



# **Effects of Problem-Solving Teaching Method on the Teaching and Learning of Financial Accounting Education in Rivers State Universities**

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## **ABSTRACT**

The purpose of the study was to ascertain the effects of problem-solving teaching methods on the teaching and learning of financial accounting education in Rivers State. The study adopted the survey research design. The population of the study comprised 87 respondents made up of 20 Business Educators from Rivers State University and 67 Business Educators from Ignatius Ajuru University of education. There was no sampling because the population was not large. The instrument for data collection was a structured questionnaire titled “Effects of Problem-Solving Teaching Method on Teaching and Learning of Financial Accounting Education in Universities in Rivers State (EPSTMTLFAE). The validation of the instrument was done by three experts. The consistency and reliability of the instrument was assured using the Pearson Product Moment Correlation Coefficient (PPMC) Method to determine the degree of reliability which yielded a correlation coefficient of 0.82. Mean and standard deviation were used to answer research questions, while z-test statistical tool was used to test the null hypotheses. The findings of the study showed that problem-solving method is very useful but not really used by some lecturers in their lesson delivery in Rivers State Universities. It was recommended amongst others that educational bodies in Rivers State Universities should make curricula policies and programmes that will enhance effective teaching and learning of financial accounting the authorities of Rivers State Universities should stressed on the influence of problem solving method and the role of teachers in their choice of teaching method so that they can enhance performance.

**Keywords:** Problem-Solving, Teaching, Learning, Financial Accounting

## **INTRODUCTION**

Financial accounting is the process of collecting, recording, presenting and analyzing/interpreting financial information for the use of financial statements (Igben, 2016). According to Agboola and Oloyede (2007), accounting in particular is central to many of the business fields of human endeavors; therefore, the teaching and learning of financial accounting should be given serious attention. Education has been acknowledged as a powerful tool for changing the world. It opens the door for individuals to participate and contribute to economic development and self sufficiency. The participation of the individual in creating wealth and contributing to economic development is a gate way to the individual’s economic security. Etuk and Ekpo (2008) stated that when people are denied educational opportunities, they are excluded from the development process. Financial accounting education seeks to provide students with knowledge, skills and motivation to encourage financial accounting success in a variety of settings such as business and the world of works.

The teaching and learning of financial accounting as a course in the universities has been a matter of great concern, this is because the general performance of students in accounting has not been very encouraging.

Thus, there have been controversies over what factors have been responsible for the general poor performance of these students. Some believe that the type of teaching methods applied in the delivering of accounting courses is important in determining the effectiveness of the teaching and learning process. To facilitate the process of knowledge transmission, teachers should apply the necessary teaching methods that best suit specific objectives in order to reduce the level of exit outcomes. Scholars in the world over have now recognized that there are better methods of learning than through the conventional ways of teaching (Achor, Imoko & Uloko, 2009). According to Ajiboye and Ajitoni (2008), universities are beginning to realize the relevance of utilization of appropriate methods through which students can learn. Furthermore, several methods of teaching have been proved to be relatively ineffective on students' ability to master and then retain important concepts. Therefore, the method of teaching is very important in the impartation of knowledge in teaching-learning processes and the type of method adopted determines to a great extent what the student, assimilate and as such, no nation can rise above the quality of her educational system.

Paul and Dantani (2012), observed that methodology is very vital in any teaching-learning situation as the method adopted by the teacher may promote or hinder learning. It may sharpen mental activities which are the bases of social power or may discourage initiatives and curiosity, thus making self-reliance and survival difficult. Many teaching practitioners widely applied teacher- centered methods. Until today, questions about the effectiveness of teaching methods on students learning have consistently raised considerable interest in the real field of educational research (Hightower, 2011). A renowned researcher Bello (2011), noted that learning through some methods of teaching is passive rather than active. The traditional passive view of learning involves situations where material is delivered to students using a lecture-based method. The application of the traditional methods like lecture, memorizing, recitation. etc. do not seem to aid critical and creative thinking, and collaborative problem-solving. In contrast, a more modern view of learning is constructivism, where students are expected to be active in the learning process by participating in problem-solving activities (Ekeke, 2013). However, the results of recent studies concerning the effectiveness of teaching methods favour constructivist, which involves active learning methods.

Problem-solving method is essentially a collaborative, constructivist and contextualized learning and teaching approach that uses real life problems to initiate, motivate and focus knowledge constructions. Ribeiro (2011) stated that despite the origin of problem-solving in the teaching of medical and health sciences, it has rapidly expanded to the teaching of other disciplines, such as, accounting, mathematics, etc. likewise, Problem-solving method involves more complex and uncertain teaching situation than those found in lectures, it appears to be an important tool in fostering the development of students' knowledge-base and promotes the students' professional skills and attitudes, helping them acquire better study habits as compared to conventional methodologies, implying that it is capable of promoting life-long and self-directed learning (Ifeanj-uche & Ejiabukwa, 2013).

Today's students are exposed to an increasingly complex and demanding information landscape, making it difficult for them to know where to turn to for help, Problem-solving method, a conceptual model of facilitated learning has been used with outstanding results in the education of various healthcare professions and education. According to Downing (2013), problem solving is more than a teaching method. It encompasses a nurturing environment in which all curriculum elements are systematically aligned to help students achieve the learning outcomes set by the instructor. Problem-solving method promotes critical thinking, as Downing (2013). Adeyemo, Babajide, and Amusa (2013) found that "in addition to the formal learning context, everyday challenges emerging from the additional new social contest provided by problem-solving curricula provide fertile environments for the development of financial accounting. In other words, when we are faced with finding solutions to a problem whether posed by the teacher as part of a problem-solving curriculum or a new social environment, we are more likely to develop generic, as well as subject specific skill".

Problem-solving as an excellent method for facilitating learning of complex and reality-based concept, is a wonderful way to keep restless undergraduate students engaged and working actively to achieve

accounting literacy learning objectives suitable for the world of works. On the other hand, demonstration method of teaching is the type of teaching method in which the teacher is the principal actor while the learners watch with intention to act later. Quoting Iyiola (2010), demonstrations are used to show procedures and to explain techniques. Thus demonstration is a direct means of explaining things to pupils. Syed and Feyzollah (2012), described demonstration as a display or an exhibition usually done by the teacher while the students watch with keen interest. The authors further added that, it involves showing how something works or the steps involved in the process. The method is an attention inducer and a powerful motivator in lesson delivery and also gives a real-life situation of study as the students acquire skills in real life situations. Good demonstration is a vital part of skill teaching as we all learn by imitation in one way or the other (Koko, 2012). The author explained further that experience shows that much student learning occurs through observing others. Thus, the demonstration method gives learners the opportunity to see and hear the details related being taught.

Nigerian educational system needs a system where the teachers (especially the financial accounting teachers) could use method that would enable them meet the learning objectives in financial accounting. There are various methods of teaching and the choice of teaching method is affected by many components such as content, time, ability of learners, group size as well as the teachers' personal preference (Lime, 2013). However, to carry out this job of teaching and learning effectively, there are many techniques that are indispensable to the classroom teachers, to ensure effective student's learning. Hence, the teacher should not just be satisfied with the fact that they have taught the lesson without finding out whether the students possess the basic skills needed to understand the lesson and finally measuring or evaluating the progress that was made at the end of the lesson by the students. If Nigeria has to develop in terms of harnessing all the human and material resource and the accounting profession for maximum wealth and productivity, then problem-solving method should be encouraged in the teaching and learning of financial accounting. This method can also be utilized in all other disciplines in order for the students to fit in, in the world of works.

To this end, several empirical investigations has been made on teaching method in comparison but it does not appear that any such studies have been done on problem-solving methods of teaching and learning of financial accounting education. This implies that there is need to investigate empirically and document the influence of problem-solving methods in the teaching and learning of financial accounting education in Rivers State Universities.

### **Statement of the Problem**

The teaching and learning of financial accounting as a course in the universities has been a matter of great concern as the general performance of students in accounting has not been very encouraging.

The academic performance by the majority students in higher educational level (particularly accounting students) has largely been cited to be the result of ineffective teaching method by lecturers (Adeyemo, Babajide & Amusa, 2013). According to the authors, learning methods that adopted the students-centered activities concept of development capability for developing skills and knowledge are conspicuously lacking. This trend of development could adversely affect the overall educational development of the state if not checked.

The incidence of ineffective teaching of financial accounting education in Rivers State Universities has resulted in poor achievement in examination and the production of half-baked graduates that cannot fit in the world of works.

Hence, Iyiola (2010) stated that there are different methods of teaching and the choice of teaching method to use is hindered by many components such as content, time, ability of students, group size as well as the teachers' personal preference.

Given that this is so, the question is put: how do problem-solving methods influence the teaching and learning of financial accounting education in Rivers State Universities?

### **Purpose of the Study**

The purpose of this study was to determine the effects of problem-solving method on the teaching and learning of financial accounting education in Rivers State Universities. Specifically, the study sought to:

1. Assess the extent to which problem-solving method influences the teaching and learning of financial accounting education in Rivers State Universities.
2. Identify hindrances in the use of problem-solving method in teaching and learning financial accounting education in Rivers State Universities

### **Research Questions**

The following research questions guided the study.

1. To what extent does problem-solving method influence the teaching and learning of financial accounting education in Rivers State Universities?
2. What are the hindrances to the use of problem-solving method in teaching and learning financial accounting education in Rivers State Universities?

### **Research Hypotheses**

The following null hypotheses were formulated and tested at 0.05 level of significance.

1. There is no significant difference in the mean responses of Rivers State University (RSU) and Ignatius Ajuru University of Education (IAUE) lecturers on the influence of problem-solving method for teaching and learning of financial accounting in Rivers State Universities.
2. There is no significant difference in the mean responses of Rivers State University (RSU) and Ignatius Ajuru University of Education (IAUE) lecturers on the hindrances to the use of problem-solving method in teaching and learning of financial accounting in Rivers State Universities.

## **RESEARCH METHODS**

The study adopted the survey research design. The population of the study comprised 76 respondents, made up of 20 Business Educators, from Rivers State University and 56 Business Educators from Ignatius Ajuru University of Education. There was no sampling because the population was not large. The research instrument used for the study was a structured questionnaire developed by the researchers based on the insight gained from the review of related literature. The questionnaire is titled "Effects of Problem-Solving Teaching Method on Teaching and Learning of Financial Accounting Education in University in Rivers State (EPSTMTLFAE). The first section sought for demographic information of the respondents, while the second section contained 20 items statements. The instrument was validated by three experts, two from Rivers State University, and one from Ignatius Ajuru University of Education. The consistency and reliability of the instrument was assured using the Pearson Product Moment Correlation Coefficient (PPMC) Method, to determine the degree of reliability which yielded a correlation co-efficient of 0.86. The first part of the instrument was designed on a 4 point-likert type of rating scale of High Extent (HE-4 points), Moderate Extent (ME-3 points), Low Extent (LE- 2 points), and Very Low Extent (VLE- 1 point). While the second part of the instrument was optioned: Strongly Agree (SA-4points), Agree (A-3points), Disagree (DA-2points) and Strongly Disagree (SDA-1point) respectively. Data collected were analyzed using mean and standard deviations to answer research questions and z-test statistics for the test of the null hypotheses".

**RESULTS****Research Question 1**

*To what extent does problem-solving method influence the teaching and learning of financial accounting education in Rivers State Universities?*

**Table 1: Mean responses on the Influence of Problem-Solving Method in the Teaching and Learning of Financial Accounting Education in Rivers State Universities**

S/No.	Problem-Solving Method	Responses		Remark
		$\bar{X}$	S.D	
1.	Motivates students to learn	2.95	1.06	Moderate Extent
2.	Enable teachers to give vast amount of knowledge	3.13	1.07	Moderate Extent
3.	Creates students-teachers relationship	3.39	0.73	Moderate Extent
4.	Enable teachers to direct students for better retention of information	3.25	0.81	Moderate Extent
5.	Encourages rote-emphasis on doing by the students	2.96	1.04	Moderate Extent
6.	Develop self-directed learning skills in students.	2.86	0.92	Moderate Extent
7.	Emphasized students-centered approach of learning.	3.29	0.85	Moderate Extent
8.	Develops critical thinking and creativity in students	3.19	0.93	Moderate Extent
<b>Grand Mean &amp; SD</b>		<b>3.13</b>	<b>0.93</b>	<b>Moderate Extent</b>

**Source (Field Survey, 2021)**

Data in Table 1 revealed that all the items (1-8) have mean values of 2.95 (1.06), 3.13 (1.07), 3.39 (0.73), 3.25 (0.81), 2.96 (1.04), 2.86 (0.92), 3.29 (0.85) and 3.19 (0.93) respectively. They were items on the influence of problem-solving method for teaching financial accounting education in Rivers State Universities, which respondents from Rivers State University (RSU) and Ignatius Ajuru University of Education (IAUE) Business Educators considered to influence the teaching and learning of accounting education. A grand mean of 3.13 and standard deviation of 0.93 imply that problem-solving method influence the teaching and learning of financial accounting education in Rivers State Universities to a moderate extent.

**Research Question 2**

*What are the hindrances to the use of problem-solving method in teaching and learning of financial accounting education in Rivers State?*

**Table 2: Mean responses on the Hindrance to the Use of Problem-Solving Method in the Teaching and Learning of Financial Accounting Education in Rivers State Universities**

S/No.	Hindrances of Problem-Solving Method are:	Responses		
		$\bar{X}$	S.D	Remark
9.	Lack of motivation and inexperience of business educators	3.10	0.94	<b>Agree</b>
10.	Lack of ability in remembering related accounting equations and formulars	3.11	0.84	<b>Agree</b>
11.	Lack of books or materials on problem solving in financial accounting	3.11	1.02	<b>Agree</b>
12.	Lack of practice on problem-solving during classes	3.42	0.83	<b>Agree</b>
13.	Poor mathematical skills on necessary understanding of financial accounting problems	3.37	0.92	<b>Agree</b>
14.	Lecturers unpreparedness.	3.38	0.88	<b>Agree</b>
15.	Large class size	3.07	0.92	<b>Agree</b>
16.	Vas contents to be covered by business educators.	3.10	0.96	<b>Agree</b>
17.	Students unpreparedness	2.71	0.95	<b>Agree</b>
18.	Learners intellectual ability	3.19	0.83	<b>Agree</b>
<b>Grand Mean &amp; SD</b>		<b>3.16</b>	<b>0.92</b>	<b>Agree</b>

**Source (Field Survey, 2021)**

Data in Table 2 showed that all the items (9-18) have mean values of 3.10 (0.94), 3.11 (0.84), 3.11 (1.02), 3.42 (0.83), 3.37 (0.92), 3.38 (0.88), 3.07 (0.92), 3.10 (0.96), 2.71 (0.95), and 3.19 (0.93), respectively. They were items pointing at the hindrances to the use of problem-solving method in teaching and learning of financial accounting education in Rivers State Universities, which respondents from Rivers State University (RSU) and Ignatius Ajuru University of Education (IAUE) considered as constraints to the use of problem-solving method in teaching and learning financial accounting education. A grand mean of 3.16 and standard deviation of 0.92 imply that respondents agreed that the items listed in table 2 above constitute hindrances to effective use of problem-solving method in teaching financial accounting education in Rivers State Universities.

**Hypothesis Testing****Hypothesis I**

There is no significant difference in the mean responses of Rivers State University and Ignatius Ajuru University of Education (IAUE) on the influence of problem-solving method in the teaching and learning of financial accounting education in Rivers State Universities.

**Table 3: z-test Analysis on the Mean Responses of RSU and IAUE Lecturers on the Influence of Problem-Solving Method in the Teaching and Learning of Financial Accounting in Rivers State Universities**

Variable	N	$\bar{X}$	SD	Df	$\alpha$	z-cal	z-crit	Decision
RSU	20	3.06	0.91	74	0.05	-0.58	1.96	Accepted
IAUE	56	3.20	0.95					

Table 3 shows the z-test analysis on the mean responses of Rivers State University and Ignatius Ajuru University of Education lecturers on the influence of problem-solving method in the teaching and learning of financial accounting. The hypothesis was tested at 0.05 level of significance with z-critical value of 1.96, which resulted to z-calculated value of -0.58. Since the z-cal (-0.58) is less than the z-crit (1.96), therefore the null hypothesis which states that there is no significant difference in the mean responses of Rivers State University and Ignatius Ajuru University of Education lecturers on the influence of problem-solving method in the teaching and learning of financial accounting in Rivers State University is accepted.

**Hypothesis 2**

There is no significant difference in the mean responses of Rivers State University and Ignatius Ajuru University of Education lecturers on the hindrances to the use of problem-solving method in teaching and learning of financial accounting education in Rivers State Universities.

**Table 4: z-test Analysis on the Mean Responses of RSU and IAUE Lecturers on the Hindrance to the Use of Problem-Solving Method in Teaching and Learning of Financial Accounting in Rivers State Universities**

Variable	N	$\bar{X}$	SD	Df	$\alpha$	z-cal	z-crit	Decision
RSU	20	3.13	0.87	74	0.05	-0.94	1.96	Accepted
IAUE	56	3.19	0.97					

Table 4 shows the z-test analysis on the mean responses of Rivers State University and Ignatius Ajuru University of Education lecturers on the hindrances to the use of problem-solving in teaching and learning of financial accounting. The hypothesis was tested at 0.05 level of significance with z-critical value of 1.96 which resulted to z-calculated value of 0.94. Since the z-cal (-0.94) is less than the z-crit (1.96), therefore the null hypothesis which states that there is no significant difference in the mean responses of Rivers State University and Ignatius Ajuru University of Education lecturers on the hindrances to the use of problem-solving method in teaching and learning of financial accounting in Rivers State Universities is accepted.

**DISCUSSION OF FINDINGS**

The findings from research question one show that through the use of problem-solving method, students are motivated to learn. This is in conformity with the findings of Iyiola (2010), who posits that problem-solving method transforms the teacher-focused method to a student-centered approach which emphasizes knowledge interpretation and construction by the learner. Riasat, Hukamdad, Agila and Anwar (2010), in their study, stated that problem-solving methods stimulates abilities and develops the student's capacity for the acquisition and retention of information. Syed and Feyzolla (2012) also confirmed that problem-

solving method is used to develop students' judgment, Creativity, Critical thinking and information integration abilities.

The result of the test of hypothesis one shows that there is no statistically significant difference in the mean responses of students and lecturers on the influence of problem-solving method in the teaching and learning of financial accounting in Rivers State Universities.

Again, the result on the hindrances to the use of problem-solving method in the teaching and learning of financial accounting in research question two showed that the following items are identified as the problems encountered in the use of problem-solving method in teaching and learning of financial accounting; This results is in conformity with the findings of Adeyemo et al (2013) who stated that teachers and students unpreparedness, lack of prerequisite knowledge, time consuming assessment are some of the hindrances to the use of problem solving method. Iyiola (2010), also supported the finding of this study by stating that the complexity and negative attitude of students, lack of tools to make the teaching of financial accounting has been a great hindrance.

## **CONCLUSION**

Based on the results and findings of this study, the researcher concluded that problem-solving method is very much useful but not really used by some lecturers in their lesson delivery in Rivers State universities and it is only with skills that teaching methods can be harnessed, manipulated and transformed into product. This clearly indicate that there is a gap in the quality of learning methods which posed many challenge on teaching and learning that present the educational system from getting the best out of its efforts to achieve the required level of attainment in teaching and learning of financial accounting in Rivers State universities. Conclusively, problem-solving method has a positive effect to good performance in examinations.

## **RECOMMENDATIONS**

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

1. Efforts should be intensified by the authorities of Rivers State Universities to ensure that Government provides adequate instructional materials for effective teaching of financial accounting education.
2. The educational bodies in Rivers State Universities should make curricula policies and programmes that will enhance effective teaching and learning of financial accounting.
3. The authorities of Rivers State Universities should stress on the influence of problem-solving methods and the role of teachers in their choice of teaching method so that they can enhance performance.

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