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PERCEIVED EFFECTS OF THE RELATIONSHIP BETWEEN COOPERATIVE, PROBLEM-SOLVING STRATEGIES AND STUDENTS' ACADEMIC PERFORMANCE IN FINANCIAL ACCOUNTING IN SELECTED SECONDARY SCHOOLS IN LAGOS STATE

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PERCEIVED EFFECTS OF THE RELATIONSHIP BETWEEN COOPERATIVE, PROBLEM-SOLVING STRATEGIES AND STUDENTS' ACADEMIC PERFORMANCE IN FINANCIAL ACCOUNTING IN SELECTED SECONDARY SCHOOLS IN LAGOS STATE

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Abstract

This study examined the perceived effect of relationship between cooperative, problem-solving teaching strategy and students' academic performance in Financial Accounting in selected secondary schools in Lagos State. To carry out the study, two specific objectives were raised. The research design used in the study is survey. The study correlates the responses of the financial accounting teachers with the performance of their students. Educational district (IV) was randomly selected for the study. The districts comprise of three (3) local government Areas (Apapa, Mainland and Yaba). The local government areas were used for the study. All the state public schools in these local government Areas were used for the study to get enough sample. Teachers of financial accounting in senior secondary school two (SS II) and their students in Lagos state are randomly selected for the study. A total of 20 teachers and 200 students were selected randomly for the study. A researcher designed questionnaire was used to collect data from the teachers on perceived use of teaching strategies (cooperative and problem-solving) and a pro-formal was used to collect students result. The study concluded that there is a significant relationship between cooperative, problem-solving teaching strategy and students' academic performance in Financial Accounting. *Based on the study findings, it was recommended among others that, the teachers, school managers and school support officers should promote the use of cooperative and problem-solving learning strategy as a commonly use strategy in classrooms as it will promote and encourage students to work together thereby enhancing students' retention ability.*

Introduction

Financial accounting is one of the business education subjects offered at both secondary and tertiary levels in the nation's private and public institutions for job skills, employment, and self-reliance. Elements of financial accounting are taught at the junior secondary school level as an aspect of business studies. At the senior secondary school level, financial accounting is offered as a full-fledge subject. Financial accounting graduates play a vital role in an economy, hence the need for accounting's graduate to be properly trained to discharge their duties effectively and to face emerging challenges in the profession. Financial accounting is the process of identifying, measuring, and

communicating economic information about an organization for the purpose of making decisions and informed judgment.

National Examination Council (NECO, 2012) has states that the general objective of studying financial accounting at the senior secondary school level is to enable students appreciate the basic rules, functions and principles of accounting, to lay proper foundation for further study of accountancy and allied courses at the higher level and to enable students understand basic accounting principles, practices and their application to modern business activities. Also, Nigerian Educational Research Development Council (NERDC, 2007) expressed the specific objectives of teaching financial accounting in secondary schools to include preparing students for employment, or for further studies. These objectives can only be realized if academic performance of secondary school students in financial accounting is encouraged through efficient teaching occasioned by accommodating learning environment.

Academic performance is the outcome of education, the extent to which a student, teacher or institution has achieved their educational goals. Academic performance is commonly measured by examination, continuous assessment, or Cumulative Grade Point Average (CGPA) of students. Academic performance also refers to what students achieve in their studies and how they cope with or accomplish different learning experiences given to them by their teachers. Ibrahim (2011) reported that in educational institutions, success is measured by academic performance, or how well a student meets the standards set out by the institution.

However, in recent years, students' academic achievement in the financial accounting test of the Senior Secondary School Certificate of Education (SSCE) in Nigeria has been far from outstanding. According to Ubulom and Ogwunte (2017), Nigerian students' performance in financial accounting is not encouraging. The situation is similar in Lagos State, where the WAEC examination of financial accounting results for the 2015, 2016 and 2017 academic years revealed a percentage failure rate of 62.69, 58.87, and 57.15 percent (WAEC Chief Examiner's Report, 2015, 2016 and 2017). In a similar vein, the researcher's personal conversations with certain financial accounting teachers and students in the area proved that financial accounting has failed to provide the desired results. In 2018 and 2019, around 60% of students who took the subject in the Senior Secondary Certificate Examination (SSCE) scored below 50%. This unfavorable position may make it harder to train future competent accountants, who are in high demand in business.

This persistent failure was blamed on the constant usage of traditional methods by financial accounting educators (Mezieobi & Eke 2014), since the introduction of the subject into the Nigerian school curriculum. This limitation experienced with the traditional lecture method which is mostly teacher-centered led to the development of many innovative methods of teaching financial accounting such as cooperative teaching methods and problem-solving a teaching method.

The co-operative teaching method is a method of delivering instructional content that simultaneously addresses both the academic and social skills of the learners. It has been around for a very long time even before John Dewey and progressive education extolled its virtues in the early 20th century. It was first documented over 300 decades ago when students of the then Talmud paired up to engage in lively debates. It was a prominent component of John Dewey's experiential classroom and was present in most American classrooms until the early 1940s, a point when it fell out of favor for about 30 years. The introduction of the co-operative teaching method stated, immediately, after finding that group work was more effective and efficient in quantity, quality, and overall productivity when compared to working as an individual.

Hence, the cooperative teaching method is a teaching strategy that organizes students in a very small group so that they can work together to minimize the time of teaching them one by one and maximize the learning of others. More precisely, the cooperative teaching method is a teaching strategy in which students are organized in pairs or in small groups to help one another in learning the assigned material (Ajaja & Eravwoke, 2012). Akinbobola (2008) added that the cooperative teaching method is a way of teaching in which students of different ability levels work together in small groups to achieve a common goal. It involves the use of a variety of learning activities to improve the understanding of a topic. According to Johnson and Johnson, (2018) cooperative teaching method deals with the relationship in a group of students that requires positive interdependence (a sense of sink or swim together), individual accountability, (each of us must contribute and learn) and interpersonal skills (communication, trust, leadership, decision making and conflict resolution). The cooperative teaching method is grounded on the belief that learning is most effective when students are actively involved in sharing ideas and work cooperatively to complete academic

tasks. Here, every member of a group is responsible not only for learning what is taught but also for helping other group members to learn, thus creating an atmosphere of mutual achievement. Students work through the assignment until all group members successfully understand and complete it. Students also work with teammates who have different learning skills, cultural backgrounds, attitudes, and personalities. These differences force them to deal with conflicts and interact with others (Okoro, 2011).

Problem-solving teaching method, on the other hand, has been an aspect of science (Physics and Chemistry) teaching and learning that has attracted the attention of many educators. Problem-solving has long been recognized as a skill that also fosters a better understanding of difficult content especially in science subjects like Physics and Chemistry (Ntibi & Neji, 2018). According to Skinner (1984) in Kousar (2010), the term "problem-solving" is defined as the framework or pattern within which creative thinking and learning take place. It is a process of overcoming difficulties that appear to interfere with the attainment of a goal. Polya (1945) defines problem-solving as the process used to solve a problem that does not have an obvious solution. Problem-solving involves taking series of actions in the process of an investigation that seeks to bridge the gap between a problem state and the anticipated goal (Jackson, in Babatunde, 2008). A problem-solving strategy, therefore, comprises action steps taken by the learner to reach an anticipated goal when faced with a problem situation. Problem-solving means engaging in a task for which the solution method is not known in advance. Bay (2000) added that teaching about problem-solving is the teaching of strategies, or heuristics, to solve problems. However, one thing is common in both cooperative and problem-Solving teaching methods, which is the role of the teacher. The role of teachers in any of these methods are not to serve as the alpha and omega of the knowledge as can be observed in the traditional lecture method but is to guide the activities of the students towards meaningful learning and to describe for the students the terminal performance which constitutes the solution of the problem in the problem-solving method. Hence, this study examined the effect of cooperative and problem-solving teaching methods on students' academic performance in Financial Accounting in selected secondary schools in Lagos State.

Statement of the Problem

The academic performance of students especially in financial accounting in secondary schools in Lagos state has been observed to be in a declining state for a while. This sorry state of academic performance of the students has been blamed on many factors such as teacher quality, school input, teachers' motivation and even teaching methodology in particular. This has led to the utilization of several teaching methodologies to teach teaching Financial Accounting in secondary schools such as lecture method, demonstration method, project method, to mention but a few, yet there seem not to be any improvement in the performance of students in Financial Accounting. This is evidenced by the summary of students' performance in the West African Examination Council (WAEC) 2020 result where a total of 61, 509 candidates sat for the WAEC examination of which just 24,491 candidates representing 39.82% obtained 5 credits and above in a minimum of five subjects including English language and Mathematics. Hence the need to further search for a better way of improving students' performance especially through teaching strategies. This necessitated this study to be seeking to explore the relationship between cooperative, problem-solving strategies and students' academic performance.

Purpose of the Study

This study examined the relationship of perceived use of teaching strategies (cooperative and problem-solving) and students' academic performance in Financial Accounting. Specifically, the study:

1) Is there any significant relationship between teachers' perceived use of **c**ooperative teaching strategy and students' academic performance in Financial Accounting in selected secondary schools in Lagos State.

2) Is there any significant relationship between teachers' perceived use of problem-solving teaching strategy and students' academic performance in Financial Accounting in selected secondary schools in Lagos State.

Research Questions

The following research questions were answered in the study;

1) Is there any significant relationship between teachers' perceived use of **c**ooperative teaching strategy and students' academic performance in Financial Accounting in selected secondary schools in Lagos State.

2) Is there any significant relationship between teachers' perceived use of problem-solving teaching strategy and students' academic performance in Financial Accounting in selected secondary schools in Lagos State.

Research Hypotheses

The study tested two hypotheses at 0.05 level of significant.

Ho_1: there is no significant relationship between teachers' perceived use of **c**ooperative teaching strategy and students' academic performance in Financial Accounting in selected secondary schools in Lagos State.

Ho_2: there is no significant relationship between teachers' perceived use of problem-solving teaching strategy and students' academic performance in Financial Accounting in selected secondary schools in Lagos State.

Methodology

The research design used in the study is survey. Survey method in deals with measurement process that involves asking questions of respondents. The study correlates the responses of the financial accounting teachers with the performance of their students. The target population for this study comprised all the teachers and students of financial accounting in Lagos state. There are six Educational Districts in Lagos State. Educational district (IV) was randomly selected. The districts comprise of three (3) local government Areas (Apapa, Mainland and Yaba). The local government areas were used for the study. All the state public schools in these local government Areas were used for the study to get enough sample. Teachers of financial accounting in senior secondary school two (SS II) and their students in Lagos state are randomly selected for the study. A total of 20 teachers and 200 students were selected randomly for the study. A researcher designed questionnaire was used to collect data from the teachers on perceived use of teaching strategies (cooperative and problem-solving) and a pro-formal was used to collect students result. Data was analysed using Pearson Product Moment Correlation to test the raised hypotheses at 0.05 level of significance.

Result

The data in this section is presented using frequency, percentage and tables that show general characteristics of teachers and students.

Table 1: Frequency and Percentage Distribution of the Demographic data of the Respondents (Teachers)

Variable	Sub-variable	Frequency	Percent
Gender	Female	3	15.0
	Male	17	85.0
	Total	**20**	**100.0**
Educational Level	Bachelor	15	75.0
	Masters	4	20.0
	Doctorate	1	5.0
	Others	-	-
	Total	**20**	**100.0**
Experience	0-5years	4	20.0
	6-10years	7	35.0
	11-15 years	8	40.0
	16 years & above	1	5.0
	Total	**20**	**100.00**

Table 1 showed the descriptive analysis of teachers' characteristics. Out of the 20 teachers used in the study, it was revealed that 17 representing 85.0% of the total sample were male teachers while the remaining 3 representing 15.0% were female teachers. The table also revealed the distribution of the respondents by education level and it showed that 15 representing 75.0% had a bachelor's degree, 4 representing 20.0% have had up to master's degree while the remaining 1 representing 5.0% of the respondents have had their doctorate degree. The distribution of the respondents by experience showed that 4 representing 20.0% had 0 to 5 years of experience, 7 representing 35.0% were teachers with 6 to 10years of teaching experience; 8 representing 40.0% were teachers with 11 to 15 years of teaching experience while the remaining 1 representing 5.0% were teachers with above 15 years of teaching experience.

Table 2: Frequency and Percentage Distribution of the Demographic data of the Respondents (Students)

Variable	Sub-variable	Frequency	Percent
Gender	Female	118	59.0
	Male	82	41.0
	Total	**200**	**100.0**
Age	14 - 18 Years	149	74.5
	19-24 years	38	19.0
	25 years & above	13	6.5
	Total	**200**	**100.0**

Table 2 showed demographic distribution of the sampled students. It was revealed that of all the students sampled 118 representing 59.0% were female while the remaining 82 representing 41.0% were male students. The table also revealed the age distribution of the respondents, and it showed that 149 representing 74.5% were of age 14 to 18years, 38 representing 19.0% were of age 19 to 24 years while the remaining 13 representing 6.5% were of age 25 years and above.

Hypotheses Testing

The inferential statistics of Pearson Product Moment Correlation and Independence were used to test the null hypotheses formulated to guide the study at 0.05 level of significance as follows:

Ho_1: there is no significant relationship between teachers' use of **c**ooperative teaching method and students' academic performance in Financial Accounting in selected secondary schools in Lagos State.

Table 3
Pearson Correlation Showing* relationship between teachers' use of cooperative teaching method and *Students' Academic Performance in Financial Accounting

Variable	N	$\overline{X}$	SD	df	r-value	P-value	Decision
Cooperative Teaching Method	200	3.59	.801	198	.523	.000	Ho_1 Rejected
Students' Academic Performance		3.50	.600				

***Significant P< .05**

Table 3 shows the calculated r-value of .523 while p-value (0.000) is less than the significance level (0.05) for 198 degrees of freedom. Therefore, the hypothesis, which states that cooperative teaching method has no significant effect on students' academic performance in Financial Accounting in selected secondary schools in Lagos State is rejected. This shows that cooperative teaching method has significant effect on students' academic performance in Financial Accounting in selected secondary schools in Lagos State.

Ho_2: there is no significant relationship between teachers' use of problem-solving teaching method and students' academic performance in Financial Accounting in selected secondary schools in Lagos State.

Table 4

***Pearson Correlation Showing* relationship between teachers' use of problem-solving teaching method and students' academic performance in Financial Accounting**

Variable	N	$\overline{X}$	SD	Df	r-value	P-value	Decision
Problem-solving Teaching Method		3.32	1.07				
				198	.590	.000	Ho_2 Rejected
Students' Academic Performance	200	3.50	.600				

***Significant P< .05**

Table 4 shows the calculated r-value of .590 while p-value (0.000) is less than the significance level (0.05) for 198 degrees of freedom. Therefore, the null hypothesis was rejected. This shows that problem-solving teaching method has significant effect on students' academic performance in Financial Accounting in selected secondary schools in Lagos State.

Discussion

This section gives a detailed discussion of the findings from the research questions and the hypotheses tested. The research question and hypothesis one has presented in Table 3 showed that cooperative teaching method has significant effect on students' academic performance in Financial Accounting in selected secondary schools in Lagos State. This finding is like the study of Ajaja and Urhievwejire (2012) reported that students performed highly correlates with using cooperative learning instructional strategy by teachers irrespective of ability level. It also supports the study of Isah (2015) which found that students taught with cooperative learning strategy performed and retained significantly higher than students taught with conventional lecture method. Supportably, the finding is in line with the study of Tunga (2015) which revealed that students in cooperative learning group performed higher than those in traditional classroom learning group. Finding of the second research questions and hypothesis presented in Table 4 showed that problem-solving teaching method has significant effect on students' academic performance in Financial Accounting in selected secondary schools in Lagos State. The finding supported the study of Ntibi and Neji (2018) which found that experimental groups taught with problem-solving approach had a higher mean score than the control group taught with conventional method in Physics and Chemistry. The finding is also similar with the study of Yusuf (2017) which showed that students in problem-solving teaching methods performed better than those in the conventional (direct teaching method). This finding supported that of Sam (2015) which found that students studying Financial Accounting perform better with strategies that are learner centred. However, it fails to agree with the study of Okafor (2011) which found that the strategies do not influence the performance in undergraduate accounting courses.

Conclusion

Based on the findings of this research, the study concluded that there is a significant relationship between cooperative, problem-solving teaching strategy and students' academic performance in Financial Accounting. The teaching strategies also determines the performance of the learners when effectively used by the teachers as a form of learner centred approach to instructional delivery.

Recommendations

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

1. Financial Accounting teachers should ensure frequent utilization of cooperative learning strategy because of its positively enhancing students' academic performance.
2. Teachers, school managers and school support officers should promote the use of cooperative and problem-solving learning strategy as a commonly use strategy in classrooms as it will promote and encourage students to work together thereby enhancing students' retention ability.
3. Curriculum planners, school managers and ministry of education at both state and federal level should incorporate and support the use of cooperative and problem-solving teaching strategy in secondary schools.

4. Teachers should be supported to go for professional development training to acquire the skills for making students to work together in cooperative and problem-solving learning strategy as it enhances students' academic retention ability in Financial Accounting.
5. The society and the educational institutions need to become more vigilant in ensuring that females remain focused on positive learning while in school.

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