



Evaluation of Teacher-centered and Learner-centered methods for Instructional Delivery of Senior Secondary Schools Financial Accounting in Rivers State

Dr. William J. UBULOM¹ & Peter Clinton OGWUNTE²

**¹Department of Business Education
Rivers State University of Science and Technology,
Port Harcourt, Nigeria
E-mail: will.ubulom@yahoo.com**

&

**²Department of Vocational Education,
Nnamdi Azikiwe University,
Awka, Nigeria
E-mail: peter.ogwunte@yahoo.com**

ABSTRACT

This study was undertaken to carry out process evaluation of the effectiveness of teacher-centred and learner-centred methods for financial accounting instructional delivery in senior secondary schools in Rivers State. Two research questions and two null hypotheses guided the study. Evaluation research design and the process evaluation component of the Stufflebeam's evaluation model were adopted for the study. The population for the study was made up of 834 accounting teachers in public secondary schools in Obio/Akpor and Port Harcourt City Local Government Areas. A sample size of 250 respondents was used for the study. A 25-item validated research instrument known as Teacher-centred and Learner-centred Teaching Approaches Rating Scale (TaLTARS), structured on a 5-point response options with 0.89 reliability co-efficient was used for data collection. Research questions were answered using mean, standard deviation and z-test was used to test the hypotheses at 0.05 level of significance. Findings revealed that teacher-centered instructional method was ineffective, while learner-centered method was very effective in teaching accounting subjects at the secondary school level. It was recommended among others that learner-centered method which was adjudged to be very effective be made compulsory in teaching accounting subjects in all secondary schools in Rivers State.

Keywords: Stufflebeam's evaluation model, accounting, instructional methods

INTRODUCTION

Accounting is the process of recording, classifying, selecting, measuring, interpreting, summarizing and reporting financial data of an organization to the users for objective assessment and decision making (Asaolu, 2002). Also, Ukpai, Kiabel & Obara (1998), quoted the American Accounting Association (1966), that accounting is the process of identifying, measuring and communicating economic information to permit informed judgment and decisions by the users of the information through the use of accounting principles. They are the basic fundamentals which guide accountants in recording, appreciating and assessing accounting information as well as the preparation and interpretation of financial statements. According to Okafor & Ile (2014), the books of accounts prepared by accountants in one part of the world are easily understood by their counterparts in other parts of the world because the information systems are based on principles that are widely accepted and globally used.

Accounting as one of the business subjects offered at the senior secondary school level helps in the acquisition of practical skills, knowledge, attitudes, values and competencies towards solving problems and satisfaction of real needs in life. The beneficiaries of financial accounting education

have the comparative advantage of being employable and employers of labour. The National Examination Council (2004) stated the objectives of studying financial accounting at the senior secondary school level to include:

1. Enable senior secondary school students appreciate the basic rules, functions and principles of accounting
2. Lay a proper foundation for further study of accountancy and allied courses at tertiary level and
3. Enable the students understand basic accounting principles and practice, as well as their applications in modern business activities.

The Federal Republic of Nigeria (FRN, 2004) and Ofoha et al., (2009), stated that the broad aims of secondary education within the overall Nigerian education are:

1. Preparation for useful living within the society and
2. Preparation for higher education.

To achieve these goals, effective instructional methods must not be taken for granted. Instructional method according to Umezulike (2007) is the process of planning and carrying out teaching task in order to achieve educational goals.

Instructional methods can be teacher-centred, learner-centred or mixed approach. Quite often, teachers prefer methods that make their work easier based on their beliefs, preferences and norms of their disciplines (Arends, 2007). In this regards, some teachers believed that lessons should be teacher-centered, where the teacher is the expert and the authority in presenting information (Ahmad & Aziz, 2009). Nevertheless, teachers-centered method are associated with inadequate stimulation of students innovative capacities, intellectual thinking, memorization, cramming of facts, poor knowledge retention and high dependency among graduates (Adeyemi, 2008, McDowell, 2001, Tanner, 2009 and Tella, et al., 2010). On the other hand, some teachers adopt learners-centered approaches in which their role is restricted to facilitation of the teaching process (Ahmad & Aziz, 2009). Learner-centered method are associated with imaginative, critical and skills, active participation of students in the learning process through discussion and intellectual engagement as well as higher learning achievement and effectiveness in addressing problem of humanity (Eken, 2000; Curtin, 2005; Froyd, 2007; Ahmad & Aziz, 2009). Although teachers have the description to choose method for delivering lessons to their students, Chika (2012) observed that learner-centered pedagogy is a powerful strategy for improving learning achievement in examination and application of knowledge and skills acquired. Teacher-centered instructional methods are also known as traditional instructional methods, where teachers are at the center of classroom activities, including explanations and discussions (Ahmad & Aziz, 2009). Teacher centered method is behaviourist in nature. Teacher-directed learning that follow the instructivist approach which involves careful and meticulous planning of the curriculum and purposeful instructional procedure employed by teacher. Under such circumstances, students have a definite and fixed perception of their roles as listeners, while teachers are expected to be the talkers and custodians of knowledge. This implies that student's active participation is minimal until the teacher authorizes them. Tanner (2009) found that teachers dominated classroom talk and students talked only when called upon to answer questions. Teacher-centered methods are however associated with a number of shortcomings. For instance, Adeyemi (2008) notes that lecture, which is the most common method, does not stimulate students' innovations inquiry and scientific thinking but rather encourages students to cram facts, which are easily forgotten. McDowell (2001) noted that instructional method that encourages memorization and reproduction are short knowledge that can be used to solve problems in new situations. Tella, Indoshi & Othuon (2010) noted that teacher centered methods often result to students not enjoying lessons and missing the benefits of intellectual discovery.

Learner-centered method actively engages the learners (students) in the learning process for effective mastery of the subject matter and promotion of positive attitude towards the subject. Teaching approaches adopted should make learning more learner-centred in order to promote imaginative, critical and creative skills in students resulting in better achievement of instructional objectives (Froyd, 2007). In a learner centred class, students take a participative role by leading discussions and teachers become facilitators. In this regard, teachers facilitate students discussion and interject only when necessary, allowing students to put the language to use and explore aesthetics of learning materials (Eken 2000 and Ahmad & Aziz, 2009).

According to Froyd (2007), the standard features of a learner-centred pedagogy include collaborative learning, connecting new information to previous knowledge and critical thinking. According to Dufresne, Gerace, Leonard & Wenk (2010), interactive learning within the classroom involves facilitating presentation of questions for small group work. Interactive pedagogy may also include the use of media and involvement of students in field work activities. Furthermore, interactive teachers allowed for diverse learning styles among their students and encourage active involvement of all students, while helping them to improve in individual weakness (Curtin, 2005). Students are also encouraged to ask questions, define problems and lead conversations (Chika, 2012). Learner centered methods are advantageous in a number of ways, for instance, they promote democratic participation in the learning process, encourage critical thinking, meet students communication needs and improve performance (Cummins, 2007). From the foregoing therefore, there is need to carry out a study such as this so as to determine how effective accounting teachers consider teacher-centred and learner-centred instructional methods for teaching accounting in secondary schools in Rivers State.

Statement of the Problem

The information available from school records like WAEC (2004) and the report of Nwogu (2011) clearly showed that vast majority of students perform poorly in Financial accounting annually. Academic achievement in education is believed to be a product of teachers' teaching method. While appropriate instructional methods are likely to enhance learning achievement, inappropriate approaches are known to stifle knowledge retention and realization of learning objectives (Chang, 2010). Observation by parents, teachers and government shows that there seems to be the absence of effective teaching methods which among others include teacher centred instructional methods and learner-centred methods for teaching financial accounting at secondary school levels not only in Rivers State, Nigeria but the whole nation. This has given rise to increase in unemployment among young school leavers. That being so, a gap in research-based knowledge seems to have been created, which this study will attempt to fill empirically. The problem of this study therefore is on how to identify those teaching methods which could best be used to impart the requisite skills on accounting students among teacher-centred and learner-centred instructional methods.

Purpose of the Study

The purpose of the study was to carry out the process evaluation of the effectiveness of teacher-centred and learner-centred methods for financial accounting instructional delivery in senior secondary schools in Rivers State.

Research Questions

The following research questions guided the study:

1. How effective do accounting teachers in Rivers State consider teacher-centred instructional methods for teaching financial accounting in senior secondary schools?
2. How effective do accounting teachers in Rivers State consider learner-centred instructional methods for teaching financial accounting in senior secondary schools?

Hypotheses

The following hypotheses were formulated and tested in this study:

1. There is no significant difference in the mean ratings of male and female financial accounting teachers regarding the effectiveness of teacher-centred methods for instructional delivery of financial accounting in Rivers State senior secondary schools.
2. There is no significant difference in the mean ratings of more experienced (6 years and above) and less experienced financial accounting teachers (less than 5 years) regarding the effectiveness of learner-centred methods for instructional delivery of financial accounting in senior secondary schools in Rivers State.

METHOD

This study is an evaluation research design. The study adopted evaluation design approach because it provided qualitative and quantitative objective judgment of the teacher-centred and learner-centred methods of instructional delivery of senior secondary school financial accounting. The particular model of evaluation used in this study is the Process evaluation (P) component of the CIPP developed by Stufflebeam in 1971. Stufflebeam's CIPP model of evaluation consists of four (4) interrelated domains of evaluation, namely: C = Context, I = Input, P = Process and P = Product. The choice of

CIPP as an evaluation model for this evaluation study is based on the fact that it is comprehensive, flexible and thorough.

The population of the study was made up of 834 public secondary schools accounting teachers in Obio Akpor and Port Harcourt City Local Government Areas in Rivers State. A sample of 250 respondents denoting thirty percent of the population was used for the study. The instrument for data collection was a structured questionnaire known as Teacher-centred and Learner-centred Teaching Approaches Rating Scale (TaLTARS). The research instrument is made up of 25-items statement measured on a five-point Likert type of scale with response options of Strongly Agree (SA) - 5 points, Agree (A) – 4 points, Undecided (U) – 3 points, Disagree (D) – 2 points and Strongly Disagree (SD) – 1 point. The consistency and reliability of the instrument was assured using Pearson Product Moment Correlation Co-efficient to determine the degree of reliability which yielded a correlation co-efficient of 0.89. Data collected were analyzed using mean and standard deviation to answer the research questions and z-test for the test of hypotheses.

RESULTS

Research Question 1

How effective do accounting teachers in Rivers State consider teacher-centred instructional methods for teaching financial accounting in secondary school?

Table 1: Mean ratings of respondents regarding the effectiveness of teacher-centred instructional methods for teaching financial accounting

S/n	Items of teacher-centred method	\bar{X}	SD	Remark
1	Lecture method	2.57	1.20	Ineffective
2	Information, advice and guidance	2.25	1.17	Ineffective
3	Listen and visualize method	2.18	1.25	Ineffective
4	Programmed instruction method	3.06	0.94	Effective
5	Individualized instruction method	2.41	0.81	Ineffective
6	Seminar method	3.01	1.13	Effective
7	Guided and shared reading method	2.71	0.99	Ineffective
8	Model-lead-test instructional method	2.31	1.12	Ineffective
9	Structure overview method	1.93	1.08	Ineffective
10	Team teaching method	2.29	1.10	Ineffective
11	Explicit teaching method	2.47	0.88	Ineffective
12	Peer partner learning method	2.37	1.07	Ineffective
	Aggregate \bar{X} and SD	2.67	1.06	Ineffective

Data in Table 1 indicated that ten items (1, 2, 3, 5, 7, 8, 9, 10, 11 and 12) of teacher-centred instructional methods were rated ineffective, and two items (4 and 6), were rated effective for teaching accounting at secondary school levels. Their grand mean scores stands at 2.67 and standard deviation (SD) = 1.06 respectively. The conclusion here is that the accounting teachers in Rivers State considered teacher-centred methods as being effective in instructional delivery of financial accounting in senior secondary schools in Rivers State.

Research Question 2

How effective do accounting teachers in Rivers State consider learner-centred instructional methods for teaching financial accounting in secondary schools?

Table 2: Mean and Standard Deviation Computation on how effective do accounting teachers in Rivers State consider learner-centred instructional methods for teaching financial accounting in secondary schools

S/n	Items of teacher-centred method	\bar{X}	SD	Remark
13	Field trip method	4.29	0.85	Effective
14	Computer assisted instruction	4.33	0.73	Effective
15	Demonstration method	4.03	0.80	Effective
16	Project method	3.94	0.94	Effective
17	E-learning	4.04	0.91	Effective
18	Office visit method	4.40	0.92	Effective
19	Critical thinking method	4.04	0.81	Effective
20	Discussion method	4.47	0.70	Effective
21	Invitation of guest speakers	4.26	0.89	Effective
22	Conferencing method	4.19	0.73	Effective
23	Inquiry method	4.23	0.95	Effective
24	Read and practice method	3.10	0.92	Fairly Effective
25	Datton method	4.10	0.96	Effective
	Aggregate \bar{X} and SD	4.90	0.85	Very Effective

Data in Table 2 indicate that twelve items (13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23 and 25) of learner-centred instructional methods were rated very effective for teaching accounting at secondary school levels. Also one item (24) was rated fairly effective for teaching accounting at secondary schools. Their grand mean score stands at 4.90 while their cumulative standard deviation (SD) = 0.85 respectively. The conclusion here is that the accounting teachers in Rivers State considered learner-centred methods as being effective in instructional delivery of financial accounting in senior secondary schools in Rivers State.

Hypothesis 1

There is no significant difference in the mean ratings of male and female financial accounting teachers regarding the effectiveness of teacher-centred instructional methods for teaching financial accounting in Rivers State senior secondary schools.

Table 3: Z- test analysis of difference in the mean ratings of male and female accounting teachers in senior secondary schools in Rivers State on the effectiveness of teacher-centred instructional methods for teaching financial accounting

Variable	N	\bar{X}	SD	Df	α	z-cal	Z-crit	Result
Male accounting teachers	80	29.20	4.06					
Female accounting teachers	170	28.80	3.91	248	0.05	2.91	1.96	Significant

The data in Table 3 revealed that the z-calculated value of 2.91 is greater than the critical value of 1.96 at 0.05 level of significance under 248 degree of freedom. This implies that there is significant difference in the mean ratings of male and female accounting teachers regarding the effectiveness of teachers-centred methods for instructional delivery of financial accounting in senior secondary schools in Rivers State. The null hypothesis was therefore rejected.

Hypothesis 2

There is no significant difference in the mean ratings of more experienced (6 years and above) and less experienced financial accounting teachers (less than 5 years) regarding the effectiveness of learner-centred methods for instructional delivery of financial accounting in senior secondary schools in Rivers State.

Table 4: Z-test analysis of differences in the mean ratings of less experienced (L-5 yrs) and experienced (6 yrs. and above) accounting teachers in public secondary schools in Rivers State on the effectiveness of learner-centred instructional methods for teaching financial accounting

Variable	N	\bar{X}	SD	df	α	z-cal	Z-crit	Result
Less experienced (Less than 5yrs)	120	54.2	3.25	248	0.05	0.63	1.96	Not Significant
Experienced (6yrs and above)	130	54.7	3.21					

Data in Table 4 shows that z-calculated value of 0.63 is less than the z-critical value of 1.96 at 0.05 level of significance under 248 degree of freedom. This means that there is no difference in the mean ratings of more experienced (6 years and above) and less experienced financial accounting teachers (less than 5 years) regarding the effectiveness of learner-centred methods for instructional delivery of financial accounting in senior secondary schools in Rivers State. The null hypothesis was accepted.

DISCUSSION

This study determines the instructional methods considered effective by accounting teachers in Rivers State public secondary schools. Two instructional methods used in rating teachers' effective consideration were teacher-centered methods and learner-centered methods. Result of the study in Table 1 shows that accounting teachers used the various teaching methods grouped under teacher-centered instructional methods, but were ineffective in delivering the course contents of financial accounting curriculum. The result was not encouraging because teachers are seen as the heart and soul of education process. Teachers roles are to teach, guide and direct students active learning through effective teaching instructional methods which stands as the basis for the realization of educational goals. Poor instructional methods hamper effective teaching and learning process and consequently affects students' academic performance. Nwodo (2006) discovered in his study that mere giving instructional information to students is not enough to impart vocational skills particularly in business education (accounting inclusive). It was found that one of the most commonly used methods in teaching skill subject is lecture. This could be responsible for the high rate of unskilled and unemployed youths in our society. Base on this Nwodo (2006) concluded that lecture method which is a key component of teacher-centered instructional methods is rarely effective for teaching skill subjects such as accounting, key boarding etc. Again, the tested hypothesis on Table 3 indicated that male financial accounting teachers in Rivers State public secondary schools differ significantly in their mean ratings regarding the effectiveness of teacher-centered instructional methods for teaching financial accounting. This led to the null hypothesis being rejected. Mannison (2009) upheld the result and the ineffectiveness of teacher-centered method for teaching business education (accounting inclusive).

Result of the study in Table 2 shows that accounting teachers considered learner-centered instructional methods very effective for teaching accounting at the secondary school level. Some of the methods of learner-centered instructions include field trip, inquiry, critical thinking, computer assisted instruction etc. These methods involve the teaching of theoretical and practical aspects of accounting within and outside the school. This could be the reason why learner-centered were rated very effective. Ogwunte (2016) supported the effectiveness of learner-centered instructional method by stating that skill subjects can only be taught effectively with demonstration method.

Data contained in Table 4 showed that more experienced financial accounting teachers (6 years and above) do not differ significantly from the less experienced (less than 5 years) in their mean ratings regarding the effectiveness of learner-centered instructional methods for teaching financial accounting. This led to the null hypotheses being accepted. The effectiveness of learner-centered method is supported by the study of Barbra (2009) who pointed out that the use of learner-centered instructions will certainly assist the students not only to become autonomous learner, but also self-sufficient.

CONCLUSION

From discussion, it was found that teacher-centered instructional method was ineffective, while learner-centered method was very effective for teaching accounting subject at the secondary school level in Rivers State. Accounting teachers have attained substantial progress in the area of awareness and identification of effective instructional methods for teaching accounting subject, but more need to be done in the area of effective application. Furthermore, although learner-centered methods have better returns in terms of learning achievement, teacher-centered methods cannot be thrown out of the window altogether. They remain important, especially for supporting weak students who may not cope in an environment that is purely learner-centered. Again, this calls for policy intervention on the correct balancing of instructional methods based on the learning needs and preferences of students.

RECOMMENDATIONS

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

1. Learner-centered instructional method which was adjudged to be very effective is recommended for compulsory application in teaching accounting subjects in all secondary schools in Rivers State.
2. Professional bodies such as Association of Business Educators of Nigeria (ABEN), and examination bodies such as National Business and Technical Education Board (NABTEB), West African Examinations Council (WAEC) and National Examinations Council (NECO) should organize seminars, workshops and in-house training for teachers and textbook authors in the use of learner-centered instructional methods in teaching financial accounting.
3. Government should also provide necessary equipments and facilities to enhance effective teaching and learning of accounting subjects.
4. Government should assign independent supervisors to monitor and evaluate accounting teachers in respect of effective teaching of accounting subjects because of its strategic importance to national development
5. Government should give financial rewards and awards to teachers who use effective instructional methods for teaching accounting subjects in secondary school in order to motivate others to implement its usage.
6. There should be a policy intervention by government on the correct balancing of instructional methods based on the learning needs and preferences of students.

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