

EFFECTS OF GUIDED DISCOVERY TEACHING STRATEGY ON ACADEMIC PERFORMANCE OF FINANCIAL ACCOUNTING SDTUDENTS IN OYO STATE, NIGERIA

BY

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Abstract

The study examined the effects of guided discovery teaching strategy on academic performance of financial accounting students in Oyo state. The study adopted quasi-experimental research design, specifically, non-randomized pre-test — post-test control group. Three research questions and null hypotheses were tested at 0.05 level of significance. Population of the study were all the students offering financial accounting in senior secondary schools in Oyo state out of which 360 students from 2 schools were chosen as sample. Financial accounting achievement test (FAAT) was the instrument used for data collection. The FAAT and lesson plans for instruction in the two groups were all validated by three accounting education experts. The reliability coefficient of the instrument was computed using split-half reliability technique and it yielded a coefficient of 0.81. Mean Difference was used to answer the research questions raised in the study. The study found that guided discovery teaching strategy is more effective in the teaching and learning of financial accounting in secondary schools. It was also found that there was significant difference between academic performance of male and female students, taught accounting using guided discovery teaching strategy. Among other things, the study recommended the adoption of guided discovery teaching strategy in the teaching of financial accounting in Oyo state secondary schools.

Introduction

An effective educational system has been variously defined around certain intoned parameters. Such parameters according to Mogbo and Akani (2017) include: a system that is able to bring about desired students behaviours, abilities, habit and characteristics, a system where the teacher is imbued with the personal qualities or characteristics of communication skills, rapport with colleagues, responsiveness of parents, good education and innovativeness, a system that is able

to bring about sound adjustment of the child in the society to which he/she belongs, a system in which the teacher has good teaching experience, knowledge of the subject matter, favourable attitude towards teaching and adequate knowledge of teaching methodology, a system that is able to relate learning activities to the development process of the learners and to their current and immediate interest and needs.

To achieve effective financial accounting education in our country, emphasis has to shift from content to process which will lead to changes in instructional techniques. Otopo (2012) observed that the need for curriculum changes in secondary education has led to consequent shift of emphasis from the traditional chalk and talk method to modern methods of teaching financial accounting such as activity orientated method of instruction, laboratory method, concept-mapping, enquiry method, guided discovery method of instruction among others.

Financial accounting is an academic course that equips students with relevant skills and knowledge needed for occupation in accounting field. Olorode and Jimoh (2016) defined financial accounting as the process of recording, classifying, selecting, measuring, interpreting, summarizing and reporting financial data of an organisation to users for objective assessment and decision making. The major objective of offering financial accounting according to Olorode and Jimoh (2016) is to impart the necessary skills and knowledge for performing financial duties in any business organisation and provide students with technical and professional skills needed to handle financial accounting subject in secondary and tertiary institutions. Both book-keeping and accounting as its taught at the senior secondary school today enables students to record or prepare accounting papers for business use and for personal use.

Academic performance is the outcome of education, that is the extent to which a student, teacher or institution has achieved their educational goals. Jimoh, Idris and Olatunji (2016) argued that academic performance is the desired success attained by students. Jimoh (2014) continued that academic achievement is the level of success attained by the students in school subjects. Ezenwosu and Nworgu (2013) noted that academic performance is commonly measured using classroom exercise, assignment and continuous assessment as well as internal and external examination. Olorode and Jimoh (2016) asserted that students' performances in financial accounting examinations in recent years are below expectations. They however opined that the low performance of students in financial accounting in secondary school in recent years may be attributed to conventional strategy popularly used by teachers in instructional delivery. Ezenwosu and Nworgu (2013) noted that most teachers adopted conventional strategy which is an oral presentation of idea concepts and principles to the students. Ubah (2011) described this method as one-way communication where the teacher does most of the talking and the students more often assume a passive role. The characteristics of conventional strategy according to Akani (2017) include: teacher-centred, teacher active, learner passive, content emphasis, large class size, wide content of instruction and minimal use of chalkboard and low level of interaction. Ezenwosu and Nworgu (2013) corroborated that the strategy is concerned with how much ground is covered by the teacher before examination. Going by the above features, conventional strategy is inappropriate for teaching some skill oriented subjects like financial accounting because students are deprived of active participation in the learning process and they have very little or no interaction among themselves and the teacher.

Guided discovery learning strategy is a strategy in which the principle content of learning is not directly exposed by the teacher but left to be discovered by the learners, making the teacher a guardian and students active participants in the learning process. Olorode and Jimoh (2016) asserted that guided strategy is a learning situation in which the principal content of learning is not directly exposed by the teacher but left to be discovered by the learners, making the teacher a guardian and students active participants in the learning process. Oyewole (2017) corroborated the assertion that guided discovery teaching strategy allows the teacher to be a facilitator of the learning who should be directed to find out what comforts his/her in the immediate environment so that he/she can create or discover own solution. Otobo (2012) confirmed that of all strategies used in teaching vocational subjects, the guided discovery teaching strategy tends to attract most students allocation.

A research conducted by Olorode and Jimoh (2016) on effectiveness of guided discovery teaching strategy and gender sensitivity on students' academic achievement concluded that guided discovery has a comparative advantage in enhancing students' academic achievement than conventional strategy. The gender factor has assumed prominence in vocational education discourse in recent years. Gender is a specifically constructed phenomenon that is brought about as society ascribes different roles, duties, behaviours and mannerisms to the sexes (Manuwat, 2016). Omotayo (2014) explained that gender is a social connotation that has sound psychological background, and it is used to refer to specific attributes of both males and females. Okoro (2018) observed that males and females showed great difference in their interest and career choice. However, the issue of gender and academic performance has remained a controversial one

The persistence poor performance of secondary school students in financial accounting public examinations (SSCE) in Oyo state as reported by Ajayi (2016) has made the development of future professionals in commerce and industry a difficult task. Parents, guardians and other stakeholders in education industry have variously commented on the performance and often hinge most of the blame on teaching strategies of instruction (Adepeju, 2012). In fact, the unimpressive academic performance of senior secondary students in Oyo state secondary schools as noted by George (2016) that 74,699 out of 132,629 students repeat in public schools as a result of inability to meet promotion criterion. This has generated a lot criticism and concern by all stakeholders in Oyo state. This has been blamed to a large extent on methods being adopted by teachers to meet the needs modern and sophisticated learners.

Several factors may have been attributed to the poor performance, such as incessant changes in government policies, closure of schools, higher student teacher ratio, lack of supervision, poor content of instruction, non-conducive environment among others but one factor often neglected is how to engage students in this age of technology with appropriate strategies rather than the old teacher centred strategies commonly used today, which of course is being suspected as the root cause of student failure in financial accounting. Teaching strategies widely been acknowledged by Omotayo (2014), Maida (2012), Jimoh (2014) and Igbokwe (2015) as the most singular variable enhancing academic performance. However, there is need for financial accounting teachers to move from chalk and talk strategy and explore strategies that is capable of arousing

student interest, freedom and independence. Therefore, the study examined the effects of guided discovery teaching strategy on academic performance of financial accounting students in Oyo state.

Statement of the Problem

To engender better student academic achievement in school subjects, the commonly adopted methods by junior secondary school teachers include conventional, tutorial, assignment and demonstration, yet these do not seem to be yielding the expected results as evidenced in continuous underperformance and unabated poor academic achievement in junior secondary school examinations in Oyo state. Despite teachers use of different strategies and provision of amenities by government to improve academic achievement in secondary schools, it has been observed by Maida (2012), Owoeye (2010) and Ajuba (2011) that all is not well with the state of education in Oyo state as evidenced in poor academic achievement recorded in public examinations in recent years. Iyabo (2017), Rabi (2017) and Awolabi (2013) collaborated this assertion and submitted that stakeholders are worried that Oyo state is the least performing of the South Western state emerging 26th in 2015, 29th in 2016, 31st in 2017 and 29th in 2018 in West African Examination result ranking. George (2016) also reported that 74,699 out of 132,629 students repeat in public junior secondary schools as a result of students inability to meet promotion criterion.

The import of this is that Oyo state known as pacesetter state that has played premier position in the field of education is now taking the back seat. This has created a lot of worries and criticism among stakeholders in education in the state. Many factors might have been suggested as causes of this dwindling and underperformance but Okoro (2018), Rabi (2017), Eze, Ezenwafor and Molokwu (2015) argued that among all other factors, teachers strategy of instruction has been viewed as the most singular variable with direct impact on students' academic achievement in secondary schools. To the best knowledge of the researcher, no study had been conducted on the interaction effects of guided discovery teaching strategy on academic achievement of business financial accounting students in Oyo state.

Purpose of the Study

The main purpose of this is to examine the effects of guided discovery on academic performance of financial accounting students in Oyo state. Specifically the study aims to:

1. determine the effect of guided discovery teaching strategy on academic performance of financial accounting students in Oyo state
2. assess the interaction effect of guided discovery teaching strategy and gender on students' performance in financial accounting

Research Questions

The study would address the following research questions:

1. What is the effect of guided discovery teaching strategy on financial accounting students' academic performance in Oyo state?
2. What is the interaction effect of gender and teaching strategy on students' academic performance in financial accounting using guided discovery teaching strategy?

Methodology

The study adopted a quasi-experimental research design, specifically, non-randomized pre-test-post-test control group design. This design was used because the experiment took place in normal school settings where randomization or assignment of subjects to experimental and control groups is not possible. Two instructional strategies (guided discovery teaching strategy and conventional teaching strategy) were used as treatments to determine the most effective one; with consideration to gender. The population for the study was 72,000 students in 652 secondary schools offering financial accounting at senior secondary school level in Oyo state. The sample comprises 53 students in their intact classes for the experimented group and 57 students in their intact classes for control group respectively. The sample were purposively chosen for proper representation using hat-and-draw technique. A 30 multiple choice financial accounting achievement test (FAAT) developed by the researcher; was the instrument validated and administered for data collection. The reliability of the FAAT was determined using split-half technique and it yielded a coefficient of 0.87. The lesson plans for the two instructional groups were also validated by experts in business education from Ekiti State University, Ado-Ekiti.

A pre-experimental briefing section was organized before the commencement of the treatment, to highlight to the research assistants, the procedures for the experiment after which a pre-test was first administered. After the pre-test, 4 week treatment was given to the two groups, using appropriate strategies and lesson plans. The post-test was administered to the two groups after the completion of the lesson and data collected were analysed using descriptive statistic of mean to answer the research questions raised in the study. To control pre-existing group difference which may arise from the difficulty in randomization students in the school situation, intact classes was used to control initial group differences.

Results

Research Question 1: What is the effect of guided discovery teaching strategy on financial accounting students' academic performance in Oyo state?

Table 1: Effect of guided discovery teaching strategy on financial accounting students' academic performance

Groups	Pretest mean		Posttest mean	Mean Difference
	N	Mean(X)	Mean (X)	
Control	57	32.82	35.10	2.32
Experimental	53	35.62	59.20	23.55
Mean gain score		3.80	24.10	21.23

The data presented in table 1 shows control and experimental groups post-test mean achievement scores of 35.10 and 59.20 respectively with a mean difference of 2.32 for the control and 23.55 for the experimental group. Since the post-test mean difference of 23.55 for the experimental is higher than 2.32 for the control group, it therefore means that guided discovery teaching strategy is more effective in teaching financial accounting than conventional teaching strategy.

Research Question 2: What is the interaction effect of gender and teaching strategy on students' academic performance in financial accounting using guided discovery strategy?

Table 2: The Mean Achievement Test Scores of students in Financial Accounting by Gender

Group	Gender	N	Pre-test Mean (x)	Post-test Mean (x)	Mean Gain Score	Difference
Control	Male	22	8.46	18.29	9.83	4.25
	Female	35	8.46	15.05	5.59	
Experimental	Male	24	7.91	19.96	12.05	0.46
	Female	29	11.18	23.69	12.51	

Table 2 shows that the mean gain score of 9.83 for male students in the control group is higher than the mean gain score of 5.59 for female students in the same group with a difference of 4.25 in favour of male students. In addition, the mean gain score of male students in the experimental group was 12.05 and 12.51 mean gain score for female students in the same group with slight difference of 0.46 in favour of female students. This result shows that control group favour male students while experimental group favour female.

Discussion

The result of research question one showed that students in the experimental group (taught financial accounting using guided discovery teaching strategy) performed significantly better than those in the control group (taught using conventional strategy). In the same vein, the findings of the hypothesis one revealed a significant difference between the mean achievement test score of students taught financial accounting using guided discovery teaching strategy and those taught using conventional teaching strategy. This finding is supported by the result of Akinbola and Afolabi (2010); Acero, Javier and castro (2010) and Oyewole, (2017) that guided discovery teaching strategy improve students' academic achievement than traditional strategy. The reason is that guided discovery strategy allows students to think and discover facts that will enable them provide solution to financial accounting problems on their own which may be difficult to do in a conventional teaching environment. Similarly, Olorode (2016) affirm that guided discovery strategy is an instructional method that emphasizes students' active involvement in the learning process through peer work and enable students to think together with a view to discovering knowledge under the guidance of the teacher especially in calculating subjects like financial accounting.

Findings for the research question two revealed that male students in the control group gain more than their female counterpart in terms of academic performance while female students in the experimental group gain more than male students. This means that the use of guided discovery learning strategy favour female students in learning of financial accounting. This is in line with study of Adeagbo (2014) that boys and girls in the ages perform equally in all subjects including English Language, and as they grow to higher classes, the girls begin to get more interested in language Arts, while the boys take more to sciences and social sciences. This is also supported by Eze (2015) that studies reported that girls showed slight superiority in computation in elementary and middle school while differences favouring males emerged in high school and

college. This finding is in consonance with the findings of Udo and Etiubon (2011) that there is a significant difference in the mean achievement test scores of male and female students taught using guided discovery strategy.

Conclusion

It is evident from the findings of this study that, guided discovery learning strategy has a comparative advantage in enhancing students' academic performance in financial accounting than the conventional strategy. Thus, the study inferred that guided discovery learning strategy is more effective in teaching financial accounting than the conventional teaching strategy.

Recommendations

Based on the finding the following recommendations were made

1. Secondary school teachers should incorporate the use of guided discovery teaching strategy in the teaching of financial accounting.
2. Ministry of education, principals and authorities in secondary school teachers should organize seminars and workshops for practicing lecturers on the procedure and use of guided discovery learning strategy in teaching accounting courses most especially financial accounting.
3. Government should employ more accounting teachers so as to raise teacher student ratio thus making the classroom manageable for easy implementations of guided discovery teaching strategy.

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