (2019) stated that SLS is a good academic activity and is helpful in learning. SLS strategy helps students to engage in higher

All Rights Reserved. Website: http://www.naujtved.com.ng

order thinking tasks and enable them to overcome nervousness and improve self-confidence and personality development.

The researcher is of the opinion that the significant difference in the academic achievements between the SLS group and conventional group could be due to the benefits of using SLS. It could be that SLS sessions were more engaging and contain stimulating debates making students feel like they were learning practical knowledge and not textbook knowledge which led to the increase in their academic achievement. Similarly, SLS introduces novel and new dimensions to learning and it could be this novelty that stimulated students' interest by capturing their attention which is evidenced by their high post-test mean achievement score. Palappallil, Sushama and Ramnath (2016) stated that student-led seminar created more interest, enthusiasm and inspiration to learn a topic when compared to CTM. SLS also increased peer coordination and group dynamics and enhanced communication skills among students. This supports the earlier assertion of Hirschy and Wilson (2014) that SLS helps to build positive students' self-perceptions, reinforces their self-esteem and reduces anxiety during test or examinations.

Findings of the study show that female students taught Financial Accounting using SLS performed better than their male counterparts with significantdifference in their post –test mean achievement scores. This finding disagrees with the finding of Kashu (2014) which revealed that males obtained higher academic achievements than females overall and across subjects. The findings also disagree with Sam (2016) which reported that male students performed better in Financial Accounting than female students. Additionally, Eze, Ezenwafor and Obidile (2016) found that male and female students taught Financial Accounting using problem-based teaching method (PBTM) performed better with higher post-test scores than those taught with lecture teaching method (LTM). However, their study revealed that there was no significant difference in the academic achievement means scores of male and female students taught Financial Accounting using PBTM.

The findings of this study is not surprising to the researchers because normally, females are more sociable than males and the setting of the SLS might have given female students opportunity to express themselves and share ideas concerning Financial Accounting concepts which might have contributed to their improved performance in the subjects more than the male students. This fact agrees with Rampersad and Patel (2014) which revealed that level of social interactions among students determine their academic success.

Conclusion

Based on the findings of the study, the researchers conclude that student-led seminar is an innovative teaching strategy that gives students the opportunity to work together with a team spirit and yet be independent learners. Therefore, it is more effective in enhancing students' academic achievement in Financial Accounting than conventional teaching method.

Recommendations

In the light of the findings of the study, the following recommendations were made:

1. Financial Accounting teachers should use more of SLS in teaching in order to enable students actively participate in classroom teaching and learning process to enhance their academic achievement.
2. Financial Accounting teachers should create effective classroom management in such a way that students can work collaboratively for improved learning and academic achievement.

All Rights Reserved. Website: http://www.naujtved.com.ng

3. Secondary school administrators should organize capacity building programmes such as workshops, seminars, symposiums, conferences and exhibition on SLS to enable teachers learn how to effectively apply it in teaching Financial Accounting.
5. Curriculum planners should incorporate SLS in tertiary education curriculum to equip teacher-trainees with skills to appropriately apply it in teaching Financial Accounting and other school subjects when employed. They should also reflect it in the schemes of work and other curriculum materials in Financial Accounting at the secondary school level.
6. Financial Accounting teachers should ensure that they do not bring into the instructional process, learning experiences and resources that could encourage gender bias.

References

Behn, B. (2012). Commission on Accounting Higher Education. 2012 a. "Final Report: Pathways to a Profession: Charting a National Strategy for the Next Generation of Accountants", AAA and AICPA.

Chew, L. & Parkinson, A. (2013). *Making Sense of Accounting for Business.* Harlow: Pearson.

Eze, T. I., Ezenwafor, J. I. & Obidile, J. I. (2016). Effect of Gender on Students' Academic Performance and Retention in Financial Accounting in Technical Colleges. *British Journal of Education, Society &Behavioural Science 18*(4), 1-9.

Gagliano, M., Vyazovskiy, V., Borbely, A., Grimonprez, M. & Depczynski, M. (2016). Learning by Association in Plants". *Scientific Reports. 6*(1).

Galdes, P.M., Johnson, J.L., Percy, M.E.& Ratner, P.A. (2010). "Help seeking for cardiac symptoms: Beyond the masculine-feminine binary" *Social Science & Medicine. 71*(1): 18-24.

Haritha, Madhavi, P. & Madhavi, D. (2019). Perception about Student-led Seminars among Undergraduate Students of a Government Medical College in Visakhapatnam: A Cross-sectional Study. *International Journal of Community Medicine and Public Health 6*(2).

Hirschy, A., & Wilson, M. (2014).The Sociology of the Classroom and its influence on Student Learning. Peabody Journal of Education 77(3), 85-100.

Kadayam, G. G., Ishtiyaq, A. S., & Venkatramana, M. (2014). Student-Led Seminars as a Teaching-Learning Method: Evidence of Effectiveness of a Modified Format. *Gulf Medical Journal, 1*(2), 52-58.

Kashu, J. N. (2014). Survey on Gender and Academic Performance in Secondary Schools in Kenya. *Published Thesis,* Department of Psychology, University of Nairobi.

Lopez, A., Najafi, B., Rogoff, B.. & Mejia-Arauz, R. (2012). *Collaboration and helping as cultural practices*. The Oxford Handbook of Culture and Psychology.

Olawolu, O. E., & Kaegon, L. E. S. (2012). *Entrepreneurship Education as tool for Youth Empowerment through Higher Education for global workplace in Rivers*. A paper presented at the Seventh Regional Conference on Higher Education for a Globalized world.

Olowolagba, F. (2018). WAEC releases 2018 May/June Result, Reveals Pass Rate. *Daily Post, July 4, 2018.*

Palappallil, D. S., Sushama, J., &Ramnath, S. N. (2016). Effectiveness of Modified Student-led Seminars as a Teaching-Learning Method in Pharmacology. *International Journal of Applied and Basic Medical Research 6*(3): 195-200.

All Rights Reserved. Website: http://www.naujtved.com.ng

Rampersad, G., & Patel, F. (2014). Creativity as a desirable graduate attribute: implications for curriculum design and employability. *Asia-Pacific Journal of Cooperative Education, 15*(1), 1-11.

Ridley, D. (2015). The Efficacy of Student-led Seminars for Critical Thinking.*BrookeseJournal of Learning and Teaching 7*(2).

Sam, L. (2016). Gender Difference in Academic Performance of Financial Accounting Students in Selected Senior High Schools in the Central Region of Ghana. *Advances in Social Sciences Research Journal, 3*(8) 40-46.

Uzoagulu, A. E. (2011). *Practical Guide to Writing Project Reports in Tertiary Institutions.* Enugu: Cheston Ltd.

Worth, N. (2015). Experimenting with Student-led Seminars for Improvement in Students' Academic Achievement.*Taylor and Francis online Journal 27*(2).

All Rights Reserved. Website: http://www.naujtved.com.ng