



## **EFFECT OF GUIDED-DISCOVERY METHOD ON STUDENTS' INTEREST IN FINANCIAL ACCOUNTING FOR SKILLS ACQUISITION**

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### **Abstract**

*The study mainly determined the effect of guided-discovery method on students' interest in financial accounting for skills acquisition. The study adopted a quasi-experimental research design. The population for the study comprised 667 NCE I students offering financial accounting in nine colleges of education in North West, Nigeria. Random sampling technique was used to select Federal College of Education, Kano and Kaduna State College of Education, Gidan-Waya, Kafanchan. Eighty financial accounting students from KSCOE, Gidan-waya and sixty financial accounting students in FCE Kano were used. The criteria for selecting the two colleges of education was based on colleges of education with approved financial accounting programme with final account of small scale enterprise, available qualified financial accounting lecturers, and approved required facilities. The instrument for data collection was a 25 items five-point likert scale response of Financial Accounting Interest Inventory Scale (FAIIS). The instrument was subjected to face and content validation by three experts. The Reliability of the instrument was determined using Cronbach Alpha Coefficient formula which yielded a reliability coefficient of 0.91. Before the commencement of the experiment, all students both in experimental and control groups were subjected to pre-test in order to obtain the pre-scores for the study. On completion of the experiment, post-test and post post-test scores were collected two weeks after the post-test. The data collected were analyzed using mean to answer the research questions while ANCOVA statistics were used for testing the hypotheses at 0.05 level of significance. Based on the data collected and analyzed, and results interpreted, the study found that guided-discovery method significantly increased students' interest in trading account, profit and loss account and balance sheet of small scale enterprise. There was significant difference in the mean achievement scores of students taught with guided-discovery method and those taught with conventional method. Based on the findings of the study, it was recommended among others, that seminar, workshop and conferences should be organized by the educational administrators and ministry of education where colleges of education lecturers will be trained on the use and application of guided-discovery method for effective teaching and learning of financial accounting, and that colleges of education lecturers in the country should be provided with required in-service training for skills update in the use of modern and students-centred methods of instruction such as guided-discovery.*

*Key words: Guided-discovery method, lecture method, students' interest, financial accounting, and skill acquisition.*

### **Introduction**

The process by which people obtain knowledge, skills, value and attitudes is known as education. The most common way to acquire a sound education is through effective teaching in a school system. Financial accounting knowledge, skills, attitude and values can be acquired the same process. Knowledge and skills required in financial accounting necessary for national development include; professional knowledge, financial monitoring and analysis, decision-making, supervision,



communication, interpersonal, problem-solving, business, risk-management and information and communication technology skills (Jayaprakash, 2005). The competent accountant is expected to apply accounting principles and practice for accounting, and budgeting or other fiscal functions such as reconciliation of accounting reports, examination of various financial statements for accuracy, completeness, and in accordance with the guideline.

Financial accounting has been defined by different authors. Osuala (2000) stated that, financial accounting is the process of capturing, processing, and communicating financial information of a business enterprise. Lewis and Pendrill (2000) stated that financial accounting is the process of identifying, measuring, and communicating economic information to permit informed judgment and decisions by the users of the information. Auwal (2013) explained that financial accounting is directly related to external reporting, by providing investors and other outsiders with financial information they need for decision-making. Udoh (2011) also defined financial accounting as a specialized area of instruction that deals directly with business facts, business understanding, economic understanding, business attitudes, and appreciation necessary to understand and adjust to the economic and social institutions called business. Financial accounting in this study is an area of instruction that provides the individual with the knowledge, skill and attitudes to collect, record, analyze, interpret and communicate financial data to the users.

According to Wood and Sangster (2008), the functions of financial accounting include that it is useful in calculating profit, in credit clearing, and as a tool of control, planning, financial position and provision of necessary information for taxation. Financial accounting also helps individuals to account for their income, record their assets, enable companies to account to their shareholders, governmental agencies and the general public; government use it as a basic tool for controlling their resources. Therefore the knowledge and skills of financial accounting would enable individuals and business organizations to keep accurate records of their financial transactions. However, no matter how good the objectives of financial accounting may be, it cannot be automatically realized except it is effectively taught and learnt.

Effective teaching means making use of the appropriate pedagogies to transmit the knowledge and skills to students. The ultimate goal of any instructional activity in both formal and informal education is to assist the learner to learn. However, to achieve this, appropriate teaching methods and approaches that encourage students' participation should be used. According to Osuala (2009), approaches are means by which the teacher introduces the subject to students of financial accounting, and these approaches are; journal approach, balance sheet approach and the ledger approach. However, according to Osuala (2009) method is the procedure by which the teacher meets the learner within his level, starting with his interest and problems. Osuala (2009) added that methods are used to help students learn facts, concepts, skills, and acquire knowledge in financial accounting. Some teaching methods that are commonly used are: the demonstration, the lecture, discussion, cooperation, individual and group, field trips, project and the Socratic methods. These methods can be individually or collectively used to develop the intellectual understanding of the students in financial accounting. But none of this method can individually be used to



assist students to learn skills in financial accounting. Therefore, there is need to embrace innovative methods and techniques that encourage students' interest and participation in the learning process. Guided-discovery method is an innovation technique that could be used in teaching financial accounting due to its student-centered approach. It is hoped that if effectively utilized, it could motivate the interest of the students and therefore facilitate the learning of Financial Accounting. According to Messial (1991), guided-discovery is a process of self-learning whereby students generate concepts or principles and ideas with very little intervention from the teacher. The author indicated that it takes place in problem solving situations where the learner draws on his own experience and prior knowledge. To encourage the students to develop interest in financial accounting, the teacher may demonstrate what the students are expected to do. Guided-discovery teaching method can effectively be used in teaching final accounts of small scale enterprises. The final account of small scale enterprises is one of the topics in financial accounting taught in colleges of education.

Small scale enterprises play very important role in national economy. One of the reasons responsible for the failure of small scale enterprises are lack of proper keeping of financial records (Kambwale, Chisoro and Korodia, 2015). According to the authors, small scale enterprises fail because of poor financial record keeping. This knowledge and skill of financial record keeping of small scale enterprises can be acquired through the use effective method. This could improve the students' interest in the subject.

Interest, in a classroom setting, is required to meet students' intellectual and emotional needs. Nworgu (2003) described interest as one practical class of attitude which is always positive and is associated with objectives or activities that are need-satisfying and pleasure giving. Agbi (2006) explained that interest is the interaction which forces a child to respond to a particular stimulus. In other words, a child develops interest for a particular stimulus that aroused and attracts him. Put in a classroom situation, if a child is interesting in a lesson, the child will definitely pay attention in the classroom. Osuafor (2001) also stated that in matters relating to interest the thing perceived has a special attraction for the mind and stands out to attract attention, by implication interest is able to compile attention.

Students' lack of interest in a subject can be exhibited through lack of enthusiasm about knowledge and some disappointing class behaviors such as sleeping, becoming distracted, chatting, passing notes and eating while lecture is on. The teachers' ability to manage his class effectively, providing good teaching pattern and strategies may develop the interest of the students. This study is set to find out whether interest of financial accounting students can be improved through guided discovery method of teaching. Whenever a student interest is motivated, the student will be able to performed academically in financial accounting

The use of guided discovery method will likely contribute positively to the interest of students in financial accounting in colleges of education. This study, therefore, investigated the effect of guided discovery method of teaching on Colleges of Education (COE) students' interest in financial accounting in North-West Nigeria



### **Statement of the Problem**

National Certificate in Education (NCE) graduates in financial accounting are expected to have acquired the required knowledge and skills in preparing accounting records and financial statements for small scale enterprises. The NCE financial accounting graduates are prepared to teach financial accounting in secondary schools, for self-employment or paid employment in the public or private sector. Unfortunately, these objectives are still far from being achieved most importantly when one looks at the performances of NCE financial accounting graduates in their examination.

Most of these graduates do not perform academically up to their abilities. Though some of these students usually pass out successfully from the system, the overall performance of many of them does not always reflect the level expected of them. Many of them are unemployed and a few that managed to be employed are disengaged to early by their employers because of lack of or poor quality of skills. The employers see majority of the graduates as incompetent in the work to which they are employed. Even those that are self-employed have been observed to close down their business as a result of poor patronage occasioned by poor performance.

The poor performance and incompetence of the graduates may be due to the level of instructions they obtained in the colleges. This may also be related to their level of lack of interest in financial accounting. The poor performance by students in financial accounting could be due to some certain factors which might include: poor teaching methods and techniques. It is common place in the Colleges of Education that the students are taught financial accounting courses through the lecture method, which is teacher-centred.

### **Purpose of the Study**

The main purpose of this study was to determine the effects of guided-discovery method on students' interest in financial accounting in colleges of education (COE) in North West zone. Specifically, the study sought to:

1. determine the difference between the effect of guided-discovery method and lecture method on the interest of colleges of education (COE) students taught trading account of a Small Scale Enterprises (SSE).
2. determine the difference between the effect of guided-discovery method and lecture method on interest of COE students taught profit and loss account of a SSE
3. determine the difference between the effect of guided-discovery method and lecture method on interest of COE students taught balance sheet of a SSE.



### **Research Questions**

The following research questions guided the study:

1. What is the difference between the effect of guided-discovery method and lecture method on interest of colleges of education (COE) students taught trading account of a small scale *enterprises* (SSE)?
2. What is the difference between the effect of guided-discovery method and lecture method on interest of COE students taught profit and loss account of a SSE?
3. What is the difference between the effect of guided-discovery method and lecture method on interest of COE students taught balance sheet of a SSE?

### **Hypotheses**

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

- Ho1 There is no significant difference between the post-test mean scores effect of guided-discovery method and lecture method on the interest of COE students taught trading account of a small scale enterprise.
- Ho2 There is no significant difference between the post-test mean scores effect of guided-discovery method and lecture method on the interest of COE students taught profit and loss account of a small scale enterprise.
- Ho3 There is no significant difference between the post-test mean scores effect of guided-discovery method and lecture method on the interest of COE students taught balance sheet of small scale enterprise.

### **Method**

The study adopted quasi-experimented design. The study was carried out in North West, Nigeria. The population for the study comprised 667 NCE I financial accounting students in Business Education in North-West Nigeria. The sample size for the population was 140 NCE I financial accounting students. This was made up of 80 and 60 intact classes of Kaduna State College of Education, Gidan-Waya and Federal College of Education, Kano respectively. Random sampling technique was used to select the two colleges of education. The instrument used for data collection was Financial Accounting Interest Inventory Scale (FAIIS). The test instrument covered topics on trading, profit and loss account, and balance sheet of a small scale enterprise. The instrument was subjected to face and content validation by three experts. Cronbach Alpha method was used to determine the internal consistency of the test items, which yielded coefficients of 0.91 for FAIIS. Random sample procedure was used to assign groups to treatment and control group. COE, Gidan-Waya was used for experiment, while FCE, Kano was used for the control group.

The experiment lasted for five weeks after which the post tests were administered. Since the participating classes were non-equivalent groups, mean and ANCOVA statistics were used for data analysis to take care of the initial difference between the groups in order to eliminate the errors of non-equivalence. The data collected were analysed using mean for research questions and Analysis of Covariance (ANCOVA) for the test of hypotheses at 0.05 level of significant.



## Results

### Research Question 1

What is the difference between the effect of guided-discovery method and lecture method on interest of Colleges of Education (COE) students taught trading account of a small scale *enterprise* (SSE)?

**Table 1**

**Mean of pretest and posttest scores on interest of COE students taught Trading Account using guided- discovery and conventional method**

Group	N	Pretest	Post-test	Mean Gain
Experimental	80	2.56	3.63	1.02
Control	60	1.79	1.89	0.08

The result presented in Table 2 shows that the treatment group had a mean score of 2.56 in the pretest and mean score of 3.63 in the post-test indicating that the pretest and the post test had a mean gain score of 1.02 in the experimental group. The control group had a mean score of 1.79 in the pretest and a post test mean score of 1.89 with a mean gain score of 0.08. The result shows that, the experimental group had higher mean gain than the control group taught trading account., this implies that, guided discovering method was more effective on the students interest in trading account than the lecture method

### Research Question 2

What is the difference between effect of guided-discovery method and lecture method on interest of COE students taught profit and loss account of a SSE?

**Table 2**

**Mean interest scores of COE students taught profit and loss Account using Guided- discovery and lecture methods.**

Group	N	Pretest	Post-test	Mean Gain
Experimental	80	2.74	3.97	1.23
Control	60	1.96	2.02	0.06

The result presented in Table 5 shows that the experimental group had pretest mean score of 2.74, a post- test mean score of 3.97 and mean gain score of 1.23. On the other hand, the control group had a pretest mean score of 1.96, a post- test mean score of 2.02 and a mean gain score of 0.06. These results indicate that experimental group had more mean score gain than the control group. This implies that students taught profit and loss account with guided-discovery were more interested than students taught using lecture method



**Research Question 3**

What is the difference between effect of guided-discovery method and lecture method on interest of COE students taught balance sheet of a SSE?

**Table 3**

**Mean interest scores of students taught balance sheet using guided- discovery and lecture methods**

Group	N	Pretest	Post-test	Mean Gain
Experimental	80	2.65	3.86	1.65
Control	60	1.90	2.26	0.36

The result presented in Table 8 shows that the experimental group had a pretest mean score of 2.65, a post test mean score of 3.86 and a mean gain score of 1.65. The control group had a pretest mean score of 1.90, a post test mean score of 2.26 and a mean gain score of 0.36. The result indicated that experimental group has higher mean score gain than the control group. This implies that guided-discovery method has more effect on students’ interest on balance sheet of SSE than students taught using lecture method.

**NullHypothesis 1**

**Ho1** There is no significant difference between the post-test mean scores effect of guided-discovery method and lecture method on interest of COE students taught trading account of a small scale enterprise using.

**Table 4**

**Analysis of Covariance (ANCOVA) for Test of Significance between the Mean Scores of treatment and control groups on interest test in Trading Account**

Source	Sum of Square	df	Mean Squares	f	Sig.
Corrected model	2.134A	2	1.067	1.551	.262
Intercept	28.189	1	28.189	35.708	.000
Pretest	.819	1	.819	1.037	.310
Group	.015	1	.015	.020	.091
Error	108.152	137	.789		
Total	2856.000	140			
Corrected total	110.286	139			

*R square = .019 (Adjusted R squared= .005)*

Table 10 shows an f-value of 0.020 with a significant value of 0.091 which is more than 0.05. The null hypothesis is therefore accepted at 0.05 level of significance. The result indicates that, there was no significant difference between the effect meanscores on interest of colleges of education students taught Trading Account using guided-discovery and lecture methods.

**Null Hypothesis 2**



**Ho2** There is no significant difference between the post-test mean scores effect of guided-discovery method and lecture method on interest of COE students taught profit and loss account of a small scale enterprise.

**Table 5**

**Analysis of Covariance (ANCOVA) for Test of Significance between the Mean Score of Treatment and Control Groups on Interest Test of Colleges of Education students taught Profit and Loss Account.**

Source	Sum of Square	df	Mean Squares	F	Sig.
Corrected model	2.428a	2	1.314	1.154	.318
Intercept	12.377	1	12.377	11.766	.001
Pretest	2.418	1	2.418	2.299	.132
Group	1.874	1	1.874	1.782	.018
Error	144.115	137	1.052		
Total	25.66.000	140			
Corrected total	146.543	139			

*R squared= .017 ( Adjusted R squared= .002).*

Table 13 shows an f-value of 1.782 with a significant value of 0.018, which is less than 0.05. The null hypothesis was, therefore, rejected at 0.05 level of significance. This indicates that there is significant difference between the effect on mean score on interest scores of COE students taught profit and loss account using guided-discovery and lecture method.

**Null Hypothesis 3**

**Ho3** There is no significant difference between the post-test mean scores effect of guided-discovery method and lecture method on interest of COE students taught balance sheet of small scale enterprise.

**Table 6**

**Analysis of Covariance (ANCOVA) for Test of Significance between the Mean Scores of treatment and control groups of Colleges of Education students' interest taught Balance Sheet.**

Source	Sum of Square	df	Mean Squares	f	Sig.
Corrected model	489a	2	244	1.161	.316
Intercept	102.436	1	102.436	486.983	.000
Pretest	256	1	256	1.216	.272
Group	314	1	314	1.432	.022
Error	28.818	137	210		
Total	2157.840	140			
Corrected total	28.139				

*R squared= .281 (Adjusted R squared = .270)*

Table 16 shows an F-value of 1.432 with a significant value of 0.022 which is less than 0.05. The null hypothesis is, therefore, rejected at 0.05 level of



significance. This shows that there is a significant difference between the effect on mean score interest scores of COE students taught balance sheet of a small scale enterprise using guided-discovery method and lecture method

### **Discussion of the Findings**

In this section, the findings are discussed under the followings headings based on the research questions and the hypotheses.

#### **Effect of Guided- Discovery on Student's Interest in Learning Financial Accounting**

The result presented on Table 1 used in answering the first research question revealed that the experimental group has higher mean score gain than the control group. This implies that guided-discovery method was more effective on colleges of education (COE) students' interest in teaching trading account of a Small Scale Enterprise (SSE) than those taught using lecture method. The result presented in Table 2 used in answering the second research question showed that the experimental group had more mean score gain than the control group. This indicated that guided-discovery method was more effective on COE students' interest taught profit and loss account of SSE than lecture method. Also, the result presented in Table 3 used in answering the third research question reveal that the experimental group has higher mean score gain than the control group. This implies that guided-discovery method was more effective on COE students taught balance sheet of a SSE than lecture method. These findings are in line with earlier studies of Adetayo (2013) and Agbi (2006) who agreed that students' interest has positive effect on learning and academic achievement.

Furthermore, analysis of the first null hypothesis using ANCOVA at 0.05 significance level proved that there was no significant difference between the effect on mean score on interest of COE students taught trading account of a SSE using guided-discovery method and lecture method. This result is in consonance with the finding of Shraw and Lehman (2001) who found that interest can be affected by altered objectives, instruction techniques and classroom environment. This implies that interest cannot be forced on students. However, the researcher advised that students can be motivated by encouraging them to be active participants in the teaching and learning process to enhance their interest.

Also analysis of the second null hypothesis using ANCOVA at 0.05 significance level provided that there was significant difference between the effect on mean score interest of COE students taught profit and loss account of a SSE using guided-discovery method and lecture method. The analysis of the third null hypothesis using ANCOVA at 0.05 significance level proved that there was significant difference between the effect on mean score interest on COE students taught balance sheet of a SSE using guided-discovery method and lecture method.

Interest of students is a necessary factor which can sustain them in a lesson. Guided-discovery method facilitated students interest in the topics; profit and loss account, and balance sheet of a SSE than lecture method. Just as Adetayo (2013) recognized the importance of students interest and its role in individual learning and



achievement Chen (2001) advised teachers to seek the interest of students when delivery a lesson. Osuafor (2001) also emphasizes that it is important to discover what children are interested in or get them interested in what we want them to learn. This can be done when appropriate or innovative teaching techniques and learning like guided-discovery method is apply in teaching and learning of financial accounting

### **Conclusion**

Financial accounting knowledge, skill, attitude and values can be acquired through effective teaching in a school system. These attributes enable the accountant to obtained professional knowledge, financial analysis, decision-making, risk-management, information and communication technology, and problem-solving skills. Unfortunately, the poor academic and quality of Nigerian graduates particularly in colleges of education spell doom to the stakeholders. It is observed that the conventional methods used in colleges of education may be responsible for making financial accounting students inadequate to acquire skills for competent and self-reliant. Therefore, for effective teaching of financial accounting for skills acquisition, guided-discovery method which is students-centred, can be useful to students of financial accounting.

### **Recommendations**

1. Lecturers of financial accounting in Colleges of Education should be encourage to adopt innovative teaching methods that will boost interest of colleges of education students financial accounting.
2. There is need to organize seminars, workshop and conferences in College of Education on the need to adopt varying teaching methods like guided-discovery practices.
3. Lecturers of financial accounting should encourage students participation in the teaching and learning process by incorporating activity in the teaching and learning of financial accounting in Colleges of Education.

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