#### **CHAPTER ONE**

#### INTRODUCTION

## **Background to the Study**

Education is a vehicle which conveys people from unknown to known or from abstract to concrete knowledge and facilitates their ability to distinguish wrong from right in all undertakings. This is why education is regarded as the totality of experiences that pave way for people in any society to understand the world they live in and be able to manage issues well. Olawoyin and Ojewale in Olawoyin, Adeleye and Olaniyi (2015), asserted that education remains the most essential element that empowers citizens of any nation to achieve their desired interest in the world of business. The authors further posited that education is a constant means by which individuals are exposed to enable them discern right and left, acceptable and non-acceptable or normal and abnormal.

The essence of any educational programme is to ensure that the products are equipped with relevant knowledge, skills and attitude needed to contribute meaningfully to the economic development of the nation (Ediagbonya, 2003). Olawoyin, Adeleye and Olaniyi (2015), affirmed that for a nation to progress and witness development, she must give the right education that is capable of

developing the youths into sound and responsible citizens as well as fully integrating them into the community.

The Federal Republic of Nigeria (FRN, 2013), stated that one of the aims and objectives of education is to help the child acquire appropriate productive skills, abilities and competencies both mental and physical as equipment to live in and contribute to societal development. In order to achieve the goals and objectives of education in Nigeria, government has geared efforts towards making individuals contribute to the growth of the nation's economy and become self-reliant through well-developed curriculum covering academic and vocational subjects at the secondary school level. At the junior secondary level, business studies is taught as a pre-vocational subject with Book-keeping as an integral part. At the senior secondary school level, the curriculum covers vocational and commercial subjects such as Financial Accounting.

Financial Accounting is therefore defined as the process of identifying, measuring and communicating economic information necessary for informed judgments necessary for decision making in organizations (Maffo, 2013). It is an aspect of Accounting which is a language that communicates economic information to those who have interest in an organization such as managers, shareholders, investors, employees, creditors and the government. According to Ademola (2010), Financial Accounting is an art or process of recording, classifying and analyzing,

summarizing, interpreting, preparing and communicating financial information to its users. Given the relevance of Financial Accounting knowledge and skills to economic and business affairs of Nigeria, its offering at the senior secondary school level is very commendable.

The general objectives of Financial Accounting as stated in the national curriculum for senior secondary schools are to provide: specialised instruction to prepare students for career in book-keeping and accounting field; fundamental instruction to help students assume their economic roles as customers, workers and citizens; background instruction to assist students in preparing for professional careers requiring advanced studies in book-keeping and accounting and; book-keeping and accounting skills for personal use in future with particular emphasis on wise planning of income and expenses (FRN, 2013). These objectives are geared towards making the students to appreciate the functions of Financial Accounting, lay a sound foundation for further study of Financial Accounting at higher level and also to assess the learners' knowledge of basic accounting principles and their application to modern business activities.

Following these objectives of Financial Accounting at the senior secondary school level, Financial Accounting students are therefore expected to be able to demonstrate functional knowledge, concepts and principles of the subject and apply the skills acquired in school in employment. In addition, they should develop

transactional and rational attitudes such as curiosity and precision to manipulate economic activities in a period of recession to solve societal problems from available resources.

Despite the recognition accorded to Financial Accounting, and its benefits in nation building, its teaching in secondary schools in Oyo State appears not to be effective as students consistently achieve poorly in external examinations. For instance, record of students' academic achievement in Financial Accounting in WAEC in the state over a period of 10 years (2006- 2015) shows a totally unsatisfactory state of affairs (See Appendix B, p. 127). In 2006, the number of students that registered the subject was 19,463 out of which only 570 (2.93%) made A grade, 1,576 (8.10%) made C grade, 9,980 (51.28%) made pass grade, 6,920 (35.55%) failed while 417 (2.14%) were absent. A summary of students' academic achievement in the subject 10 years after (in 2015) still shows that the failure rate was very high. Out of 24,541 students that registered for the subject, 9,821 (40%) made A or C grades while 14,720 (60%) made P or F grades or were absent.

Achievement generally means doing what one wants to do within the bounds of the law. Academic achievement is defined as the outcome of a student's learning in a given school subject. Ojikutu (2005) explained that there is no general agreement as how best it is to be tested or which aspects are most important. It is a measure of the extent to which a student, teacher or institution has achieved the set

educational goal or goals. Several psychological and physiological environmental factors such as government, societal, institutional, teacher-related, parental and student-related can be implicated in the poor academic achievement of students in Financial Accounting in Oyo State. These may include negative attitude of government and society towards commercial subjects, lack of relevant instructional material in schools, poor quality teachers and their teaching methods and students' poor study habits. Of all these factors, teachers and their teaching methods appear to have the highest impact on academic achievement of students in Financial Accounting. This is because a good teacher will select and use teaching methods that enhance active participation of students in class activities in Financial Accounting to ensure high academic achievement.

For any subject to be effectively taught, teacher has to select appropriate teaching methods that would appeal to both male and female students, arouse their interest and enable them achieve excellent performance. The use of teaching methods that require students to be more actively involved in the learning process is therefore strongly advocated in secondary schools in Nigeria especially in vocational subjects. Following this, Barth (2006) defined teaching method as a professional technique teachers adopt regularly in instructional exercises to enable them impact relevant knowledge and skills to the learner. Teaching methods refer to the process of transmitting facts, skills, information and knowledge by the teacher,

so as to engage students in meaningful activities for learning and to achieve the objective of the lesson. Therefore, effective teaching of Financial Accounting is needed to adequately equip the students for the world of work or higher education to become Accountants or accounting personnel with skills and abilities to solve societal problems. That is why Barth (2006) stated that the method teacher adopts in the teaching and learning has been relying heavily on the teacher-centred method. This teacher-centered is what this study considers as the conventional teaching method.

Conventional method of teaching is viewed as an oral presentation of information to students without an active involvement or effort on the part of the student. According to Nwafor (2012), conventional teaching method is imposed from teachers and the students are expected to docilely and obediently receive and believe these fixed information. Teachers are the instrument to which this knowledge is communicated and these standards of behaviour are enforced. Despite the advantages of conventional teaching method in teaching large classes and suitable for covering large number of course contents with minimum time interval (Barth, 2006), it fails to stress how teacher structure guided teaching to facilitate students' critical thinking, enhance interactive class sessions, and constructive behavior which could be considered as one of the teaching objectives of modern method of teaching. This method of teaching therefore might not be capable of

producing skills required by students to cope with challenges of rapid economic and technological development. The researcher therefore strongly advocates the use of students' activity-based and inquiry methods in teaching Financial Accounting.

One of the students' activity-based teaching methods is collaborative teaching method (CTM). Johnson and Johnson (2010) and Slavin (2011), affirmed that CTM can produce positive effect on students' academic achievement. Collaborative teaching is an instructional method in which students with different levels of learning ability are paired or arranged in small groups where they work collaboratively together to accomplish a given task or goal. Vygotsky (2008), explained that unlike individual learning, students in a collaborative teaching method learn by asking and answering other's questions as well as monitoring each other's work for better achievement. Collaborative teaching method is where the teacher organizes students into small groups who then work together to assist each other learn some academic content (Slavin, 2011). It is a method in which teachers allow students to study in small groups where each contributes efforts to promote the achievement of all members of the group. Each class of students consists of males and females of high and low performers and when grouping students in collaborative teaching method, thus, there is no gender bias.

Gender is a term which describes behavior and attributes expected of individuals as the basis of being either males or females in a given society (Okonna,

Ushie, & Okworo, 2014). According to Oppong (2013), there are many challenges posed by gender on academic achievement of students where certain subjects and activities are recognized as masculine and others as feminine. Studies on gender differences on academic achievement have mixed results where some report higher achievement in favour of females, other report higher achievement in favour of males. For instance, Epunam (2009) and Adeyegbe (2004) debunked the belief that males perform better than females in Financial Accounting.

Who knows if teaching method could have significant effect on the gender of students in schools pertaining to their achievement? Teacher-centered method allows a great deal of information to be passed to the learner and follows handling of large classes. In spite of this advantage, the teacher-centered method seems not to stimulate students' innovation, inquiry, self discovery and scientific attitudes. It encourages students to memorize facts which are easily forgotten (Ademola, 2010). It has therefore become apparent that the learner-centered method for effective achievement of the objectives of Financial Accounting be introduced. There is, therefore, a need to search for more effective methods which are suitable and efficient for promoting the level of secondary school Financial Accounting performance beyond contemporary limits and to the satisfaction of the current Financial Accounting curriculum requirements. It is with this background that this study on the effect of CTM on students' academic achievement in Financial Accounting in Oyo State would also determine the effect of gender and students' academic ability on teaching methods and academic achievement.

#### **Statement of the Problem**

Financial Accounting is a business subject taught at the senior secondary school level in Nigeria. The objective is to equip the students with knowledge and practical skills to perform middle level accounting tasks in employment or pursue higher education in tertiary institutions and become professional accountants on graduation (FRN, 2013). One of the ways to equip Financial Accounting students with knowledge and practical skills is by employing the appropriate teaching method for teaching that would cater for different level of students' learning abilities after being paired in smaller groups where they can work collaboratively to achieve a given task.

The objectives of teaching Financial Accounting in secondary schools in Oyo State appear unrealized as students' academic achievement in WAEC examinations (Appendix B, p.126) showed that the percentage of students from Oyo State who made P and F grades in Financial Accounting within the period was far greater than the percentage of those who made C grades. Corroborating this report, the Federal Ministry of Education (2013), reported that between 2006 and 2015 only few of students that registered Financial Accounting in West African Examination Council (WAEC) passed at credit level.

Since no teaching method is disadvantaged but based on its usability, it could be said that Financial Accounting needs to be taught with modern teaching method of which guided-discovery teaching method is one of them. To this effect, the researcher is disturbed with the persistent low achievement of students in Financial Accounting in external examination. The low performance of students could be attributed to the way Financial Accounting is handled by teacher which has a significant effect on student's comprehension, critical thinking, assimilation and retention. This study is therefore prompted to investigate the effect of collaborative teaching method (CTM) on academic achievement of secondary school students in Financial Accounting in Oyo State. The problem of the study put as a question is; would the use of CTM in teaching Financial Accounting yield appreciable result on students' academic achievement?

## **Purpose of the Study**

The purpose of this study was to determine the effect of collaborative teaching method (CTM) in academic achievement of secondary school students in Financial Accounting in Oyo State. Specifically, the study determined the:

- 1. Mean academic achievement scores of Financial Accounting students exposed to CTM and those exposed to conventional teaching method.
- 2. Mean academic achievement scores of male and female Financial Accounting students exposed to CTM.

- 3. Mean academic achievement scores of high and low achieving students exposed to CTM in Financial Accounting.
- 4. Interaction effect of teaching methods and gender on students' academic achievement in Financial Accounting.

## **Significance of the Study**

The findings of this study would be of tremendous benefits to Financial Accounting teachers, students, curriculum planners, school administrators and future researchers. The findings of this study would help Financial Accounting teachers realize which of the teaching methods is better. With this realization, they begin to implement the teaching method that could be found to be effective in the teaching of Financial Accounting. If it is CTM they find effective, they would begin to implement best practices in teaching such as grouping high achievers and low achievers to accomplish tasks that would lead to successful outcomes for all learners.

As for Financial Accounting students, they would be able to gain high devise which of the teaching methods facilitates better academic achievement as well as putting into consideration their academic ability when they are being exposed to teaching of Financial Accounting using CTM method. With this knowledge, Financial Accounting students become more responsible and responsive to the teaching learning process.

The findings of this study would assist curriculum planners and administrators in taking appropriate decisions towards the re-assessment of the subject curriculum and encouraging a re-evaluation of Financial Accounting instruction by emphasizing the use of teaching methods that would produce higher achievement. The findings of the study would provide more insight for Financial Accounting curriculum planners in commending suitable in-service training for Financial Accounting teachers to be able to implement recommended teaching strategy appropriate for teaching Financial Accounting.

The findings of the study would also serve as an eye opener to school administrators to effectively promote classroom activities of Financial Accounting teacher to ensure proper application of suitable teaching methods. Such understanding would be useful in the planning of facilities and staff development provisions for training and re-training of teacher in order to ensure that teachers of Financial Accounting teachers use appropriate teaching method. Finally, future researchers would benefit from the findings of this study as they shall form a rich source of literature for their studies.

# **Scope of the Study**

This study was delimited to determining the effect of collaborative teaching method (CTM) on academic achievement of students in Financial Accounting in Oyo State. This study was also delimited to senior secondary school two (SS II)

students in public schools. The content of the curriculum covered cash book, trading account, profits and loss account, balance sheet and bank reconciliation. The researcher's choice of these topics was based on the fact that they are the key concepts in Financial Accounting in the SS II syllabus. The study also covered the effect of CTM on academic achievement of male and female students and high and low academic achievement students in Financial Accounting. Gender, high and low achievers are the moderator variables in this study.

## **Research Questions**

The following research questions guided the study:

- 1. What are the effects of Collaborative Teaching Methods (CTM) and Conventional Method (CM) in students' academic achievement in Financial Accounting?
- 2. What are the effects of CTM in academic achievements of male and female students in Financial Accounting?
- 3. What are the effects of CTM in academic achievements of high and low achieving students in Financial Accounting?

# **Hypotheses**

The following null hypotheses were tested at 0.05 level of significance:

- There is no significant difference between the mean academic achievement scores of Financial Accounting students exposed to Collaborative Teaching Methods (CTM) and those exposed to Conventional Teaching Method.
- 2. There is no significant difference between the mean academic achievement scores of male and female Financial Accounting students.
- 3. There is no significance difference between the mean academic achievement scores of high and low achieving students exposed to CTM in Financial Accounting.
- 4. There is no significant interaction effect of teaching methods and gender in students' academic achievement in Financial Accounting.

#### **CHAPTER TWO**

#### REVIEW OF RELATED LITERATURE

The chapter reviewed the literature related to the study under the following subheadings:

## **Conceptual Framework**

Collaborative Teaching Method

Academic Achievement

Financial Accounting

#### **Theoretical Framework**

Vygotsky's Socio- Cultural Theory

Jean Piaget Theory of Cognitive Development

#### **Theoretical Studies**

History of Collaborative Teaching Method

Collaborative Teaching Method

Benefits of Collaborative Method

Conventional Teaching Method

Importance of Financial Accounting

Effective Teaching of Financial Accounting in Secondary Schools

Academic Achievement of Students in Financial Accounting

Gender Issues in Financial Accounting

## **Empirical Studies**

Collaborative Method of Teaching

Academic Achievement in Financial Accounting

Gender Issues and Academic Achievement in Financial Accounting

### **Summary of Review of Related Literature**

### **Conceptual Frame work**

Major concepts in the title of this study are reviewed in this section as follows:

# **Collaborative Teaching Method**

Collaborative teaching is a method teacher use to group students together to impart learning in a positive way. Collaborative teaching method refers to methodologies and environments in which learners engage in a common task where individual depends on and is accountable to each other. In the collaborative classroom, the lesson would be divided into several segment, and each student who is in one of the several collaborative groups (three to five students in each group), would be assigned to learn one segment of the written material (Azih and Nwosu, 2011). Before giving report of their topic to their collaborative group, students would meet first with other students who would be assigned the same segment (one from each collaborative group) in a temporary 'expert' group. Together, the experts

research their segment, discuss and clear up questions with one another. Finally, the collaborative groups would acts as a tutor to the group on their special topic.

Aronson (2012), summed up the advantages of collaborative method that students learn the material faster and perform significantly better in objectives examination than a control condition of students learning the same material under a controlled condition in classes conducted with lecture method. More importantly, however, as Aronson emphasized, the collaborative structure encourages listening, engagement and empathy by giving each member of the group an essential part to play in academic activity. Group members must work together as a team to accomplish a common goals; each person would depends on the other. Group goal and individual goal would complement and bolder each other.

The results of collaborative studies were heterogeneous and somewhat less enthusiastic. Chinanso, Kurumeh and Obida (2010), showed that students in the collaborative classroom would score significantly higher in academic outcomes, on self-esteem measures, and in involvement in classroom activities. Yet, there are also studies that show no advantage for the collaborative procedure.

Emmanuel, Musa and Zipporah (2013), opined that participation in the collaborative classes did not have any positive influence on students. Collaborative method failed to influence students' perception of classroom climate, attitude

towards peers or school, locus of control, school attendance, or reading and mathematics achievement. A positive effect was found on academic self-esteem, but only for female participants. However, the collaborative method does increases students' active involvement in the classroom. The collaborative classroom is a participatory learning technique with a three- decade track record of successfully reducing racial conflict and increasing positive educational outcomes. Just as in a collaborative puzzle, each piece-each student part- is essential for the completion and full understanding of the final product (Aronson, 2012). Collaborative teaching method could therefore be operationalized as a method of teaching where a small group of students work together on a particular task of a subject in order to achieve the stated objectives.

#### **Academic Achievement**

Academic achievement or (academic) performance is defined as the outcome of the extent to which a student, teacher or institution has achieved their educational goals. Academic achievement is commonly measured by examinations or continuous assessment but there is no general agreement on how it is best tested or which aspects are most important (Emaikwu, 2012).

Academic achievement of student is defined as learning outcomes of the student in term of skills, knowledge and ideas necessary for employment in related occupation (Epunam, 2009). According to Epunam, academic achievement

connotes performance in a school subject as symbolized by scores or marks in an achievement test. Academic achievement is attitudinal exhibition an individual does or achieves in class, workshop and laboratory at school, college or university (Alaba, 2010). Human achievement is learning outcomes because, learning makes human achievement possible. Academic achievement is a permanent change of the conceptual attainment of knowledge, skills and attitude of learner on the completion of a specified course of study or module. The classroom teacher is therefore faced with the challenges of teaching to attain effective conceptual change, high academic and skill achievement. Learning occupies a very important place in one's life. It is the basis of human survival as well as the development and progress of society. Academic achievement is defined as the outcome of the extent to which a student, teacher or institution has achieved their educational goal. However, in the context of this study, academic achievement is the outcome of student's effort or achievement in a specify test or examination. Academic achievements are commonly measured by examinations or continuous assessment but there is no general agreement on how it has been tested or which aspects are most important (Epunam, 2009)

The implication of all these for the classroom teachers is that teachers 2especially in public secondary schools should develop and employ learning approaches which should encourage learners to participate actively in the learning

processes. Academic Achievement is therefore the result or outcome of a test or examination conducted after learning processes have been acquired to measure learner's ability in the related subject areas.

### **Financial Accounting**

Financial Accounting is the systematic recording, classifying, selected, measure, communication and interpreting financial data of an organization to enable users make reasonable decision. Financial Accounting is often said to be the language of business. It is used in the business world to describe the transactions entered into by all kinds of organizations. Financial Accounting terms and ideas are therefore used by people associated with business whether they are managers, owners, investors, bankers, lawyers, or accountants (Omuya, 2009). Financial Accounting may be defined as a process concerned with the recording, classifying, creating, summarizing and communicating of financial information to interested parties and interpreting to help in making specific business decisions. It also includes the design of the financial statements, development of forecast and their analysis and interpretation of accounting information to assist decision makers in making informed decisions (Longe, 2009).

Maffo (2013), defined Financial Accounting as the process of identifying, measuring and communicating economic information to permit informed judgments and make decisions by the users of the information. Accounting is concerned with

providing financial and non-financial information that would assists managers or decision makers to make good decisions or informed judgments. Accounting is a language that communicates economic information to people who have an interest in an organization such as managers, shareholders and general investor, employees, creditor and the government. According to Ademola (2010), Financial Accounting can be defined as an art or process of recording, classifying and analyzing, summarizing, interpreting, preparing and communicating financial information to its users.

Idowu (2015) defined Financial Accounting as a systematic analysis of financial records, preparation of accounts and financial statements for the users of accounting information. The subject is specifically designed to prepare individuals to acquire practical skills, basic attitude and scientific knowledge required by craftsmen and technicians at sub-professional level. From the forgoing, Financial Accounting could be viewed as a subject where the knowledge of keeping proper records, summarizing transactions, analyzing and interpreting the records of business transactions of an enterprise is acquired.

### **Theoretical Framework**

Collaborative teaching is related to the theories of two authors; namely Vygotsky and Jean Piaget.

## **Vygotsky's Socio-Cultural Theory**

Lev Semyonovich Vygotsky (1978), was a Soviet psychologist and propunder of a theory of human cultural and bio-social development commonly referred to as socio-cultural theory. Vygotsky theory is built on four basic principles which include:

- i. Learning and development is a social, collaborative activity;
- ii. The zone of proximal development (ZPD) can serves as a guide for curricular and lesson planning;
- iii. School learning should occur in a meaningful context;
- iv. Out of school experience should relate to the child school experience.
- v. School learning should occur in a meaningful context.

According to Vygotsky (1978), knowledge is socially constructed and learning develops as a result of dialogical and dialectical interactions between teachers (facilitators) and students and between students. Vygotsky belief is that instead of assessing students by means of standG100ardized tests, they should be assess by comparing what students are capable of doing individually with what they have the ability to do with the help of an individual who has previously mastered the concepts at hand. Vygotsky affirmed that students helping students and social interaction in general would provide growth for students. This means that by given students opportunity to talk and practice with others, they are given frames for

thinking on their own and through other people they become themselves. Vygotsky's main work was in developmental psychology, and proposed a theory of the development of higher cognitive functions in children that saw reasoning as emerging through practical activity in a social environment. The author also posited a concept of the zone of proximal development (ZPD), often understood to refer to the way in which the acquisition of new knowledge is dependent on previous learning, as well as the availability of instruction. This suggests that social interaction leads to continuous step-by-step changes in children's thought and behavior that can vary greatly from culture to culture.

Basically, Vygotsky's theory suggests that development depends on interaction with people and the tools that the culture provides to help them to form their own view of the world. According to Vygotsky (1978), the concept of ZPD must result in re-evaluation of the role of imitation. The author refers to imitation of the part played by the significant people in the learners' lives and people enhance their learning by selecting and shaping the learning experiences presented to them. Through imitation, children are capable of doing much more in a collective activity or under the guidance of an older person. Within the context of ZPD, Vygotsky proposed the use of scaffolding in teaching. According to Vygotsky, scaffolding refers to a temporary structure on the outside of a building, made of wooding plank and metal poles, used by workmen while building, preparing, or cleaning the

building. Vygotsky was of the view that adults are an important source of cognitive development. Adults transmit their cultural tools of intellectual adaptation which inexperienced capture and internalized. Vygotsky theory is related to the present study as collaborative teaching method will enhance better achievement of students in Financial Accounting. Since the teacher who is experienced would act as a facilitator to guide the children in order to achieve better knowledge and skills. This would be done by the teacher designing the lesson in a way to help students in collaborative relationship between questions posed and the materials displayed before them. The researcher is of the view that this theory provides the basis for social interaction among the students which in turn could lead to better assimilation, retention and improved performance in the subject area. Vygotsky theory therefore has a particular relevance for collaborative teaching method and provides necessary scaffolding for students learning, interaction, and the construction of knowledge to effectively take place.

Based on the view of Vygotsky theory, there is the need to study the cognitive development theory of a child as propounded by Jean Piaget who is another contributor to the theory on which collaborative teaching method is based.

# Jean Piaget Theory of Cognitive Development

Jean Piaget (1973) developed a systematic study of cognitive development in children. The author is another contributor to the theory on which collaborative

teaching method is based. Through his work, Piaget showed that children think in considerably different ways than adults do. This did not mean that children think at less intelligent degree, or at a slower pace, they just thought differently when compared to adults. Piaget work showed that children are born with basic genetically inherited mental structure that evolves and is the foundation for all subsequent learning and knowledge. Piaget saw cognitive development as a progressive reorganization of mental processes resulting from maturation and experience. Piaget opines that children would construct an understating of the world around them, and experience discrepancies between what they already know and what they discover in their environment. Piaget held that conventional, even with demonstration, was not the most effective teaching method unless students were also able to discover their own ways to learn. The cognitive development and mental processes of students should be studied and understood by teachers (facilitators). Piaget felt there should be more freedom and initiative built into teacher training which would give instructors the opportunity to focus more on students interaction and learning rather than on teaching (Edu, Ayang & Idiaka 2012).

This theory therefore is related to the present study based on the fact that the students teaching themselves would bring about development in their cognition and

gaining experiences among themselves through exchange of ideas in the course of teaching and learning.

#### **Theoretical Studies**

Theoretical studies that are related to this study are reviewed in this section as follows:

### **Methods of Teaching in Secondary Schools**

Teaching is a planned process which requires the methodical application of techniques based on the result of experimental analysis of behaviour (Mckeachie, 2009). Teaching is perceived as a range of activities aimed at assisting the learner acquire knowledge, attitude, values, habits and skills (Mckeachie, 2009). Onabanjo (2010), defined teaching as a deliberate effort by a mature or experienced person to impart information, knowledge and skills to an immature or less experienced person through a process that is morally and pedagogically acceptable. Teaching methods that are commonly used by the teachers in secondary schools are also refer to as conventional or lecture methods of teaching (Bilesami, 2010). In the conventional method, teacher is being considered as the custodian of knowledge and dishes it out in form of ideas, opinions and information. The method is characterized by teacher dominance with little or no students' participation. This method of teaching would turn teacher active or as depositor while students remain passive or as receptor of information

Conventional teaching approach is an instructional method whereby teacher disseminates information to learners by direct verbal discourse (Gbamaja, 2009). Teaching methods used in teaching according to Gbamaja includes conventional demonstration and discussion, among others. Some of these methods like lecture and demonstration are teacher-centered and do not stimulate creativity on the part of the learners. Okoro (2009) submitted that in conventional method, the teacher supplies information to the students. In relation to this fact, Okoro advises that teachers should resist the temptation of giving lengthy lectures since such lectures are usually dull and are incapable of stimulating and sustaining the interest of students. Awotua-Efebo in Eze (2014), explained that lecture method is a teaching method whereby the teacher transmits information (subject matter, content) verbally to the students. Sometimes, it involves writing on the chalkboard or using instructional materials. The students listen and take notes as well as ask questions occasionally for clarification.

Ukoha and Eneogwe in Eze (2014), explained that lecture teaching method involves a formal discussion or exposition on a subject matter to attain stated instructional objectives whereby the teacher does the talking and students listen and occasionally take notes. The authors further asserted that conventional method encourages self-study and research and is convenient for teaching large number of students at the same time. It is useful in covering considerable amount of lesson

contents in a very short time. The learners, according to Ukoha and Eneogwe in Eze develop communication skills such as note taking, listening and summary writing. However, the authors agreed that the teacher is an embodiment of knowledge who dishes out knowledge to students who are supposedly ignorant and blank. In Emaikwu (2012), view students are seen as empty vessels into which knowledge is to be poured where the teacher overrides, threatens and frightens students through his expertise, superiority, intolerance of errors and inability to accommodate different opinions.

Conventional method is concerned with the teacher being the controller of the learning environment. Power and responsibility are held by the teacher who plays the role of instructor and decision maker in the teaching and learning process (Omotayo, 2014). In the conventional method, according to Omotayo, it is the teacher that causes learning to occur since students are regarded as 'knowledge hole' that need to be filled with information. Aguele (2012), agreed with Novak that the learner's mind is likened to a blank slate that the teacher has the compelling duty to fill up. Aguele further stated that the teacher does this filling by telling while the learner absorbs by listening passively. Many post primary school teachers use the conventional method which involves the transmission of knowledge by the teacher to passive learners thereby encouraging rote learning.

The use of conventional method could be useful in teaching fundamental operations in financial accounting. Ogbuanya (2010), contended that with this method, the teacher can explain the steps of an operation or of an experience while performing them. Iwuchukwu, (2011), opined that good teaching provides for a two-way communication between the teacher and the students and for this reason, demonstration method is effective in teaching financial accounting subject. According to Ogbuanya, demonstration method makes it possible to learn how to perform manipulative operations by reading, seeing or practicing how to do them. Students can learn better, faster and more effectively when they are shown how a job done in real life situations. Brown and Collins and Doguid (2009), concluded that learning is not a spectator sports. The authors emphasized that students do not learn much by sitting in class listening to teachers, memorizing pre-packaged assignments and spitting out answers. Students must talk about what they are learning, relate it to their past experiences and apply it to their daily lives. The authors believes that conventional teaching method could be effectively used when introducing a new topic, presenting importance facts or materials which are not easily available to students and when summarizing important points after lesson delivery (Curzon, 2001). Yusuf and Afolabi (2010), suggested that teachers should use methods and techniques which cater for multiple learning styles to help students achieving information and strengthen understanding.

When deciding on a teaching method, the teacher needs to be flexible and willing to adjust the teaching style according to the students' background, topic, availability of materials or equipment, period time for teaching a particular topic (Mckeachie, 2009). The use of conventional approach in teaching subjects like Financial Accounting may not offer students high academic achievement. Iwuchukwu (2011), worried about this trend and its consequences on the achievement of students in Financial Accounting call for a teaching method associated with higher students' academic achievement. This is very important as education continues to be the driving force to a sound economy and prosperous society.

## **Teaching of Financial Accounting in Nigerian Secondary Schools**

Research in Financial Accounting has shown that the courses seem mainly to be taught with conventional method and copying of lecture notes (Omotayo, 2014). Though psychomotor skills are stressed in Financial Accounting subjects, however, there should be a blend of both cognitive and affective skills in teaching. Supporting this statement, Yusuf and Afolabi (2010), opined that any method that should be effective in the teaching of Financial Accounting subjects has to appeal to the three domains of cognitive, affective and psychomotor simultaneously. Since most Financial Accounting subjects are geared towards preparing students for

chosen occupation, students must be active in their thinking if their understanding is to be secured.

Successful teaching of Financial Accounting requires that students should make sense of what they are taught and are supposed to learn. Dominance of teachers in the lecture/conventional approaches does not allow students to engage in critical thinking. Consequently, Mckeachie (2009), asserted that in conventional teaching approach, teachers do not assess students understanding nor do they direct teaching towards student level of understanding. This situation could lead to rote learning with little concept understanding. Mckeachie contended that students were unable to construct meaning from the teachers' statements and therefore did not develop problem solving skills. According to Mckeachie the cognitive demands in commercial tasks are reduced to a minimum in conventional method of teaching because the teacher is the sole custodian of knowledge.

Cortazzi and Jin (2013), affirmed that students-centered teaching approach which includes collaborative, project, simulation games, field trips and problems solving are process oriented, problem based, contextual, interdisciplinary and metacognitive in nature. Eze (2013) contended that in students-centered teaching approach, teachers allow students to construct knowledge by themselves through social interaction in their environment. The students achieve deeper learning that is required to develop a higher level of achievement. Umar, Abdulllahi and Hassan

(2015), maintained that student-centered teaching method provide students with the opportunities to integrate and apply knowledge and skills acquired in the subject in responding or reacting to simulated scenarios. Thus students learn how to solve problems rather than seeking model answers. Azih and Nwosu (2011); Shannon (2013); Ginn (2012); Mayer (2011) and Eze (2013), all contended that innovations in teaching methods include differential, expository, team teaching and discovery which involves explanation, demonstration and practice. According to Eze and Mayer, the dynamism of the society, business activities and realities of globalization call for adaptability to innovate teaching methods.

According to Uzokwe (2010), business activities are perceived as means for developing student business thinking and understanding. However, lecture method fails to structure business activities in such a way as to engage students in meaningful thinking. To develop student business thinking and understanding of commercial concepts, their learning should take place through the use of innovative teaching methods. Supporting this view, Barth (2006), affirmed that the use of various innovative teaching methods by a teacher will bring about knowledge acquisition, assimilation, achievement, recalling and application by students. Barth contends that if teaching methods are correctly selected, it will develop logical thinking in students as well as their abilities for analysis, synthesis, induction and deduction. Barth further stated that correct methodology enable students to find the

connection between cause and affects, how to apply theory into practice and how to improve their activities in the commercial world.

Oguntuase (2010), postulated that the teaching of Financial Accounting subject in secondary schools supposed to be dynamic, practical-oriented and activity based through application of appropriate teaching method such as collaborative method. The teacher should be conversant with the use of appropriate teaching methods in order to make teaching and learning effective. Thus, an effective teacher is one who is able to display the skills and behavior expected of him. To this end, Ndinechi (2010), advocated that teaching is effective to the extent that the teacher acts in a way that is favourable to the development of basic skills, understanding, work habits, desirable attitudes and value judgment which reveal personal adjustment of students. Mayer (2011), asserted that collaborative teaching method is more effective in helping students to learn and understand concepts.

According to Glasserfield (2011), collaborative teaching encourages students to learn on their own through actions and experiences. In support to this view, Ogbuanya (2010), affirmed that the teachers' role is to ensure that learning activities arouse children's curiosity, minimize the risk of failure and are relevant to students' life. These postulations as expressed in literature are useful in education but applying them in the classroom is yet to be determined academic achievement of Financial Accounting students in secondary schools.

## **Importance of Financial Accounting**

Financial accounting is importance because it provides an organization's stakeholders with business statements, allowing them to know if the organization is making or losing money. This information is essential in determining if a company is able to maintain profitability, according to accounting careers. Accounting is the money that comes in and the money that goes out. The accounting department typically monitors this closely by recording transactions, analyzing transactions patterns and dealing with things like payroll and taxes. Overall, the accounting department can determine the health and efficiency of a business, and increase profitability just by studying this information.

Accounting Coach describes financial accounting as a specialized branch of accounting responsible for tracking an organization's financial transactions. This includes recording, summarizing and presenting financial reports on a regular basis and provide to owners, stockholders and lenders. These reports include substantive information that allows recipients to assess the value of the company. In the United States publicly traded corporations are required to follows the requirements established by the security and Exchange Commission in presenting their reports. The security and Exchange Commission, a federal agency, designates that the independent Financial Accounting Standards Board determines the rules of

accounting, known as the generally accepted accounting principles, or GAAP, according.

Financial accounting is communication of information about a business or other type of organization (such as assess its financial health and prospects. Probably no single word is more relevant to Financial Accounting than "information". Whether it is gathering financial information about a specific organization, putting that information into a structure designed to enhance communication, or working to understand the information being conveyed, Financial Accounting is intertwined with information (Brittani, 2014).

In today's world, information is a king. Financial accounting provides the rules and structure for the conveyance of financial information about businesses (and other organizations). At any point in time, some businesses are poised to prosper while others teeter on the verge of failure. Many people are seriously interested in evaluating the degree of success achieved by a particulars organization as well as its prospects for the future and give them adequate information. Financial Accounting provides data that these individuals need and want.

Many possible benefits can be gained from acquiring a strong knowledge of Financial Accounting and the means by which information is communicated about an organization. In this book, justification for the serious study that is required to master the subject matter is simple and straight forward: Obtaining a working

knowledge of Financial Accounting and its underlying principles enables a person to understand the information so that better decisions can be made.

Around the world, millions of individuals make critical judgments each day about the businesses and other organizations they encounter. Developing the ability to analyze financial information and then using that knowledge to arrive at sound decision can be critically important. Whether an organization is as gigantic as Wal-Mart or as tiny as a local convenience store, a person could have many, varied reasons for making an assessment. As just a single example, a recent college graduate looking at full time employment opportunities might want to determine the probability that company 'A' would have brighter economic future than company 'B'.

Although such decisions can never be correct 100 percent of the time, knowledge of Financial Accounting and the information being communicated greatly increases the like-hood of success.

Generally, the important of financial accounting are:

- Preparation and communication of accounting information to the users.
- Assisting management with the aid of relevant information to curb or eliminate wastage.
- Setting up and running an efficient system of internal and accounting controls.

- Investigation of fraud and treasury management.
- It is used in ascertaining the propriety of transaction and its conformity with established standard and acts.
- It gives room for information needed for crucial and relevant decision making.
- It makes future prediction possible.
- It reveals the irregularities and provides room for accountability.
- Determination of profitability level, liquidity level, and solvency level of an organization possible with the help of accounting
- It serves as a basis for appraisal management performances.
- It is used as a key service of indicators.
- It provides general statistical information.

The role of this study will provides students an opportunity to decrease poor behavior, enhance better achievement in the subjects, increase productivity, self-discipline, engagement, and achievement (Brittani, 2014).

# **Classifications of Collaborative Teaching Method**

Slavin (2011), classified collaborative teaching method into the following:

Participatory Learning Strategies (PLS), Conventional Learning Strategies, (CLS), Jigsaw Grouping (JG), Teams-Game-Tournament (TGT), Group Investigation (GI), Think-Pair-Share (TPS), Learning Together (LT), Student

Teams Achievement Division (STAD), and Team Accelerated Instruction (TAI), Student Team Learning (STL), Student Team Achievement Divisions (STAD), Team Assisted Individualization (TAI), Cooperative Integrated Reading and Composition (CIRC) among others.

How collaborative teaching method works: The students in a Financial Accounting class, for example, would be divided into small groups of five or six students each. If their task is to learn about cashbook of an enterprise or firm, in one collaborative group, a student would be responsible for researching the meaning of cashbook and how it has been used in the business transaction. Another student would be assigned to work on trading accounts. Also, a student in the group would finds out about the reasons for preparing profit and loss account while another student would finds out about the importance of balance sheet to the organizations. Other students would assign to work on bank reconciliation statement and what bring about discrepancies between bank statement and cashbook of the customers.

Eventually, each student would come back to her or his collaborative group and present a well-organized report to the group. The situation was specifically structured so that the only access any member has to the other five assignments was by listening closely to the report of the person reciting. Thus, if one student has something against another, he or she would not possibility do well in the test that

follows. The students doing the research do not take it back to their collaborative group immediately. Instead, they meet first with students with the identical assignment (one from each collaborative group). For example, students assigned to the cashbook would meet as a team of specialists, gathering information, becoming experts on their topic, and rehearsing their presentations. We call this the "expert" group. It is particularly useful for students who might have initial difficulty learning or organizing their part of the assignment, for it allows them to hear and rehearse with other "experts" (Aronson, 2012)

One each presenter was up to speed, the collaborative groups reconvened in their initial heterogeneous configuration. "The cashbook expert in each group taught the other group members about the uses of cashbook to organization". Each student in each group would educate the whole group about her or his specialty. Students are then tested on what they have learned about cashbook, trading account, profit and loss account, balance sheet and bank reconciliation statement from their fellow group members.

What are the benefits accruable from the collaborative classroom? Firstly, it is a remarkably an efficient way of learning the material. More importantly, the collaborative process encourages listening, engagement, and empathy by giving each member of the group an essential part to play in the academic activity. Group members must work together as a team to accomplish a common goal; each person

would depend on all the others. No students can succeed completely unless everyone works well together as a team. This "collaborative by design" facilitates interaction among all students in the class would lead them to value each other as contributors to their common task.

### **Academic Benefits of Collaborative Teaching Method**

Collaborative can be benefits to teachers, students and students being taught using collaborative method. Studies have been done to support the claim that many students may feel more at ease, and thus can concentrate better on the subject matter, with a collaborative rather than a professional teacher or consultant (Gagne and Briggs (2009). Other studies have found that collaborative method help students to increase their own understanding of the subject matter they collaborate students in/on, which boosts confidence and can carry over to their desire to learn other subjects. So we can see that collaborative is mutually beneficial; both the student and teacher stand to gain something. Collaborative is also beneficial to teachers who may not have the time to spend with each of their students one-on-one (Dabkowski, 2000).

According to Goodland and Beverley (2009), there are four main benefits for the students when they seek out collaborative help: they receive individualized instruction; they receive more teaching; they (may) respond better to their groups

than to their teachers; and lastly, they can obtain companionship from the students that taught with collaborative method. The first case, in which they receive individual instruction, gives students a fairly obvious advantage. This benefit is rooted in behaviorists theory, which itself is based on an assertion that learning will be effective if every correct response to a question by a student is rewarded, the reward working as an incentive for the student to take another step in learning (Goodlad & Berverly (2009). Also, giving each learner his or her own personal teacher can spark dialogue between student and teacher, and the student may ask the teacher questions he or she wouldn't dare to ask in class, or spend time on things that could be crucial to a student's understanding of the subject matter. Spending time working with just one person may discount outside perspectives, but if the teacher is familiar enough with the subject matter, the one-on-one experience can help a student immensely, and the student can learn in low pressure situation. The second case, in which students in group receive more teaching, also gives students being taught a pretty obvious advantage. Working with a teacher is usually done outside of normal class time, so spending more on their work with someone that is familiar with what they are doing outside of class obviously means that the students get more teaching time.

Collaborative method sessions give students the chance to talk through problems with a qualified person, whereas students may not get the chance to do

taking up nor demanding the instructor's time. Also, interaction with a group students nearly the same can be a big help. As Goodlad and Berverly (2009) put it, 'A student only a year or two ahead can readily show a fellow student the way through a problem, indeed, often re-formulating the problem with a student at a similar of the course can be sufficient to promote learning'.

The third case, in which students potentially respond better to their groups than to their teachers, is probably one of the most important reasons for using collaborative teaching method. Often, student especially rebellious teenagers will shun the advice of someone else they perceive as an authority figure. One way of reaching children like this is through using someone only a year or two older who shares similar cultural tastes, but has also made it a point to acquire the knowledge and skills that formal schooling offers. It is here that collaborative group can make the apathetic, bored or unruly student realize that education is truly an important part of their life and something that shouldn't be ignored in their youth (Goodlad & Berverly, 2009).

A study conducted by two psychologists, Gerber and Kauffman (2012), founded that groups are more sensitive than adult teachers to picking up on non-verbal cues students being taught may give to reveal that may not understand what a

teacher is trying to communicate to them. So, a collaborative group may be able to more readily perceive difficulties a student being taught may be having, and can then work to clear things up. While an adult teacher can be highly effective and one should not ever discount turning to a professional, a professional may gloss over problems he or she thinks the student being taught already understands (Gerber & Kauffman, 2012).

The final case, in which students being taught can receive companionship from collaborative groups, is a pretty matter-of-fact psychological rationalization. As Goodlad and Berverly (2009) Says, "Just as a child feels more secure in the presence of an older person is an intellectual one". Following this logic, Gestalt theory- which affirms that learning occurs when the learner can locate an item in an intellectual structure or field- says that "learning would be improved if the structure or field into which individual ideas and experiences must be placed, is simply, quickly and painlessly communicated" (Goodlad & Berverly, 2009). Collaborating group, by its nature, does just this; it allows a student having trouble with a particular subject to work with someone who has a breadth of knowledge of the needs to be done for him or her to become a full-fledged part of the academic group or community he or she wants to be involved in, and to improve the quality of his her work.

Utly (2011), also identified four benefits of collaborative method as enhancing performance on tests (both standardized and curriculum-based), including students with Individualized Education Programme (IEPs) in learning in the general education classroom, improving acceptance of students with different needs and relationships between all students, and improving student discipline. Enhancing performance on tests, especially standardized state examinations, is a rationale for using collaborating that would highly appeal to administrators in schools, improvement on curriculum-based tests, which administrators would also be pleased with, is a reason for teachers to implement collaborative in their Including students with IEPs in the general education classroom classrooms. generates less need for special education and resource teachers. This may not appear to be a benefit to a general educator, but again, administrators will be impressed with another way to increase funding by cutting positions and having general education teachers accommodate all learners.

A benefit that is most obvious in combining all students is the acceptance of those students with Individualized Education Programme (IEPs). Though it may be more difficult and taxing on the teacher to accommodate several types of learning styles and IEPs in one classroom, inclusion of special needs students allows for acceptance of students with disabilities by conventional classmates. Inclusion classroom break this divide and support the full acceptance of students who were

once viewed as "different" by students of average or above learning levels. Besides, a most appealing benefit for teachers is an improvement in classroom behaviors among students involved in collaborative method. Classroom management plays a large role in the productivity, engagement, and achievement of students. Collaborative method provides an opportunity to decrease poor behavior, which can increase productivity, engagement, and achievement.

### **Social- Emotional Benefits of Collaborative Teaching Method**

The skills expected of all employees to possess which employers are seeks are "Communication skills, interpersonal skills and initiative". Almost every employer likes to enjoy these skills in the employees such as:

- Ability to exercise leadership- communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies.
- Ability to work with diversity-works well with men and women from diverse background.
- Self-Management-assesses self accurately, sets personal goals, monitors progress, and-exhibits self-control.
- Sociability- demonstrates understanding, friendliness, adaptability, empathy.
- Ability to participate as member of a team- contributes to group effort.

Knowing content academic is not enough to make today's secondary school graduate competitive in the workplace, they must be taught and have the opportunity to practice the social and personal competencies necessary to survive in the work place. Compared to other forms to instruction collaborative teaching helps students become better communicators and listeners, collaborative members of a team are effective leaders (Waganjo, Ngesa, Cheplogoi & Wambugu, 2014). Using collaborative teaching in the college setting helps break the stereotype that students working together are "cheating". Instead, it enables students with the mindset that one must exercise their collaborative skills and work with others to achieve a 29 journal of business administration and education common goal. In addition to promoting social skills, collaborative teaching also enhances personal competencies of self-reflection and accurate self-assessment. By working closely with others students, learners can evaluate their own strengths and weaknesses, utilizing the diversity of the group to accomplish their mutual goal. By considering how well the group worked together, the effectiveness of social skills used as well as the creation of goals for further growth, collaborative teaching encourages students to become reflective practional and strive for continuous improvement.

## **History and Benefits of Collaborative Teaching Method**

The origin of collaborative as a teaching methodology can be traced back to ancient civilizations (Ranee, 2012). However, it was replaced by other learning

philosophies both in the West and in the colonized East. Collaborative teaching was granted a new lease of life in the second half of the 20<sup>th</sup> century when research showed that students learned faster and retained more when they became partners in the process of teaching and learning instead of remaining mere receivers of knowledge from their educators.

The contemporary concept of collaborative teaching began to interest educators in the Wes5t after theories of personality development, group dynamics and social cognitive mechanisms began a fresh thought process into learning mechanisms and classroom techniques. Though there is no one point of origin that can find many related ideas that have helped the formation of this teaching tool. Dewey's also contributed to the social nature of learning and advocated of teaching through discussion and through hands-on problem solving; Elwin's social interdependence concepts and competition can be seen as early seeds of the collaborative teaching process. Alpert described interdependence among members as he studied Group Dynamics and social psychology and wrote about the reasons behind the success and failure of groups. Piaget talked about intellectual development as something that was fostered by social interactions. If you disagree with me about something, it causes disequilibrium in my ideas, thus expanding and enhancing experience and comprehension of my world (Ranee, 2012).

Collaborative teaching is heavily rooted in Vygotsky's views that there exists an internet social nature of learning which is shown through the author zone of proximal development. Collaborative teaching can include collaborative writing, group projects, joint problem solving, debates, study teams, and other activities. Vygotsky supported the idea of learning as a social process. According to his social cultural theory, we learn first from our interactions on the social level and then carry that learning to our individual selves. Loosely speaking, these thought processes can be bundle under the theory of constructivism, which serves as the foundation of the structure we call collaborative learning. At the core of constructivism is the idea that we learn from our own experiences; that learning is active; that we make meaning of the world around us from what we see, feel, hear, smell etc. and by asking questions, exploring new ideas and evaluating our existing knowledge. Every time we have a new experience, we try and fit it into what we already know. The new experience can either add to our knowledge of the world as we already known it or it can modify our perspective and give us a fresh belief.

According to the constructivist, we are not passive absorbers of knowledge given to us by others. We are on the contrary, active contributors to the learning process. This learning process is affected by the context of experiences from which it began. Thus, learning is a social process, enhanced by our interpersonal relations and encounters (Ranee, 2012).

Johnson and Johnson (2010) and Slavin (2011), have extensively published and reviewed the literature on collaborative teaching method. They identify a variety of outcomes of collaborative teaching. Achievement increases for all ability levels (high, medium, low); higher-level thinking processes can result; a deeper level of understanding is possible; critical thinking is promoted; more positive peer relationships result; studies exhibit better social skills and provide more social support for their peers; and a higher level of self- esteem can result (Brandt, 2009). Brandt also pointed out that teachers can teach their students how to be part of a productive group and manage conflict, and teachers themselves can learn those social skills and use them with their colleagues. Johnson and Johnson (2009) defined the basic elements of collaborative teaching as: positive interdependence, face-to-face promotive interaction, individual accountability, interpersonal and small group skills, and group processing. Individual accountability is the key to insuring that all group members are in fact strengthened in learning collaboratively. It seems from highly structured, collaborative learning activities which ensure that every student participates equitably and meets the learning objectives. Johnson, Johnson and Stanne (2006), pointed out that the following learning outcomes could be probably promoted by collaborative learning:

- Greater achievement motivation and intrinsic motivation to learn.
- More frequent higher-level reasoning, deeper-level understanding and

promote critical thinking.

- More positive attitudes toward professors.
- More positive, accepting and supportive relationships with regardless of ethnic, sex, class or handicap differences.
- More positive self-esteem based on basic self-acceptance.
- Greater social competencies.
- Greater ability to view situations from other perspectives among others.

Johnson and Johnson (2009), integrated collaborative learning with competitive and individualistic learning by providing guidelines for managing critical issues, assessing competencies and involvement, and resolving conflict. They clearly defined each type of lear5ning, pointed out the advantages and disadvantages of each. Their book is helpful for preservice and in-service teachers who are interested in collaborative teaching methods. More-so, the authors opines that the use of collaborative teaching methods is to promote a culturally plural society within school.

Collaborative learning promotes greater efforts to achieve, more positive relationship, and greater psychological health than do competitive and individualistic learning. These outcomes indicate that when collaborative learning is used the majority of the school day, diversity among students can be a potential source of creativity and productivity.

Johnson and Johnson (2009), also pointed out that the use of active learning methods through collaborative in the classroom. They showed how teachers in secondary schools could facilitate students in actively creating their knowledge rather than passively listening to the teachers. Their monograph is about "structuring learning situations collaboratively at the secondary level so that students work together to achieve shared goals". The concept of collaborative learning was also introduced by Slavin (2011), who offered a practical, down-toearth approach to collaborative learning and provides practice methods for Teams-Achievement Divisions (STAD) which involves competition among groups. In this method, students are grouped heterogeneously by ability, gender, race and ethnicity. They learn materials in teams and take quizzes as individuals. Individual scores contribute to a group score. Slavin (2011), agreed this method appropriate for a variety of subjects.

Utulu (2007), posited to determine whether the relationship between peer orientation and achievement remained in research methodology courses in which collaborative learning groups were formed to undertake major course requirements. Utulu explained that graduate students who preferred to learn in collaborative learning groups tend to obtain lower levels of achievement in research methodology courses in which all assignments are undertaken and graded individually than their counterparts who have more individualistic orientation. The author also found that

peer orientation explained as much as 27.4 percent of the variance in achievement among graduate students. In another study, Gerber and Kauffman (2012), provided ideas and resources that could be used by teachers who want to improve their classroom and promote community building. They demonstrated how classroom teachers could use collaborative teaching methods for lesson planning and class management. The studies in their book were based on experience and in-depth research.

In a collaborative learning classroom, students were placed in small groups and work together under the teacher's guidance to attain group goals that could not be obtained by working alone or competitively. In such a classroom environment, students discussed, helped each other learnt and encouraged personal achievements among other members in the group. Thus, the way in which lessons are organized can influence students' interactions with others, knowledge, and attitudes (Ranee, 2012, Johnson & Johnson, 2010). Collaborative learning has the advantage of using this method in different subjects and levels, starting from elementary school to university. However, this kind of pedagogical approach requires very experienced and well-trained teachers who know how and when to assign learning objectives to students and how to monitor each learner within each small group.

In addition, the collaborative learning approach makes subjects more interesting and promotes effective learning. Also, it improves intergroup relations,

self-esteem, attitude toward class and the advantage of working in a team (Johnson & Johnson, 2010; Ranee, 2012). As the result of some studies, university students demonstrate greater academic achievement over a long term through the use of collaborative learning than through other traditional teaching methods such as lecture method. The major advantage of collaborative teaching is that it refers to small group instruction that comprises five elements: clear, positive interdependence among students; group self-evaluation; interpersonal behaviours that promote each member's learning; individual accountability; and frequent use of small group social skills.

## **Academic Achievement of Students in Financial Accounting**

Achievement is that level of accomplishment which depends on value judgment, opinions and standards. Achievement, according to Effandi, Titi, and Zulkarnain (2013), is an act of accomplishing or finishing something which means something successfully especially by means of exertion, skill, practice or perseverance. In consonant to the view of the BBC English Dictionary (2009) defined achievement as something which someone has succeeded in doing, especially after a lot of effort. The definition of underachievement is essentially the opposite of achievement. In other words, when one does not measure up to one's level of aptitude or when performance is below the expected level, it could be referred to as underachievement.

Academic achievement is an educational goal that is achieved by student, teacher, or an institution over a certain period. The training given students in secondary schools aims at equipping them, with useful skills and improving their knowledge in the desired areas of study. According to Adevemi (2014), secondary schools train and produce marketers and accountants for business in both public and private sectors of the economy. Adeyemi affirmed that the training marketers and accountants with vital information skills for work in such areas as cash book, trading accounts, profits and loss account, balance sheet, and bank reconciliation. In recognition of the vital role played by skill trades in the nation, Federal Republic of Nigeria (2013), emphasized that the teaching of financial accounting subject in secondary schools. According to National Policy on Education, program in secondary schools are handled and supervised by National Policy on Education (FRN, 2013). They award West Africa Examination Certificate (WAEC), National Examination Council (NECO), General Certificate Examination (GCE) and National advance and Technical Board (NABTEB) to students. Abonyin (2011), contended that these certificates are awarded after sitting for NABTEB examination using tests that test appropriate psychomotor activities.

In Nigeria, an achievement at any level of formal education is crowned with certificates for those who successfully complete the course of study with good academic records (Bell, (2012). In corroborate to this view, Masita Maizam and

Maizam (2009) contended that academic achievement has become the bench mark for determining the knowledge which students have acquired and learnt throughout the period of their learning process.

The main role of the teacher is to facilitate learning for students. For this reason, the teacher has to device ways to motivate the students to learn. According to Cuaresma (2010), one of the ways of motivating students is to determine and dwell in their interests, strengths, learning preferences and styles. Cuaresma further stated that students learn in different ways through different learning styles. Teachers, therefore, should devise teaching and learning approaches to address these varied learning styles. However, there are students who come to school without being serious for studies. Such students do not have books and do not participate in academic activities in the school or do assignments. (McCoach & Siegle, 2011), pointed out that those students who appear not to study for examinations or listen to teacher's advice lose their grades which affect the rest of their professional lives are called under or low achievers. Reis and McCoach (2011), defined underachievement as a discrepancy between potential (ability) and performance (achievement). Therefore, a student who appears capable of succeeding in school but is not working for it is often referred to as an underachiever.

### Factors Affecting Students' Academic Achievement

Academic achievement can be influenced by many factors. A student can attain optimum achievement or can underachieve. Under-achievement may be caused by a combination of internal and external factors. The teaching and learning processes are faced with various challenging factors which in turn affect the students' achievement. According to Oludipe (2012), some of the factors or conditions that influence learning are:

- Learning Factors: This involves the personality of the learner such as the learner's age, sex, interest, readiness, social relationship, home background, general disposition, and parent educational qualification.
- Internal Factors: This is closely linked with the learning factor which is the emphasis on intellectual/mental achievement level or ability and heredity.
- External Factor: This has to do with the environment such as rural/urban, in/outside classroom, teachers' perception of his role. However, a poor environment results in low quality learning while anxiety, fear, stress, and anger inhibit learning. Absence of these factors in addition to conducive environment, emotional stability and social drives promote learning.

Other factors include the:

i. Qualification of the teacher

- ii. Teachers' level of mastery of the subject matter.
- iii. Availability of resources
- iv. Utilization of resources
- v. Teachers' teaching methods
- vi. Teachers' ability to improvise.

According to Igboanugo (2013), the external factors may include: change of school, family break up, teacher absence, parent illness and death of family member while internal factors may include: students' illness and learning disability caused by visual or hearing impairment.

It is necessary to remark that students affected by these factors may not have tangible achievement in commercial subjects such as financial accounting because of lack of concentration. Academic achievement by students may not necessarily take place unless teachers identify such factors and take of them so as to form a solid instructional base. Tinto (2009), affirmed that by focusing on solid instruction, retention will occur. In agreement with Tinto's view, Jabeen and Khan (2013), noted that students with lower competence but with moderate or high commitment can acquire and apply specific skills in a specific area. The authors further explained that such skills in that area could be applied in future studies in

the area of problem solving, critical thinking, communication and self-development within the studies. Students develop confidence in many ways and those who are confident about their skills are more likely to engage in a variety of activities. Schunk (2008), is of the view that the confidence students have about their skills influence the types of activities they select, how they challenge themselves in those activities and persistence they exhibit once they are involved in those activities. Furthermore, a number of studies have been carried out to identity and analyze the numerous factors that affect academic achievement in various centers of learning. Their findings identified students' effort and previous schooling (Onabanjo, 2010: Wigfield, 2014), parents' education and family income, self-motivation, age of students and learning preference (Ezenwafor & Ndinechi, 2014), entry qualifications and class attendance (Zakaria, Solfitri, Daud & Abidin, 2013), as factors that have a significant effects on the students' academic achievement in various settings. Although there has been considerable debate about the determinants of academic achievement among educators, policymakers, academics, and other stakeholders, it is generally agreed that the impact of these determinants vary (in terms of extent and direction) with context, for example, culture, institution, and course of study. A good match between students' learning preferences and instructor's teaching style has been demonstrated to have positive effects on student's achievement (Mtsem, 2011). In fact, Kim (2015) reported that some students seem to learn better when information is presented through words (verbal learners) whereas others seem to learn better when it is presented in the form of pictures (visual learners). Clearly in a class a class where only one instructional method is employed, there is a strong possibility that a number of students will find the learning environment less optimal and this could affect their academic achievement.

Felder (2007), established that alignment between students learning preferences and an instructor's teaching style lead to better recall and understanding. Research on this subject seems to provide a consensus that students who miss classes perform poorly compared to those who attend classes (Onabanjo, 2010). Socio economic status of students and their families show moderate to strong relationship with academic achievement. Social economic status is most commonly determined by combining parent educational level, occupational status and income level (Kim, 2015; McCoach, & Siegele, 2011). It is not surprising that social economic status is one of the major factors predicting academic achievement, in most studies. It is believe that low social economic status negatively affects academic achievement because low social economic status prevents access to vital resources and creates additional stress at home (Kim, 2015).

Gage and Beriner (2014) carried out a study on social economic status in education research and policy found that social economic background remains one

of the major sources of educational inequality and adds that one's educational success depends very strongly on the social economic status of one's parents. Aranson (2012) agreed with Kolawole (2000), that families where the parents are advantaged socially, educationally and economically foster a higher level of achievement in their children. They also found that these parents provide higher levels of psychological support for their children through environments that encourage the development of skills necessary for success at school.

On the contrary Masita, Maizam and Maizam (2009), in their study on educational and social economic background of undergraduates and academic achievement at a Brazilian university, found that students coming from disadvantaged socio-economic and educational homes perform relatively better than those coming from higher socio-economic and educational strata. They called this phenomenal educational resilience. This could be true considering that different countries have different parameters of categorizing what a developed country categorizes as low social economic status of a developing country; Family income, according to Masita, Maizam and Maizam (2009), has a profound influence on the educational opportunities available to adolescents and on their chances educational success. The authors adds that due to residential stratification and segregation, lowincome students usually attend schools with lower funding levels, have reduced achievement motivation and much higher risk of educational failure. When compared with their more affluent counterparts, low-income adolescents receive lower grades, earn lower scores on standardized test and are much more likely to drop out of school.

Mazita, Maizam and Maizam (2009), reported that children from families with low income are more likely to exhibit the following patterns in terms of educational outcomes; have lower levels of literacy, innumeracy and comprehension, exhibit higher levels of problematic school behavior, are more likely to have difficulties with their studies and display negative attitudes to school. Similarly, Oludipe (2012), in a study exploring beliefs about academic achievement studied the relationship between parent and guardian educational attainment to academic achievement and concluded that the educational attainment of parent or guardian does have a relationship with academic achievement of their children, the researcher argued that the higher the parent or guardian's educational achievement, the higher the academic achievement.

From the above viewed, it can be seen that social economic status is related to academic achievement, whether one studies social economic status as a whole or with distinct dimensions, there is considerable support to hypothesize that parents' social economic status affects academic achievement of students. (Jabeen & Khan, 2013): Abdu - Raheem (2000); (Masita, Maizam & Maizam 2009); Hammeken 2007). Students who come from low social economic backgrounds earn lower

examination scores compared to their counterparts from high social economic backgrounds, Hammeken (2007). According to Masita, Maizam and Maizam (2009), cited Sparkle whose study in Britain shows that schools have an independent effects on students attainment and attitudes, so teachers in disadvantaged schools often hold low expectations of their students which compound the low expectations the students have hence leading to poor achievement by the students.

Mtsem (2011) agreed that school has an effect on the academic achievement of students but argued that school facilities determine the quality of the school, which in turn influences the achievements, and attainment of its pupils. Gagne (2009) argued that schools influence learning in the way content is organized and in the teaching, learning and assessment procedures. The interests and feelings which students have in school activities affect their attitude towards school. To this effect, Ford (2006) noted that low achievers appear to display negative attitudes towards school than high achievers. Weiner (2010) agreed that people who do well in school tend to be more interested in learning than the ones who do not. Students who have positive views about their teachers are more likely to demonstrate achievement oriented behaviours. Wigfield (2014) opined that students' interest in class work is related to their use of self-regulatory strategies in the academic field as well as their motivation and academic achievement. McCall, Evahn and Kratzer (2012), in agreement to the view of Ford stated that many under or low achievers exhibit hostility towards the authority (teachers and school personnel).

Silverman and Casazza (2010) opined that teachers should help students to achieve higher through motivation, interaction with the environment, self-regulation and goal setting. Self-regulation refers to students' self-generated thoughts, feelings and actions which are systematically oriented towards the attainment of goals (Zimmerman, 2014). Self-regulation is a significant predictor of academic achievement, and the use of internalized self-regulatory strategies help an individual to achieve in schools. Igboanugo (2013) stated that under or low achievers may lack motivation or self-regulation or a combination of the two.

Valuing learning and believing in the importance of learning increases students' motivation and achievement. When students value the goals associated with school, they are more likely to be achievers. According to Wigfield (2014), achievement values include individual's likeness for a task, importance the individual attaches to a task and the potential usefulness of the task. According to Brown, Collins and Doguid (2009), postulated that learning to achieve will be more effective if learners are involved in solving realistic problems relevant to them, since learning bring their own ideas to the process of learning based on their own perceptions and values. The authors further pointed out that students should be provided with guided experiences that will help them think and solve problems so

as to make progress in their academic pursuit. The authors noted that students need variety instructional approaches to meet different learning preferences which lead to optimum academic achievement in their various areas. If students are going to achieve more in schools, they need teachers who know the subjects and how to teach them. In view of this, Adekoya and Olatoye (2011) contended that the strength of any education system must largely depend on the quality of teachers. The author further states that the quality of the national philosophy is a determinant factor in the achievement of the goals set out in the National Policy on Education.

To this end, Arisoy and Tarun (2013) advised that for achievement gap to be closed in schools, a relentless focus should be on the academic work through setting clear and high standards for the students and assisting teachers to improve their practice through extra instruction for students who need it. All these scholars agreed to the principle that schools do affect academic achievement of students which is one of the variables in the present study.

# **Gender Issues in Achievement in Financial Accounting**

Gender issue has been given great recognition in Nigeria educational system. One of the philosophies of National Policy on Education (FRN, 20013), is to offer every child equal opportunity in all areas of education from lower to higher levels regardless of sex, social status, religion and ethnic set up. Despite the efforts of

Nigerian government to offer equal educational opportunities to both male and female, it appears that Financial Accounting subject is regarded as being predominantly made for boys and attempts being made to facilitate girls' participation in the area are not yielding much fruits. Eze, Ezenwafor, and Obidile (2016), affirmed that gender bias exist in financial accounting education. They noted that women have little or no access to some programmes like financial accounting which are seen to be men's domain and does not correspond to women's nature or physical capabilities. Omotayo (2014) stated that stereotyping occupations for male and female prevents equal and full involvement of girls in financial accounting subject, unlike their male counterparts. According to Omotayo, some of the occupations and financial accounting subject that seen by society to be men's career are marketers, accountants etc. Improving girls' access to education with the goal of attaining gender equality is a critical component of promoting development and meeting the Millennium Development Goals (MDGs) in Nigeria and around the world. Although the importance of educating girls is widely recognized, girls throughout the world continue to lag behind boys in terms of enrolment rates, completion rates and performance in school (Huggins & Randell, 2016).

According to Olawoyin, Adeleye and Oladele (2015), the influence of gender on performance could be seen in such areas like choice of subjects and career

pursuit at various educational levels most of which are attributable to differential treatment meted to boys and girls from infancy. Many research studies have been concerned with finding out the level of gender participation, causes of gender inequality and probable ways of restoring gender balance in various fields of human Olurode and Soyombo (2011) agreed that gender is significant in the endeavor. understanding of developmental effort of a nation. This is because sustainable human and economic development cannot take place without equitable participation Omotayo (2014), contended that educating women is of men and women. fundamental to economic development, poverty reduction, promotion of human rights, among others. Therefore, it would be a fruitful exercise to look at whether gender has significant effect on students' performance in financial accounting. Consequently, researchers are making efforts in order to device among others teaching methods that will be gender friendly and will enhance science teaching and learning.

## **Empirical Studies**

The researcher reviewed some empirical studies that are related to the present study as follows:

# **Collaborative Teaching Method and Academic Achievement**

Adebule (2005) conducted a study "effects of collaborative and expository methods of teaching on students' performance in biology in Afijio Local

Government Area of Oyo State". Four research questions were raised while four null hypotheses were tested. The study adopted a quasi-experimental pre-test posttest non-randomized control group. The population of the study consisted of all 980 SS II biology students in Afijio Local Government Area of Oyo State. Simple random sampling technique was used to draw 240 biology students (balloting without replacement). The instrument for this study comprised 40 multiple choice biology test items on ecology and 20 multiple transfer test on application of knowledge. The instruments were subjected to face validation by three experts while a co-efficient value of 0.77 indicated that the instrument was reliable using Kudar-Richardson 21 formula. The data obtained were analyzed using mean to answer the research questions and ANCOVA to test the hypotheses. The findings of the study revealed that collaborative group performed significantly better than the expository group; male students performed significantly better than female students when exposed to collaborative method; the high ability group performed better than the low ability group; and no significant difference existed in the academic achievement of male and female students exposed to collaborative and expository (lecture) methods. Based on these findings, it was recommended among others that textbook writers should shift emphasis from teachers' activities to students' activities that will promote the incorporation of collaborative method in biology textbooks. The study of Adebule is similar to this present study as they both examined the effect of collaborative teaching methods and academic achievement. Similarly, the two studies are similar in terms of research design (quasi-experimental), instrument for data collection (achievement test), method of data analysis (mean, standard deviation and ANCOVA). Contrarily, the studies differ in terms of population and sample, sampling technique and subject coverage. The study of Adebule was conducted among SS II Biology students in secondary schools in Oyo State while the present study was carried out among SS II Financial Accounting students in Oyo State.

Williams and Akpan (2017) carried out a study on "collaborative versus contextual learning and students' academic achievement in Biology". The study on collaborative versus contextual learning and students' academic achievement in biology was conducted in Hallmark Academy secondary school, Omoku in Ogba Egbma Ndoni Local Government Area of Rivers State. Three objectives and three hypothesis guided the study. The study adopted a comparative research design, the population consisted of senior secondary school biology students (SS2) which was eighty (80) students, and census sampling techniques was used. Biology Achievement Test (BAT) was used as instrument for data collection which was validated with a reliability coefficient of 0.06. Mean and standard deviation was used for this study while two tail t-tests were used as a statistical tool for the study.

The findings revealed no significant difference between the mean scores of students who learned using collaborative approach and their contextual contemporaries; male students had a higher mean score than their female counterpart when exposed to collaborative approach. The study also revealed no significant difference between the mean score of male collaborative learners and their contextual counterparts. Furthermore it was found out that there is no significant difference between the mean scores of female collaborative learners and their contextual counterparts. Based on these findings, the study recommended that instructors should be selective in the choice of their teaching approaches for lesson delivery for improved students' academic performance. The study of Williams and Akpan was conducted among SSII Biology students in Hallmark Academy secondary school, Omoku in Ogba Egbma Ndoni Local Government Area of Rivers State using collaborative versus contextual learning and students' academic achievement in Biology while the present study was carried out among SSII students using collaborative teaching method Financial Accounting conventional teaching method in Oyo State. The reviewed study differs from the current study in the area of the design adopted. The reviewed study adopted comparative research design while the present study adopted quasi- experimental research design of pre-test, post-est. The reviewed study employed t- test statistical tool in testing the null hypotheses while the present study employed Analysis of Covariance (ANCOVA) to test the null hypotheses. The reviewed study was conducted in River State while the current study was carried out in Oyo State.

Michael and Hameed (2017) carried out a study on "effect of collaborative learning styles on performance of students in a iniquitous collaborative mobile learning environment". The specific purposes of this study are to: examine the difference in the performance of students in mobile learning platform; examine the difference in performance of students in the five collaborative learning styles; examine the significant difference in performance between collaborative and noncollaborative learning styles; and determine the effect of collaborative learning style on student's performance in a mobile learning platform. Four research questions were raised while two null hypotheses were tested at 0.05 level of significance. Purposive sampling technique was used to choose 36 secondary school students as the sample. The study adopted a pretest-posttest experimental approach and subjects were randomly assigned into the five collaborative and one non-collaborative learning group. The groups were exposed to mobile learning on the mole concept (MLMC) in Chemistry. The instrument was subjected content validation made by three experts. The instrument had a co-efficient value of 0.76 which shows that the instrument is reliable using KR-21. Research questions were answered based upon descriptive statistics such as means and standard deviations, while hypotheses one and two were tested using t-test and multivariate analysis of variance (MANOVA) respectively. The reviewed differs from the present study in the area of the statistical tool used in testing the null hypotheses. The reviewed study employed t-test and multivariate analysis of variance (MANOVA) while the current study adopted Analysis of Covariance (ANCOVA) to test the null hypotheses.

The results showed that there was significant gain regarding the difference between pretest and posttest scores of students in the mobile learning experience, and think-aloud-pair problem-solving technique is the most effective collaborative learning style. Also, all the collaborative learning styles are more effective for learning in a mobile learning environment compared to non-collaborative learning style. The findings also revealed that there was a statistically significant difference in the mean scores of male and female students in all the collaborative teaching styles. Based on the findings, it was recommended that mobile learning platform should be used for instructional delivery in the classroom to improve performance of students. The study of Micheal and Hameed was conducted to examine the difference in the performance of students in mobile learning platform; examine the difference in performance of students in the five collaborative learning styles; examine the significant difference in performance between collaborative and noncollaborative learning styles; and determine the effect of collaborative learning style on student's performance in a mobile learning platform while the present study was carried out on the effect of collaborative teaching method and conventional teaching method to determine the academic achievement among students in Financial Accounting.

Nkechinyere and Ordu (2018) conducted a study on "impact of collaborative learning strategy on the academic achievement of senior secondary school Chemistry students in Obio-Akpor Local Government Area. The study adopted quasi-experimental pretest-posttest control group design. A total sample size of hundred students participated in the study. Two research questions and two hypotheses guided the study. The instrument used for data collection was chemistry achievement test. The reliability coefficient was calculated using Person Product Moment Correlation with reliability coefficient of 0.87. For data analysis, the research questions were analyzed with mean and standard deviation. Analysis of covariance (ANCOVA) was used to test hypothesis 1, while t-test was used to test hypothesis 2, at 0.05 level of significance.

The findings showed that the experimental group performed better in organic chemistry that students exposed to lecture teaching method; male students performed slightly better than female students. The findings also revealed that students who studied chemistry using collaborative learning strategy achieve better than those of the lecture based method. Also, there was statistical significant difference in the mean scores of students taught Chemistry using collaborative learning strategy and those taught using the lecture based method; there was no

statistical significant difference in the mean scores of male and female students taught chemistry using collaborative learning strategy. Some recommendations were made based the findings. For example, science teachers should spice up their methods of teaching by using the collaborative method in their lesson delivery since it enhances achievement and active participation. The study of Nkechinyere and Ordu was conducted on "impact of collaborative learning strategy on the academic achievement of senior secondary school Chemistry students in Obio-Akpor Local Government Area while the present study was carried out among SSII Financial Accounting students in Oyo State. The reviewed study also differs from the current study in the subject and the instrument and the area where the study carried out. The reviewed study was conducted on the "impact of collaborative learning strategy on the academic achievement of senior secondary school Chemistry students in Obio-Akpor Local Government Area while the present study was carried out on "Financial Accounting Achievement Test" (FAAT) on secondary school students in Oyo State.

# **Collaborative Teaching Method and Academic Ability**

Adolphus, Alamina and Aderonmu (2013) conducted a study on "the effects of collaborative learning on problem solving abilities among senior secondary school physics students in simple harmonic motion in Rivers State. Four research questions were raised. Two null hypotheses were tested. The methods employed for

this study are survey and quasi-experimental research design. The sample was made up of 112 physics teachers and 81 physics students drawn from two urban and one rural school. The research instruments employed for the study were Physics Teachers Questionnaire on Simple Harmonic Motion (PTQSHM) and Simple Harmonic Motion Achievement Test (SHMAT). The instruments were subjected to both face and content validation to measure what the instrument ought to measure. Kudar-richardson 21 was used to determine the internal consistency of Achievement Test while Cronbach Alpha was used to determine the internal consistency of the questionnaire test. Statistical data analysis tools utilized were the simple percentage, four point Likert-Scale of 2.50 criterion mark and t-test at 5% level of significance.

The result of the findings showed that low ability students always shy away from mathematical calculations involved in physics during collaborative learning classes compared to high achieving students who does not; there was significant difference in problem solving abilities among students taught using collaborative learning strategy and those taught with the conventional method; there is no significant difference between boys and girls in their problem solving abilities using the collaborative strategy. Based on the findings, it was recommended that teachers encourage group learning, group projects, tasks and assignments which facilitate collaborative learning and improves problem solving abilities among the students.

The study of Adolphus, Alamina and Aderonmu was conducted on the effects of collaborative learning on problem solving abilities among senior secondary school physics students in simple harmonic motion in Rivers State while the present study was carried out among SSII Financial Accounting students in Oyo State.

Similarly, Ishaq (2016) carried out a study on "effect of collaborative learning strategy on performance among low ability junior secondary school basic science students in Kano, Nigeria". Four research questions were raised while four null hypotheses were stated in line with the research questions. Quasi Experimental pretest and posttest control group research design was adopted for data collection. Pretest was conducted on the two groups. After treatment, posttest was administered. The experimental groups were given treatment for six weeks, using collaborative learning, while the control group was exposed to teaching for six weeks using lecture method. The population consists of 6,715 students. A sample of 120 subjects of both experimental and control groups was selected. The instrument used for data collection was Basic Science Achievement Test. Simple random sampling using balloting method involving a pick from a hat, was used. The content validity of the instrument was established from three experts. The Basic Science Achievement Test has reliability coefficient of 0.78. Data collected were analyzed using mean and standard deviation to answer the research questions and t-test statistics to test the null hypotheses at  $P \le 0.05$  level of significance.

The findings revealed that: high ability students exposed to collaborative learning strategy had a higher mean gain when compared to low ability students exposed to the same strategy; there was a significant difference in the mean scores of experimental groups, with experimental group performing better. Both the male and female low ability their counterparts' low ability students exposed to lecture method. It was recommended that curriculum planner's and basic science teachers to consider its suitability and incorporate collaborative teaching strategy for the teaching of Basic Science concepts among low ability students. The study of Ishaq was conducted on effect of collaborative learning strategy on performance among low ability junior secondary school basic science students in Kano State while the present study was carried out among SSII Financial Accounting students in Oyo State.

# **Interaction Effect of Teaching Methods and Gender on Academic Achievement**

Ibe and Nwosu (2003) conducted a study on the effect of collaborative and demonstration methods of teaching on science process skills acquisition among secondary school biology students. The study adopted a quasi-experimental research. Three research questions were raised while two null hypotheses were tested at 0.05 level of significance. The population of the study comprised all 2,345 students offering biology in Obollo-Afor Local Government Area of Enugu State. The sample size was 98 (40 males 58 females) drawn through simple random

sampling technique. A research made test of 20 test items on Test of Science Process Skills Acquisition (TOSPSA) for data collection. The control group students were taught using the conventional teaching method and the experimental groups were taught using collaborative and demonstration methods respectively. The deviation while the null hypotheses was tested using ANCOVA. The results revealed that students taught using collaborative method performed significance better than those taught with demonstration methods. Also there was no interaction effect due to gender and teaching method on students' academic achievement. Based on these findings, it was revealed that curriculum planners should ensure the implementation of collaborative teaching strategy which stimulate cognitive activities, promote higher academic achievement and knowledge retention. The study of Ibe and Nwosu was conducted among secondary school biology students while the present study was carried out among SSII Financial Accounting students in Oyo State.

Nweke, Abonyi, Omebe and Njoku (2014) explored the effects of experiential teaching method on pupils' academic achievement in Basic Science and Technology. The study adopted a pre-test, post-test, non equivalent control group design. Two research questions and two null hypotheses guided the study. A total of 426 pupils from 6 intact classes participated in the study. Three intact classes were assigned to treatment group, while the other three intact classes were

assigned to control group. The treatment group was taught Basic Science and Technology (BST) using experiential teaching method, while the control group was taught the same topics using the conventional teaching method (lecture method). A Basic Science and Technology Achievement Test (BSAT) was used for data collection. The instrument was subjected to validation by three experts. The reliability index of 0.88 was ascertained using Kudar-Richardson 21 to ascertain the internal consistency of the instrument. Research questions were answered using adjusted mean while the hypotheses were tested at 95% confidence level using the Analysis of Co-variance (ANCOVA). The results revealed that there was a significant difference between pupils taught basic science and technology using experiential teaching method and those taught BST using the conventional (traditional) teaching method. The experiential teaching method proved to be more facilitative. Finally, it was found that there was no interaction effect between method and gender on pupils' achievement in basic science and technology. This study is in relation with the current study in the design and procedure adopted and gender issues measured, but differ in terms of the independent variable covered, population, and sample size. Also the subject investigated on Basic Science and Technology while the current study involved Financial Accounting.

Another study was conducted by Nwafor (2012), on the effect of experiential teaching method on the academic achievement of Junior Secondary School students

in basic science. The study was carried out in Abakiliki Education zone of Ebonyi State. The study employed a non-equivalent control group quasi-experimental design. Six secondary schools were drawn through stratified random sampling. In each of the schools, one intact class was drawn through simple balloting. The population of the study was 68,512 and sample was 150 junior secondary school students in Abakiliki Education zone of Ebonyi State. The treatment group was taught using experiential method. The instrument for data collection was the Basic Science Achievement Test. The data was analysed using mean, standard deviation and Analysis of Co-Variance (ANCOVA).

The result revealed that the experiential teaching method is superior to the conventional method in the facilitating achievement in basic science. The study also revealed that though females showed higher academic achievement than males, the difference in the mean achievement was not significant. There was no significant interaction effect between gender and instructional method. The researcher recommended that experiential teaching method be adopted in the school system. The study of Nwafor was conducted on the academic achievement of Junior Secondary School students in basic science in Abakiliki, Ebonyi State while the present study was carried out among SSII Financial Accounting students in Oyo State.

## **Summary of Related Literature Reviewed**

The literature for this study was reviewed under conceptual framework, theoretical studies and empirical studies. Conceptual framework dealt with collaborative teaching method, academic achievement and Financial Accounting. The theoretical framework covered Vygotsky's social-cultural theory and Jean Piaget theory of cognitive development. Theoretical studies covered teaching method in secondary schools, importance of Financial Accounting, effective teaching of financial accounting in secondary schools, academic achievements of students, factors affecting achievements, gender issues in Financial Accounting.

Empirical studies reviewed covered collaborative method of teaching, academic achievement in Financial Accounting, gender issues and academic achievement in Financial Accounting. The review showed that different methods of teaching and learning are available in the teaching of financial accounting. It was also observed that most of the studies reviewed were carried out on different level of education attainment rather than senior secondary schools. In all the literature review no work on collaborative teaching method was seen to have carried out in secondary schools in Oyo state with reference to financial accounting. Among all these methods, those that allow students' active participation (students- centered) have been advocated as capable of improving academic achievement of students

more than those methods that are teacher –centered. These gaps identified, prompted the researcher to carry out this study.

The review related to collaborative method of teaching showed that most empirical works on collaborative were carried out mainly on science subjects like physics, Biology, Chemistry and Mathematics other than Financial Accounting subjects. The review proved that when teachers are well equipped with the most effective method of teaching, they help students to gain knowledge and skills needed to perform tasks in Financial Accounting concepts. The review of related literature revealed that most of the studies reviewed were not carried out in secondary schools in Oyo state with reference to Financial Accounting which created a gap. The gap identified, prompted the researcher to carry out this study.

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#### **CHAPTER THREE**

#### **METHOD**

This chapter describes the method and the procedure adopted in carrying out the study. It is presented under the following sub-headings: research design, area of the study, population of the study, sample and sampling technique, instrument for data collection, validation of the instrument, reliability of the instrument, experimental procedure, control of extraneous variables, method of data collection and method of data analysis.

# **Research Design**

The study adopted a quasi-experimental pretest- posttest research design in which there was control group but no randomization (Baker, 2001; Best & kahn, 2003). Quasi-experimental design was used because random assignment of students into experimental and control groups was not possible. The intact or pre-existing groups were used as it always possible to use true experimental design in conducting educational research. The reason for this was that the school authorities might not allow the control or manipulation of some relevant variables which, they may consider, as disruptive of school activities. Under such a situation the researcher resorted to quasi- experimental design using intact groups for the research. This research design deemed appropriate as this experiment was basically to find out the effect of collaborative teaching method as an experimental treatment

on the achievement in financial accounting by students in public secondary schools using intact classes without randomization (Uzuogulu, 2011). Goodlad and Berverly (2009) adopted a quasi experimental pre-test post-test non-equivalent control group in a study conducted the effects of collaborative leaning on academic achievement of secondary school students. They found out that collaborative teaching method was effective.

## Area of the Study

The study was carried out in Oyo State. Oyo State is in the South Western part of Nigeria. Oyo State is bounded in the West by Republic of Benin and Ogun State, in the East by Osun State, in the North by Kwara State and in the South by Ogun State. Oyo State has 33 Local Government Areas with the capital at Ibadan. It occupies a total land space of about 280,454sqkm and has a population size of about 5,591,589 people. It contains six Education Zones. The State is widely known for her achievement in commercial activities, civil services and traditional occupation like farming. This is seen with numerous industries, private and public establishment operating in the area. The people living in the state have passion for education. This is seen by the number of educational institutions springing up in the area, both private and public. The rationale for choosing Oyo State as the area of the study was informed by the persistent poor academic achievement of Financial Accounting students as shown in Appendix B on page 127.

## **Population of the Study**

The population of this study consisted of all the 65,112 secondary school students in the 324 public secondary schools in Oyo State. This information was obtained from the Ministry of Education, Ibadan, Oyo State as at May 4th, 2019 (See Appendix C, Pg. 128).

## Sample and Sampling Technique

The sample of the study comprised 102(54 males and 44 females) SS II financial accounting students. The sampling was done using multi-stage sampling technique. At stage one, purposive sampling procedure was adopted to ensure that the two schools sampled were schools that offered Financial Accounting as well as making sure the two schools are from the same Local Government Area to ensure that smooth administration of instruments to the two groups. The simple random sampling technique was also employed in assigning the two schools to experimental group (E) and control group (C). Simple random sampling technique was adopted as it allowed each element in the population to have equal and independent chance of being sampled (Adeyemi, 2014). Experimental group consisted of 54 (33 males and 21 females) students and the control group consisted of 48 (25 males and 23 females) students (See Appendix D, Pg. 129).

Based on the purpose of this study, the high achieving students in the two sampled schools were determined by students with 65 percent and above in the

FAAT scores while the low achieving students were those with 20 percent and below in the FAAT scores (Jabeen & Khan, 2013). This information obtained from the school records of continuous assessment of the two sampled schools.

#### **Instrument for Data Collection**

The instrument titled Financial Accounting Achievement Test (FAAT) drawn from WAEC past questions by the researcher were used to collect data for the study. The test covered five units of the SSII first term on Financial Accounting based on National Education and Research Development Council (2007) curriculum. The development of the test items covered cash book, trading account, profits and loss account, balance sheet and bank reconciliation. The students were expected, after covering the topics to be familiar with and acquire conceptual knowledge and skills of the operations performed in the subject.

This achievement test consisted of 50 objective questions with four options (A – D) multiple choice formats adapted from West African Examination Council (WAEC) Financial Accounting past Questions between 2006 and 2015. Each item has four alternative answers. Each correct answer attracted (1) point while each incorrect answer attracted zero (0) point.

#### Validation of the Instrument

An initial draft of 70 test items with four- options (A-D) multiple choice formats was drawn based on the table of specifications and sent to three experts for

face and content validation. Among the validators were an expert in the Department of Accounting and Finance from Ajayi Crowther University, Oyo in Oyo State; one was an expert in business education from the Department of Technology and Vocational Education, Nnamdi Azikiwe University, while one expert was from Curriculum and Instruction Department, Emmanuel Alayande College of Education, Oyo. Each of the validators was given the topic of the research, purpose of the study, research questions, hypotheses, the lesson plan, content to be covered and the instrument. The experts were requested to check the test items for clarity and suitability of the language, coverage of the content area, relevance of the items to the research questions and items outside the ones indicated which the validators may consider necessary. Based on the recommendations of the experts, some of the items were dropped while some were restructured. Corrections were made on items questioned by any of the validated while rejected ones were dropped. The corrections, recommendations and suggestions of the experts were taken into consideration. The items were modeled based on the WAEC past questions between 2006 and 2016. Out of the 70 test items obtained after validation, only 50 test items were used in the final copy of the instrument used for the study. (See Appendix F, p.131).

## **Reliability of the Instrument**

The reliability of the instrument was determined by administering the 50 FAAT test items on a trial group of an intact class of 30 SSII Financial Accounting students in Anglican Secondary Grammar School, Ife-Odan in Ejigbo Local Government Area of Osun State. The 50 test items instrument was administered for 50 minutes. Anglican Secondary Grammar School Ife-Odan is similar in most respects to the secondary schools in Oyo State, particularly in terms of staffing, materials and level of course offered and they are all state owned secondary schools and as a result they possess similar characteristics.

The test was administered once to 30 SSII students to estimate the reliability of the instruments. The reliability coefficient figure of 0.75 was obtained using Kuder-Richardson formula 21 (K – R 21) used to check the internal consistency of dichotomous items (see Appendix K, p.151). This was in agreement with Uzoagulu, (2011), who stated that any figure above 0.7 is an acceptable reliability value for this kind of study.

#### **Method of Data Collection**

The Financial Accounting Achievement Test (FAAT) was administered as pre- test to the respondents in both experimental and control groups. Post-test was administered after the treatment, the same instrument used for the pre-test would reshuffle and the colour of the paper changed before administered it as post-test.

Each test lasted for a period of 50 minutes. One question will attract 1 mark to make a total of 50 marks (See Appendix F, G., H, I, and J, on pages 131, 140, 141,142 and 150 respectively).

# **Experimental Procedure**

The procedure adopted in carrying out the experiment highlighted below:

## **Symbolization**

The design can be symbolically represented as follows

E	$O_1$	X	$O_2$
-	-	-	-
C	$O_1$	-X	$O_2$

Meaning of these symbols is:

 ${\bf E}$  - Experimental group

C - Control group

 $O_1$  – Pre-test

O<sub>2</sub> – Post-test

**X** – Treatment- Collaborative teaching method

X – No treatment

= Non equivalence of the two groups E and C

# Phase one-Training of the participating teachers who will administer the treatment.

The training programme lasted for two weeks and only one Financial Accounting teacher from the experimental group was used as trainee teacher. The Financial Accounting teacher in the control group school was not trained because they were not exposed to collaborative teaching method but rather their usual classroom teaching method. The researcher met once a week with the trainee teacher for at least two hours.

#### Week One

The researcher and the Financial Accounting teacher in the experimental group school met in the school and discussed on the modalities for the training and emphasized during the treatment. Sequel to this, the researcher explained the purpose of the study to the trainee teacher and introduced the concept of collaborative to the trainee teacher in the experimental class. Collaborative method of teaching used in this study was explained to the trainee teacher as a student-centered activity-oriented teaching in which the teacher guided students through problem solving approach to provide answers to an instructional topic at hand. The researcher gave out the prepared lesson plans on collaborative teaching method (See Appendix L. pg.153) on the five topics selected which the teacher taken home and study.

#### Week Two:

It was agreed upon by the researcher and the trainee teacher that a second training was held. The researcher discussed the lesson plans and gave further explanations and clarifications (if any) on the use of collaborative teaching method to the trainee teacher in the experimental class. The researcher asked the trainee teacher to use the following books for references.

- i. Simplified and Amplified Financial Accounting for senior secondary schools 1, 2, 3, Longe, F. and;
- ii. Essential Financial Accounting for senior secondary schools O.A. Longe andR.A. Kazeem
- The experimental class was shared into small groups of not more than six (6) students in each group in their own school.
- The topics of the Financial Accounting content comprising:
- i. Cash book (Three column);
- ii. Trading accounts;
- iii. Profits and loss accounts;
- iv. Balance Sheet and.
- v. Bank reconciliation was taught for five weeks.

Oral evaluation to ensure that the trainee teacher acquired the method that involved in the collaborative and conventional method was carried out. During the

oral evaluation, some steps that were not clearly understood was discussed and clarified.

#### **Phase Two- Students' Treatment**

#### Week One

On the first day of the experiment, the FAAT instrument was administered to all students both in the experimental and control groups. This would enable the researcher to ensure that the students' initial abilities prior to the experiment known.

#### Week Two

Both teachers in the experimental and control group schools taught their students once a week for five weeks of 50 minutes per week. Further discussions laid emphasis on the experimental group only. Students in experimental class randomly shared into smaller groups of not more than six students in each group in their school. This sharing in groups was for the purpose of this study only. Each group was headed by one of the students.

The topic on "cashbook" was taught where students were guided to understand different materials and documents used in various Financial Accounting operations. During class teaching, the teacher in the experimental class engaged the students in a discussion and posed questions relating to the cashbook, specimen and materials displayed on the tables in front of them. This was done for about 10 minutes. Thereafter, the students in each group observed and check the specimen

and materials which was placed on their tables. The students tried to draw the specimen as they observe them and provided answers to the questions that asked by the teacher. This treatment was for experimental group and the lesson lasted for 50 minutes.

For the control group school, the students exposed to the use of textbooks while the teacher did almost all the talking alone. Teaching was based on the experiences of the teachers. Occasionally, the students asked questions, jotting down points and copying notes that was made by the teacher on the chalkboard. There was no grouping of the students before the teacher's presentation and the lesson also lasted for 50 minutes.

#### Week Three:

The second topic was on "Trading accounts" that involved guiding the students to understand the preliminary calculations entailed in trading accounts to enable them know how to record daily transactions in the business organizations. Chart on different methods of how trading accounts can be prepared was displayed while the teacher and students held discussions on the topic. Then the students, through the guidance of the teacher providing and understanding more things about then preparation of the trading account topic.

#### Week Four:

The third topic was on "Profits and loss accounts" which required the students to examined different specimens of profits and loss accounts displayed on their tables in order to understand total expenses items and how to ascertain gross profits in the accounts. Specimens on different methods of profits and loss account displayed and discussed by the teacher and students.

#### Week Five:

The fourth topic was on "Balance sheet statement" which involved students observing what was ascertained in the statement and make them to understand the position of assets and liabilities in business. Specimen of balance sheet was displayed on their tables and discussed among students in various groups and proffer answers to it.

#### Week Six:

The fifth topic was on "Bank Reconciliation" that required the students to examine different specimen displayed on their tables. Students understood factors that bring about the differences between bank statement and cash book of the customers. Students were allowed to discuss the topic in their groups and provided answers to questions.

At the end of six weeks when the Financial Accounting topics had been completed, the FAAT was administered as post-test to both the experimental and

control groups. Before the administration of the post-test, the items of FAAT produced in yellow coloured question papers. The essence of the post-test was to find out if there were changes in the students' achievement as a result of the treatment.

In addition, the following precautions were taken in the course of the experiment:

- i Attendance was taken at the beginning of every teaching session so that scores of students who missed any of the sessions used during data analysis.
- ii The control group was taught the same topics as the experimental group by their teacher.
- iii To prevent the students from being familiar with the questions of the pre-test and post-test:
  - (a) The colour of the test papers were changed and
  - (b) The test items were rearranged.
- iv The same time allocated for both the pre-test and post-test, the data obtained from both the control and experimental groups were analyzed.

#### **Control of Extraneous Variables**

The following extraneous variables which likely to interfere with the dependent variables were taken care of as follows:

- 1. **Teacher variable:** When different teachers are involved in an experiment, the problem of teacher variable would arise since different teachers possess different standards in terms of knowledge of the content, methodology, among others. In order to control this variable, the researcher prepared lesson plan (See Appendix L, pg.153) on Financial Accounting which used to teach the experimental. The researcher trained the participating
  - to teach the experimental. The researcher trained the participating teacher on how to use the collaborative teaching method.
- 2. **Experimental bias:** When a researcher involves external people in experiment, the students become sensitized that they were used for a study and take some of their actions consequently the following measures would adopted to minimize experimental bias:
  - a) Regular Financial Accounting teacher in each of the schools under study were trained and used in the treatment. The researcher occasionally monitored these teachers so as to ensure adherence to the instructions.
  - b) The same achievement test was given to all the groups at the same time.
  - c) The students would have no pre knowledge of their involvement in the experiment.

- 3. **Initial group difference:** Intact classes were used for the study. Since the participating intact classes were non-equivalent groups, analysis of covariance (ANCOVA) used for data analysis to take care of the initial differences across the groups due to differences in the background.
- 4. **Instructional Situation Variable:** For uniformity in teaching, the participating teacher was trained on the instructional procedures involved in the experiment and given detailed lesson plans prepared by the researcher. The teacher in the experimental group school directed to strictly follow the detailed lesson plan provided. Both the experimental and control group were taught the same topics and within the regular period allotted to Financial Accounting in the school timetable.
- 5. **Students' Interaction:** The researcher was aware of the possible interaction between the students in experimental and control groups. As a result of this, the schools used far from each other and was not in the same senatorial zones of the state.
- 6. **Effect of pre-test and post-test:** In order to minimize influence of memory and forgetfulness, the time lag between pre-test and post-test was six weeks. The FAAT test was re-shuffled and produced in yellow or blue colour question papers before being used as post-test. The relatively short period was minimized the effect of maturation.

## **Method of Data Analysis**

The data collected or test scores of the pre-test and post-test of the groups were collected through FAAT. The research questions were answered by finding the difference between pre-test and post-test mean scores. In addition, the standard deviation was used to determine the homogeneity or heterogeneity of the mean scores of people's opinions. Inferential statistics of Analysis of Covariance (ANCOVA) was used to test the null hypotheses at 0.05 level of significance.

ANCOVA was considered appropriate because it controls the initial differences across groups and also increases the precision due to the variables thus, reducing error variance (Ferguson, 2011). Null hypothesis was rejected where the probability of obtaining the F ratio value less than 0.05 level of significance but where the value was equal to or greater than 0.05, null hypothesis would not be rejected.

#### CHAPTER FOUR

#### PRESENTATION AND ANALYSIS OF DATA

This chapter deals with the presentation and analysis of data collected according to the research questions that guided the study and the null hypotheses tested as follows:

#### **Results**

### **Research Question 1**

What are the effects of Collaborative Teaching Methods (CTM) and Conventional Method (CM) on students' academic achievement in Financial Accounting?

Table 1: Collaborative Teaching Methods And Conventional Method On Students' Academic Achievement In Financial Accounting Using Their Pretest And Post-test Scores

Source of	N	Pre-test	SD	Post-test	SD	Mean	Remark
Variance		Mean		Mean		Gain	
Experimental	54	44.41	7.8	69.12	4.11	24.71	More Effective
Control	48	39.52	8.4	54.89	5.44	15.37	

Data in Table 1 show that for the experimental group, the post-test means score of 69.12 is greater than the pre-test means score of 54.89. Similarly, for the control group, the post-test means score of 54.89 is greater than the pre-test mean scores of 39.52. This shows a positive effect for both experimental and control groups. However, the mean gain of 24.12 for the experimental group is greater than that of the control group of 15.37. This means that the students taught with collaborative teaching methods strategy had a higher gain in mean than those taught with conventional teaching method.

## **Research Question 2**

What are the effects of CTM on academic achievements of male and female students in Financial Accounting?

Table 2: Effect Of CTM On Academic Achievement of Male And Female Students In Financial Accounting Using Their Pre-test And Post-test Scores

Gender	N	Pre-test	SD	Post-test	SD	Gain	Remark
CTM		Mean		Mean	j	in Mean	
Male	33	21.45	7.09	65.85	4.96	44.40	More
							Effective
Female	21	33.13	6.25	71.26	4.22	38.13	

Data presented in Table 2 reveal male and female students taught Financial Accounting using CTM. Male students had pre-test mean of 21.45 with standard deviation of 7.09 and post-test mean of 65.85 with a standard deviation of 4.96 while their gain in mean is 44.4. The female students in the same group had 33.13 as the pre-test mean and 71.26 as their post-test mean with 6.25 and 4.22 respectively as their standard deviation, with a gain in mean of 38.13. This implies that in teaching Financial Accounting using CTM, male students achieved more than female students.

# **Research Question 3**

What are the effects of CTM on academic achievement of high and low achieving students in Financial Accounting?

Table 3: Effects Of CTM On Academic Achievements Of High And Low Achieving Students In Financial Accounting

Achieving students on CTM	N	Pre-test Mean	SD	Post-test Mean	SD	Gain in Mean	Remark
High	19	33.13	6.25	71.26	4.22	38.13	More
Low	35	29.29	7.18	59.28	4.56	29.99	Effective

From the data presented in Table 3, the high achieving students have pre-test mean of 33.13 with standard deviation of 6.25 and post-test mean of 71.26 with standard deviation of 4.22, while their gain in mean is 38.13. The low achieving students had pre-test mean of 29.29 and 59.28 as their post test-test mean with a standard deviation of 4.22 and 4.56 respectively, while their gain in mean is 29.99. This implies that the high achieving students achieved more academically than the low achieving students taught with CTM.

# Test of Statistical Significance of Hypothesis Hypothesis 1

There is no significant difference between the mean academic achievement scores of Financial Accounting students exposed to Collaborative Teaching Methods (CTM) and those exposed to Conventional Teaching Method.

Table 4: ANCOVA for Difference Between The Mean Academic Achievement Scores Of Financial Accounting Students Exposed To Collaborative Teaching Methods (CTM) And Those Exposed To Conventional Teaching Method

	Type III Sum of		Mean			Partial Eta
Source	Squares	Df	Square	F	Sig.	Squared
Corrected Model	1445.007 <sup>a</sup>	2	722.504	100.473	.000	.636
Intercept	4369.875	1	4369.875	607.685	.000	.841
Pretest	.397	1	.397	.055	.815	.000
Treatment	1308.402	1	1308.402	181.949	.000	.613
Error	826.968	100	7.191			
Total	164629.000	102				
Corrected Total	2271.975	101				

a. R Squared = .636 (Adjusted R Squared = .630)

The result in Table 4 show that there is a statistically different in the mean academic achievement scores of students taught financial accounting using CTM and those taught using conventional method. This is because the p-value (0.000) is less than the alpha level of 0.05. Hence, the hypothesis was rejected at 0.05 alpha level of significance and, 1 and 102 degree of freedom  $(F_{1,102}=0.000, p<0.05)$ . Therefore, the null hypothesis is rejected, implying that there is a statistically difference in the mean academic achievement scores of students taught financial accounting using CTM and those taught using conventional method.

### **Hypothesis 2**

There is no significant difference between the mean academic achievement scores of male and female Financial Accounting students exposed to CTM

Table 5: ANCOVA Of Difference Between The Mean Academic Achievement Scores Of Male And Female Financial Accounting Students Exposed To CTM

	Type III Sum				
Source	of Squares	Df	Mean Square	F	Sig.
Corrected Model	1160.929a	1	1160.929	67.876	.000
Intercept	40725.392	1	40725.392	2381.101	.000
Gender	1160.929	1	1160.929	67.876	.000
Error	1145.941	52	17.104		
Total	45582.000	54			
Corrected Total	2306.870	53			

Data presented in Table 5 show that the p-value ( $p \le 0.000$ ) is less than 0.05 alpha level. Thus, the hypothesis is rejected at 0.05 alpha level of significance and, 1 and 54 degree of freedom ( $F_{1,54}$ =0.000, p<0.05). This implies that there is a significant difference in the gain in mean academic achievement scores of male and female students taught financial accounting using CTM.

# **Hypothesis 3**

There is no significant difference in the mean academic achievement of high and low achieving students in Financial Accounting.

Table 6: ANCOVA of Difference In The Mean Academic Achievement Of High And Low Students In Financial Accounting

	Type III Sum of		Mean			Partial Eta
Source	Squares	Df	Square	F	Sig.	Squared
Corrected Model	1521.309ª	4	380.327	57.252	.000	.670
Intercept	4102.541	1	4102.541	617.568	.000	.845
Pretest	.085	1	.085	.013	.910	.000
Treatment	1179.924	1	1179.924	177.617	.000	.611
Achievers	.064	1	.064	.010	.922	.000
Treatment * Achievers	76.201	1	76.201	11.471	.001	.092
Error	750.666	52	6.643			
Total	164629.000	54				
Corrected Total	2271.975	53				

a. R Squared = .670 (Adjusted R Squared = .658)

Data presented in Table 6 show that the p-value ( $p \le 0.092$ ) is greater than 0.05 alpha levels. Thus, the hypothesis is rejected at 0.05 alpha level of significance and, 1 and 54 degree of freedom ( $F_{1,54}$ =0.092, p<0.05). This implies that there is a significant difference in the gain in mean academic achievement scores of male and female students taught financial accounting using CTM.

## **Hypothesis 4**

There is no interaction effect of teaching methods and gender on students' academic achievement in Financial Accounting.

Table 7: ANCOVA on interaction effect of teaching methods and gender on students' academic achievement in Financial Accounting

Source of	Type III Sum	Df	Mean	F	Sig.
Variation	of Squares		Square		
Corrected Model	887.654 <sup>a</sup>	4	121.431	6.667	.000
Intercept	102.504	1	102.504	9.345	.008
Achievement	946.939	1	946.939	31.436	.000
Gender	4.822	1	4.822	.432	.568
Treatment	41.915	1	41.915	1.999	.341
Treatment * Gender	15.93	1	15.93	.549	.416
Error	1231.742	100	19.286		
Total	18001.011	102			
Corrected Total	1505.553	101			

From the analysis provided above, the p-value ( $p \ge 0.416$ ) is greater than the alpha level of 0.05. This implies that there is no significant effect of the teaching methods and gender on students' academic achievement in Financial Accounting. Therefore, the hypothesis of no significant interaction effect is not rejected at alpha level of 0.05 level of significance and, 1 and 102 degree of freedom ( $F_{1,102}$ =0.416, p>0.05).

# **Summary of Findings**

From the analysis of data presented, the following findings were made:

 Students taught with collaborative teaching methods strategy had a higher mean academic achievement score more than those taught with conventional method.

- 2. In teaching Financial Accounting using CTM, male students achieved more than female students.
- 3. High achieving students achieved more academically than the low achieving students taught with CTM.
- 4. Teaching methods and gender enhances interaction effect on students' academic achievement in Financial Accounting.
- 5. There is a significant difference between the mean academic achievement scores of Financial Accounting students exposed to Collaborative Teaching Methods (CTM) and those exposed to Conventional Teaching Method.
- 6. There is a significant difference in the mean academic achievement scores of male and female students taught financial accounting using CTM.
- 7. There is a significant difference in the mean academic achievement scores of high and low achievers taught Financial Accounting using CTM.
- 8. There is no interaction effect of teaching methods and gender on students' academic achievement in Financial Accounting.

#### **CHAPTER FIVE**

### DISCUSSION OF RESULTS, CONCLUSION AND RECOMMENDATIONS

This chapter deals with the discussion of findings arising from the study, conclusion, implications of the study, recommendations and suggestions for further study.

# **Discussion of Findings**

# Effects Of Collaborative Teaching Methods CTM And Conventional Method (CM) On Students' Academic Achievement In Financial Accounting

Findings of the study revealed that students taught Financial Accounting using collaborative teaching method had a higher mean score and mean gain than those taught using conventional method. This finding was in line with the finding of Adebule (2005) that the collaborative group performed significantly better than the expository group. The collaborative learning styles are more effective for learning in a mobile learning environment compared to non-collaborative learning style. The finding also concurs with the findings of Nkechinyere and Ordu (2018) that students who studied chemistry using collaborative learning strategy achieve better than those of the lecture based method.

Similarly, the academic achievement of students taught Financial Accounting revealed that there is a significantly difference in the mean academic achievement scores of students taught financial accounting using CTM and those taught using conventional method. This finding was in line with the finding of Michael and

Hameed (2017) that there was a significant gain regarding the difference between pretest and posttest scores of students in the mobile learning experience, and think-aloud-pair problem-solving technique is the most effective collaborative learning style. The findings also agreed with the finding of Nkechinyere and Ordu (2018) that there was statistical significant difference in the mean scores of students taught Chemistry using collaborative learning strategy and those taught using the lecture based method. These findings also concur with the finding of Ibe and Nwosu (2003) that students taught using collaborative method performed significance better than those taught with demonstration methods. The difference in their mean scores may be attributed to students' participation during teaching learning process. This helps students to develop interest and have confidence on their capabilities which will improve their academic achievement.

# **Effects Of CTM On Academic Achievement Of Male And Female Students In Financial Accounting**

Findings of the study revealed that in teaching of Financial Accounting using CTM, male students achieved more than their female counterparts. This finding was in line with the finding of Adebule (2005) that male students performed significantly better than female students when exposed to collaborative method. The finding also supported the finding of Williams and Akpan (2018) that male students had a higher mean score than their female counterpart when exposed to collaborative approach. The finding of the study was also in agreement with the

findings of Nkechniyere and Ordu (2018) that male students performed slightly better than female students.

The result analysis in hypothesis two revealed that there is a significant difference in the mean academic achievement scores of male and female students taught financial accounting using CTM. The findings supported the finding of Michael and Hameed (2017) that there was a statistically significant difference in the mean scores of male and female students in all the collaborative teaching styles. On the other hand, this finding disagreed with the findings of Adebule (2005) that no significant difference existed in the academic achievement of male and female students exposed to collaborative and expository (lecture) methods. This findings also opposed the findings of Nkechinyere and Ordu (2018) that there was no statistical significant difference in the mean scores of male and female students taught chemistry using collaborative learning strategy. The difference in this findings and the findings of Adebule (2005) and Nkechnivere and Ordu (2018) as regards significant difference between male and female mean scores when exposed to CTM could be as a result of geographical location and content scope and the teaching strategies appeared by Financial Accounting teacher.

# Effects Of CTM On Academic Achievement Of High And Low Achieving Students in Financial Accounting

Findings of the study analysis revealed in research question three revealed that the high achieving students achieved more academically than the low achieving students taught with CTM. This finding corroborated with the findings of Ishaq (2016) that high ability students exposed to collaborative learning strategy had a higher mean gain when compared to low ability students exposed to the same strategy. This finding also agreed with the finding of Adolphus, Alamina and Aderonmu (2013) that low ability students always shy away from mathematical calculations involved in physics during collaborative learning classes compared to high achieving students who does not

# **Interaction Effect Of Teaching Methods And Gender On Academic Achievement In Financial Accounting**

The result analysis in hypothesis three showed that there was no significant interaction effect of teaching methods and gender on academic achievement in Financial Accounting. This finding supported the finding of Ibe and Nwosu (2003) that there was no interaction effect due to gender and teaching method on students' academic achievement. This finding also agreed with the finding of Nweke, Abonyi, Omebe and Njoku (2014) that there was no interaction effect between method and gender on pupils' achievement in basic science and technology. Finally, this finding was in line with the finding of Nwafor (2012) that there was no

significant interaction effect between gender and instructional method. The fact that no interaction effect it was noticed showed that Financial Accounting is important to both male and female students hence, teachers should adopt collaborative teaching method in teaching irrespective of the gender

#### **Conclusion**

From the students' perspective, Financial Accounting is considered as one of the hardest subjects in schools and they believe that only special gifted students understand the concept. The findings of this study, however, have shown that collaborative teaching method is an innovative and effective mode of teaching with the capacity of improving students' academic achievement in Financial Accounting. Finally, it could be concluded that teacher use of collaborative method in instructional delivery of financial accounting irrespective of gender, the students whether male or female will improve in their academic achievement in Financial Accounting in secondary schools

# **Implications of the Study**

The findings of this study have some implications for education stakeholders. It was found that collaborative teaching method increased students' academic achievement in Financial Accounting. This implies that if Financial Accounting teachers involve their students actively in the teaching-learning process through collaborative teaching method, they will acquire in-depth knowledge which will

help them to achieve higher in tests and examinations and as well perform better in the labour market after graduation.

The result also indicated that there was no significant difference of teaching methods and gender on students' academic achievement in Financial Accounting. Thus, the collaborative teaching method favoured both male and female students equally, showing that the method is effective in instructional delivery in Financial Accounting for both male and female students. This implies that Financial Accounting teachers should apply it in teaching Financial Accounting subjects irrespective of gender of the students. To the curriculum planners, the implication is that collaborative teaching method should be included in the curriculum of secondary schools as method of teaching to be emphasized by teachers during teaching learning process especially in this 21st century where students centered learning is taking a lead.

#### Recommendations

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

1. Collaborative learning strategy should be used to enable secondary school students' performance better in Financial Accounting; therefore using this learning strategy would enhanced teaching and learning of the subject, and as

- such teachers should try to adopt it in teaching Financial Accounting students.
- 2. Conferences, seminars and workshops should be organized by professional associations, professional bodies and research organizations such as Association of Business Educators of Nigeria (ABEN) on the need for collaborative method in teaching Financial Accounting. The Nigerian Educational and Research Development Council (NERDC) should also incorporate collaborative learning strategy in Financial Accounting curriculum at secondary school level.
- 3. Federal, State and Local government should assist in the provision of necessary materials for effective use of Collaborative learning for the teaching of Financial Accounting.
- 4. Non-Governmental Organizations (NGOs) and Parent Teachers Association (PTA) should supplement and compliment government effort by providing materials for effective use of teaching strategy for the teaching of Financial Accounting.

# **Suggestions for Further Studies**

The following suggestions are made for further research:

1. Similar study could be carried out on collaborative learning and students' academic achievement and retention in a wider scope.

- 2. In addition, similar study could be conducted in senior secondary school level to find out the effect of collaborative learning strategy on the academic achievement on low ability students at senior secondary levels of education in other trade subjects.
- 3. Similar study could also be conducted in tertiary institutions to find out the effect of collaborative learning strategy on the interest and academic achievement of students at higher levels of Financial Accounting in Oyo State.

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Appendix A

Non-Equivalent Pre-test Post-test Control Group Design

Group	Pre-Test	Treatment	Post-Test	
Group 1	$O_1$	$E_1$	${ m O}_2$	
Group 2	$O_2$	$C_2$	$\mathrm{O}_2$	

Appendix B

Achievement of Students in Financial Accounting in WAEC from 2006 to 2015.

Year	Number Enrolled	Number Absent	Number of Passes with Percentage			Number of Failure with Percentage
			A1-A3	C4-C6	P7-P8	F
2006	19,463	417	570(%)	1,576(%)	9,980 (%)	6,920 (%)
2007	23,173	496	440	1,135	5,537	5,731
2008	23,73	574	942	1,769	7,750	12,698
2009	22,143	542	1,784	3,325	11,323	5,169
2010	22,658	552	3,130	3,969	12,412	4,174
2011	24,938	508	2,679	4,250	13,327	4,174
2012	24,938	508	2,679	4,250	13,327	3,178
2013	25,519	456	2,589	5,526	13,770	3,178
2014	23,722	468	3,563	5,317	14,248	126
2015	24,541	288	4,506	5,315	12,432	2,000
Total	213,468	4,808	22,882	36,432	114,106	47,348

Source: The West African Examinations Council (WAEC) Headquarters, National Head Office, Yaba, Lagos, 2006 to 2015

Appendix C

Names of the Public Secondary Schools and Gender in Oyo East Local

Government Area in Oyo State

S/N	Schools	Gen	Total	
		Males	Females	
1	Abiodun Atiba Memorial Institute	143	97	240
	School, Oyo			
2	Anglican/Methodist Secondary Grammar			
	School, Oyo	85	95	180
3	Anglican/Methodist High School, Oyo	154	152	306
4	Community High School, Durbar, Oyo	143	97	240
5	Community High School, Ajagba, Oyo	38	24	62
6	Durbar Secondary Grammar School, Oyo	83	54	137
7	Oba Adeyemi High School, Oyo	91	59	150
8	Olivet Baptist High School, Oyo	296	256	552
	TOTAL	928	982	1,910

Population Distribution by Schools and Gender

Source: Local Inspector of Education, Oyo East Local Government Area, Oyo, 2016

Appendix D
Sample Distribution by Schools and Gender.

	Name of Schools	ľ	Number of	SS II Stud Accoun	dents in Fina ting	ncial
		Expe	rimental	Con	itrol	
		Male	Female	Male	Female	Total
C	Anglican/Methodist Secondary Grammar					
	School, Oyo			25	23	48
E	Olivet Baptist High School, Oyo	37	21			54
	TOTAL	37	21	25	23	102

Appendix E

Lesson Plan Topics on Financial Accounting for Six Weeks

Period	Duration	Topics
1 <sup>ST</sup> Week	50 Minutes	Administration of Financial Accounting Achievement
		Test (FAAT) to both experimental and control groups
2 <sup>nd</sup> Week	50 Minutes	Observing, drawing of cashbook specimen, its usefulness and the classification
3 <sup>rd</sup> Week	50 Minutes	Meaning of trading accounts, its preliminary calculation, reason for preparing trading accounts
4 <sup>th</sup> Week	50 Minutes	Explanation on Profit and Loss Accounts, examining
		accounts specimen, understanding total expenses items
		and how to ascertain gross profit in the accounts.
5 <sup>th</sup> week	50minutes	Explanation on balance sheet, how to post items in the
		balance sheet, reasons for preparing the balance sheet.
6 <sup>th</sup> week	50 minutes	Explanation on bank reconciliation, what bring about
		the discrepancies in the statement as per cash book of
		the customers and the statement of the bank

## Appendix F

### **Financial Accounting Achievement Test (FAAT)**

#### Section A

#### Students' Bio Data

Supply answers to the following information in the spaces below:

- (i). Class:
- (ii). Admission No:
- (iii). Sex:

#### **Section B**

#### **Financial Accounting Achievement Test**

Pre- Test Time Allowed: 50 minutes

**Instruction:** This is a multiple choice test and there is only one correct answer. Choose one of the alternatives (a) to (d) that best answers in the questions to complete the statement.

- 1. The sales day book is used to records
  - (a) Cash and Credit Sales
- (b) Credit Sales

(b) Cash Sales

- (d) Cash Book
- 2. Which of the following is used to record the purchase of fixed asset on

Credit?

- (a) Sales Journal
- (b) Journal Proper
- (b) Purchases Journal
- (d) Cash Book

3.	Pending the identification of an error the difference disclosed in a trial					
	Balance is temporarily treated in					
	(a) Suspense Account (b) Trading Account					
	(c) Control Account (d) Profit and Loss Account					
4.	Which of the following items is not shown in the Trial balance					
	(a) Closing Stock Value (b) Opening Stock Balance					
	(c) Opening Debtors Balance (d) Closing Asset Value					
	Use the information to answer question 5 $\qquad \qquad \mathbb{N}  :  K$					
	Rent prepaid 1/01/2003 600.00					
	Rent prepaid 31/12/2003 3, 000.00					
	Rent paid 31/12/2003 4, 000.00					
5.	Rent for 2003 amounted to:					
	(a) $\cancel{\$}4,000$ (b) $\cancel{\$}3,200$ (c) $\cancel{\$}3,000$ (d) $\cancel{\$}2,800$					
6.	Which of the following is correct about cost of goods sold?					
	(a) Opening Stock + Purchases – closing Stock					
	(b) Opening Stock + Sales - Closing Stock					
	(c) Opening Stock – Purchase – Closing Stock					
	(d) Opening Stock + Sales + Closing Stock					
7.	The cost of goods available is					
	(a) $\cancel{N}$ 3, 850 (b) $\cancel{N}$ 2, 900 (c) $\cancel{N}$ 2, 300 (d) $\cancel{N}$ 2, 000					
8.	The systematic recording of business transactions in monetary term is					
	known as:					
	(a) Auditing (b) Book-keeping (c) Debiting (d) Credit					

9.	An allowance given to a customer by a supplier for prompt payment is Called:
	(a) Trade Discount (b) Discount Received
	(c) Cash Discount (d) Cash Rebate
10.	Gross profit is calculated in the
	(a) Trading Account (b) Profit and Loss Account
	(c) Appropriation Account (d) Partners Current Account
	Use the following information to answer question 11 and 12
	Rent receivable accrued $1/01/2005 \Rightarrow 3,000$
	Rent receivable during the year 2005 № 5, 000
	Rent receivable during the year $31/12/2005$ $\stackrel{\text{N}}{=}$ 2, 500
11.	The entry for rent received in the profit and loss account for the year Ended 31 <sup>st</sup> December, 2005 is  (a) Credit profit and loss account with № 4, 500  (b) Credit profit and loss account with № 2, 500  (c) Debit profit and loss account with № 2, 500  (d) Debit profit and loss account with № 4, 500
12.	The rent receivable accrued as at 31st December 2005 is shown in the
	Balance sheet as
	(a) Current Asset (b) Current Liability
	(c) Long-term Liability (d) Capital
13.	The closing balance of N3, 368 Dr. is classified in the balance sheet as a
	(a) Fixed Asset (b) Current Liability
	(c) Current Liability (d) Capital

14. A debit entry in the cash account and a corresponding credit entry in Alieu's Account indicate a

- (a) Receipts of cash from Alieu
- (b) Payment of Cash to Alieu
- Sale of goods to Alieu for cash (d) Purchase of goods from Alieu for cash (b) Use the following information to answer questions 15 to 17

	N	:	k
Opening Stock	1	,800	)
Closing Stock	1.	,350	)
$Creditors-1/01/\!/2004$	1,	,275	
Creditors -31/12/2004	1.	,140	)
Cash paid to Creditors	6,	900	
Debtors - 1/01/2004		465	
Cash received from debtors	11,	130	
Debtors – 31//12/2004	3	300	

- 15. Sales for the year was
  - (a)  $\mathbb{N}$  11, 430
- (b)  $\mathbb{N}$  11, 295
- (c)  $\mathbb{N}$  11, 130 (d)  $\mathbb{N}$  10,965
- 16. Cost of sales for the year was
  - (a)  $\mathbb{N}$  110, 963
- (b)  $\mathbb{N}$  8,565
- (c)  $\mathbb{N}$  7, 215  $\mathbb{N}$  6,765
- 17. Gross profit for the year was
  - (a)  $\mathbb{N}$  4, 650
- (b)  $\mathbb{N}$  4, 200 (c)  $\mathbb{N}$  3, 750 (d)  $\mathbb{N}$  2, 400

- 18. Returns inwards is also called
  - (a) Purchases Returns
- (b) Sales Returns
- Goods on sold or Returns
- (d) Goods on Transit
- Carriage inwards is posted to 19.
  - (a) Trading Accounts
- (b) Profit and Loss Account

	(c) Appropriation Accounts (d) Balance Sheet
20.	Repair to air conditioners was debited to office equipment account. This is an error of  (a) Principles (b) Commission  (c) Original Entry (d) Compensation
21.	A three column cash book contains for
21.	
	(a) Cash, assets and liabilities (b) bank, cash and assets
	(c) cash, bank and returns (d) discounts, cash and bank
22.	In the balance sheet, the balance on the provision for depreciation account is
	Shown as
	(a) Addition to fixed assets (b) deduction from fixed assets
	(c) Addition to capital (d) deducted from current liabilities
23.	S. Sule sets aside from his private funds $\aleph$ 20, 000 for business purposes.
	The $\cancel{\$}$ 20, 000 is referred to as
	(a) Drawings (b) capital (c) loan (d) profit
24.	Where a wrong figure occurs in only one account with the second figure
	(a) Transposition (b) Suspense account
	(c) Omission (d) Commission
25.	An expenses is termed an 'accrual' because it
	(a) Is yet to be paid (b) is a profit and loss item
	(c) Must appear in balance sheet (d) is a trading account item
26.	Money received from a customer is recorded in the customer's account and
	Bank account; the accounting concept applied is
	(a) Business entity (b) dual aspect

	(c) going-concern (d) Money measurement
27.	Expenses accrued at the end of the accounting year as treated in the balance
	Sheet as
	(a) Current assets (b) Current liability
	(c) Fixed assets (d) Long-term liability
28.	Another name for owners' equity is
	(a) Loan (b) Debtors (c) capital (d) Overdraft
29.	Provision for depreciation in delivery can charge to
	(a) Trading account (b) Profit and loss account
	(c) Appropriation account (d) Manufacturing account
30.	Which of the following date lines is correct for a profit and loss account
	(a) For the year ended 31st December, 2009
	(b) As at 31st December, 2009
	(c) For the period 31st December, 2009
	(d) As at the year 2009
31.	A balance sheet shows only
	(a) Fixed assets and current assets
	(b) Assets and long –term liabilities
	(c) Assets and liabilities
	(d) Assets and capital
32.	Osa started business with N40, 000 cash. The accounting entry is debit
	(a) Cash account, credit cash account
	(b) Capital account, credit cash account

	(c) Purchases account, credit cash account
	(d) Expenses account, credit capital account
33.	When closing stock is overstated it would reduce
	(a) Cost of sales and increase gross profit
	(b) Gross profit and increase cost of sales
	(c) Purchase account and increase sales
	(d) Sales and increase purchase
34.	Cash receipts and payment involving discounts are entered in
	(a) three-column cash book (b) two-column cash book
	(c) Analytical cash book (d) Petty cash book
35.	Which of the following is not a book of original entry?
	(a) Cash book (b) Purchases ledger
	(c) Returns outwards journal (d) general journal
36.	The distinguishing feature between a two-column and three column
	Cash book is
	(a) Discount column (b) cash column
	(b) Bank column (d) ledger foli
37.	At the end of trading period cost of goods sold is debited to the trading
	Account while cost of services is debited to the
	(a) Balance sheet (b) manufacturing account
	(c) Trading account (d) profit and loss account
38.	A trading account is prepare to disclose the
	(a) Net profit for the year (b) gross profit or loss for the year
	(c) Accumulated fund for the year
	(d) Gross profit on manufacturing

40.	A company made net profit of N2, 000, 000 for the year and it net profit
	Percentage is 25%. What is the total sale for the year?
	(a) $\mathbb{N}$ 8, 000, 000 (b) $\mathbb{N}$ 6, 000, 000
	(c) $\cancel{\$}$ 800, 000 (d) $\cancel{\$}$ 500, 000
41.	Which of the following items is not treated in the profit and loss account?
	(a) Office expenses (b) salaries and allowances
	(c) Carriage inwards (d) discount allowed
42.	Subscription in advance is classified in the balance sheet as
	(a) An assets (b) a reliability (c) a deficit (d) a surplus
	Use the following information to answer questions 43 and 44
43.	Purchases Account is overcast by № 200, while wages account is under cast
	by $\cancel{\mathbb{N}}$ 200. This is
	(a) An error of omission (b) a compensating error
	(c) An error of commission (d) an error of principle.
44.	Which of the following is used to record the disposal of a fixed asset?
	(a) Journal proper (b) Petty cash book
	(c) Sales day book (d) Purchases day book
45.	Net profit in a business is
	(a) The amount of money taken out of the business by the
	owner
	(b) The cash in the business bank account
	(c) The difference between sales and cost of sales
	(d) Sale revenue less cost of sales and expenses

46.	A petty cash account has an impress of $\aleph$ 28, 000. The account has a debit				
	balance of ₹ 5,000. How mu	ich cash is needed to restore the impress?			
	(a) № 33, 000 (b) № 28,000 №	₹23,000 (d) ¥ 5000			
47.	Which of the following accounts has a credit balance?				
	(a) Returns inwards account	(b) machinery account			
	(c) Sales account	(d) cash account			
	Use the following information to answer questions 48 and 49				

	₩
Cash in hand	1,440
Cash at bank	2,440
Stock	2,500
Furniture and fittings	2,200
Creditors	1,000

- 48. The capital is
  - (a)  $\mathbb{N}$  7, 580
- (b)  $\frac{1}{8}$  6, 580 (c)  $\frac{1}{8}$  5, 380 (d)  $\frac{1}{8}$  1000
- 49. Which of the following is not an item in the profit and loss account?
  - (a) Drawings (b) interest (c) balances (d) bad debts
- 50. A loss made on the disposal of a fixed asset is debited to:
  - (a) Sales account
- (b) Purchases account
- (c) Profit and loss account
- (d) capital account.

Appendix G

Model Answers to FAAT (Pre-Test)

Item No	Correct Option	Item No	Correct Option	Item No	Correct Option	Item No	Correct Option
1.	D	16	В	31	A	46	A
2	C	17	В	32	В	47	D
3	D	18	В	33	В	48	A
4	A	19	D	34	C	49	C
5	В	20	C	35	В	50	В
6	В	21	C	36	A		
7	A	22	В	37	C		
8	C	23	A	38	A		
9	A	24	A	39	A		
10	A	25	D	40	A		
11	В	26	C	41	A		
12	В	27	A	42	A		
13	C	28	В	43	D		
14	A	29	A	44	В		
15	D	30	D	45	С		

# Appendix H

**Table of Specification for FAAT** 

Content Area		Comprehension		Analysis	Synthesis	Total
Cash book	3	2	2	2	1	10
Trading account	4	2	1	1	1	9
Profit and loss account	3	3	2	2	1	11
Balance sheet	5	2	1	1	1	10
Bank reconciliation	2	3	2	2	1	10
Total	17	12	8	8	5	50

# Appendix I

### **Financial Accounting Achievement Test (FAAT)**

#### **Section A**

#### Students' Bio Data

Supply answers to the following information in the spaces below:

- (i) Class:
- (ii) Admission No:
- (iii) Sex:

#### **Section B**

# **Financial Accounting Achievement Test**

(**Post-Test**) Time Allowed: 50 minutes

**Instruction:** This is a multiple choice test and there is only one correct answer. Choose one of the alternatives (a) to (d) that best answers in the questions to complete the statement.

- 1. The sales day book is used to records
  - (a) Cash and Credit Sales

(b) Credit Sales

(c) Cash Sales

- (d) Sales to Middlemen
- 2. Which of the following is used to record the purchase of fixed asset on credit?
  - (a) Sales Journal

(b) Journal Proper

(c) Purchases Journal

- (d) Cash Book
- 3. Pending the identification of an error the difference disclosed in a trial balance is temporarily treated in
  - (a) Suspense Account

(b) Trading Account

(c.) Control Account

(d.) Profit and Loss Account

4.	Which of the following items is not shown in the trial balance?  (a) Closing stock value (b.) Opening Stock Balance (c.) Opening debtors Balance (d.) Closing Asset Value Use the following information to answer question 5				
	Rent prepaid $1/01/2003$ $600.00$ Rent paid $31/12/2003$ $3,000.00$ Rent prepaid $31/12/2003$ $400.00$				
5.	Rent for 2003 amounted to: (a) $\frac{N}{4}$ ,000 (b.) $\frac{N}{3}$ ,200 (c) $\frac{N}{3}$ ,00 (d) $\frac{N}{2}$ ,800				
6.	<ul> <li>Which of the following is correct about cost of goods sold?</li> <li>(a) Opening Stock + Purchase - closing Stock</li> <li>(b) Opening Stock + Sales - Closing Stock</li> <li>(c) Opening Stock - Purchase - Closing Stock</li> <li>(d) Opening Stock + Sales + Closing Stock</li> </ul>				
7.	The cost of goods available is (a) N 3,850 (b) N 2,900 (c) N 2,300 (d) N 2,000				
8.	The systematic recording of business transactions in monetary term is known as:  (a) Auditing (b) Book-keeping (c) Debiting (d) Crediting				
9.	An allowance given to a customer by a supplier for prompt payment is called  (a) Trade Discount (b) Discount Received  (c.) Cash Discount (d.) Cash Rebate				
10.	Gross profit is calculated in the  (a.) Trading Account (b.) Profit and Loss Account  (c.) Appropriation Account (d.) Partners Current Account				
	Use the following information to answer question 11 and 12				
	Rent receivable accrued 1/01/2005 $\cancel{\times}$ 3,000 Rent receivable during the year 2005 $\cancel{\times}$ 5,000 Rent receivable during the year 31/12/2005 $\cancel{\times}$ 2,500				

11. The entry for rent received in the profit and loss account for the year ended 31<sup>st</sup> December, 2005 is

- Credit profit and loss account with ₩ 4,5000 (a)
- **№** 2,5000 (b) Credit profit and loss account with
- Debit profit and loss account with N 2, 5000 (c.)
- N 4, 5000 (d.) Debit profit and loss account with
- The rent receivable accrued as at 31st December 2005 is shown in the 12. balance sheet as
  - (a) **Current Asset**
- (b) Current Liability
- (c) Long-term Liability
- (d.) Fixed Asset
- 13. The closing balance of  $\mathbb{N}$  3,368 Dr. is classified in the balance sheet as a
  - Fixed Asset (a)
- (b) Current Asset
- (c) **Current Liability**
- (d) Capital
- 14. A debit entry in the cash account and a corresponding credit entry in Alieu's Account indicate a
  - Receipts of cash from Alieu (a)
  - Payment of Cash to Alieu (b)
  - (c) Sale of goods to Alieu for Cash
  - Purchase of goods from Alieu for cash (d)

Use the following information to answer questions 15 to 17

	<b>₩</b> : k
Opening stock	1,800
Closing stock	1,350
Creditors -1/01/2004	1,275
Creditors 31/12/2004	1,140
Cash paid to Creditors	6,900
Debtors- 1/01/2004	465
Cash received from debtors	11,130
Debtors 31/12/2004	300

- 15. Sales for the year was
  - N 11,430 (b) N 11,295 (a)
- (c) N 11,130
- (d)  $\mathbb{N}$  10,965

- 16. Cost of sales for the year was
  - (a)
- ₩ 110,963 (b) ₩8, 565
- (c) ₩ 7,215
- (d)  $\mathbb{N}$  6,765

17.	Gross (a)	s profit for th \$\frac{\textbf{\text{\tint{\text{\tint{\text{\tin}\text{\text{\text{\text{\text{\text{\text{\text{\tint{\tex{\tex		(c)	₩ 3,750	(d) ₩ 2,400
18.	Return (a) (c)	rns inwards is Purchases Goods on se		, ,	ales Returns oods in Trar	
19.	Carri (a) (c)	age inwards Trading Ac Appropriate	count	` '	rofit and Lo alance Shee	
20.	an er (a) P	ir to air condror of Frinciples Original Entry		(b) C	office equip ommission ompensation	ment account. This is
21.		Cash, assets	ash book contains s and liabilities and returns	(b) b	ank, cash ar	nd assets sh and Bank
22.	In the show (a) (c)	n as Addition to	fixed assets	(b) de	eduction fro	lepreciation account is m fixed assets n current liabilities
23.	S. Su (a)	₩ 20,000 is	from his private referred to as (b) capital (c)			ousiness purposes. The
24.		_	nis is an error of	(b) st	e account waspense accommission	with the second figure
25.	An expenses is termed an 'accrual' because it  (a) Is yet to be paid for  (b) Is a profit and loss account item  (c) Must appear in the balance sheet  (d) Is a trading account item					

26.	bank (a)	account; the accounting concept	applie spect				
27.	Expe sheet		coun	ting year as treated in the balance			
	(a)	Current assets	(b)	Current liability			
	(c)	Fixed assets	(d)	•			
28.		ther name for owners' equity is	1 (4)	Overaduate			
	(a)	Loan (b) Debtors (c) Capita	1 (a)	Overdrait			
29.	Prov	rision for depreciation in delivery	can cl	harged to			
	(a)	<u> </u>	(b) P	rofit and loss account			
	(c)	Appropriation account	(d) N	Ianufacturing account			
30.	Whic	Which of the following date lines is correct for a profit and loss accounts?					
	(a)	For the year ended 31st December, 2009					
	(b)	•					
	(c)		009				
	(d)	-					
31.	A ba	A balance sheet shows only					
01.	(a)	•					
		Assets and long term liabilities					
	(c)						
32.	Osa s	started business with Le40, 000 ca	ısh. T	The accounting entry is debit			
	` ′	-					
		-		t			
	(d)						
33.	Whe	en closing stock is overstated it wo	uld re	educe			
		_					
32.	Osa started business with Le40, 000 cash. The accounting entry is debit  (a) Cash account, credit capital account  (b) Capital account, credit cash account  (c) Purchase account, credit cash account						

34.	Cash (a) (c)	receipts and payment involving three-column cash book Analytical cash book	(b) tv	ents are entered in wo column cash book etty cash book
35.	Which (a) (c)	h of the following is not a book Cash book Returns outwards journal	(b)	•
36.	book	is		o-column and three column cash
	(a)	Discount column Cash column	(b)	
	(c)	Bank column	(d)	Ledger folio
37.	accou (a)	ant while cost of services is debit Balance sheet	ted to to (b) M	Ianufacturing account
	(c)	Trading account	(d) P	rofit and loss account
38.	A trac	ding account is prepared to discl	ose the	
	(a) (c)	Net profit or loss for the year Accumulated fund for the year		-
39.	In the (a) (b)	• • • •	e accou	untant
	(c)		each	period with the same amount of
	(d)	Main cashier accounts to the policy	etty ca	ashier for some expenses made by
40.	perce	ntage is 25%. What is the total s	ale for	•
	(a)	№8, 000,000 № 800,000		€ 6,000,000 ₹ 500,000
	(c)	<del>11</del> 000,000	(u. <i>)</i> #	<del>*</del> 500,000
41.		h of the following items is not tr		-
	(a)	Office expenses (b) Salaries		
	(c)	Carriage inwards (d) Discoun	t allow	vea

42. Subscription in advance is classified in the balance sheet as (a.) an asset (b) a reliability (c.) a deficit (d.) a surplus

Use the following information to answer question 43 and 44

- 43. Purchases Account is overcast by №200, while Wages Account is under cast by №200. This is
  - (a) An error of omission
- (b) a compensating error
- (c) An error of commission
- (d) an error of principle.
- 44. Which of the following is used to record the disposal of a fixed asset?
  - (a) Journal proper (b) Petty cash book (c.) Sales day book (d) Purchases day book
- 45. Net profit in a business is
  - (a) The amount of money taken out of the business by the owner
  - (b) The cash in the business bank account
  - (c) The Difference between sales and cost of sales
  - (d) Sale revenue less cost of sales and expenses
- 46. A petty cash account has an impress of  $\mathbb{N}$  28,000. The account has a debit balance of  $\mathbb{N}$  5000. How much cash is needed to restore the impress:
  - (a)  $\frac{1}{2}$  33,000 (b)  $\frac{1}{2}$ 28,000 (c)  $\frac{1}{2}$ 23,000 (d)  $\frac{1}{2}$ 5,000
- 47. Which of the following accounts has a credit balance?
  - (a.) Returns inwards account
- (b.) Machinery account

(c.) Sales account

(d.) Cash account

Use the following information to answer questions 48 and 49

	<b>₩</b> : K
Cash in hand	1,440
Cash at bank	2,440
Stock	2,500
Furniture and fittings	2,200
Creditors	1,000

48. The capital is

(a) 
$$\mathbb{N}$$
 7,580 (b)  $\mathbb{N}$ 6, 5980 (c)  $\mathbb{N}$ 5, 380 (d)  $\mathbb{N}$  1,000

- 49. Which of the following is not an item in the profit and loss account?
  - (a) Drawings (b) Interest (c) Balance
- (b) Interest (c) Balances (d) Bad debts

- 50. A loss made on the disposal of a fixed asset is debited to:
  - (a) Sales account
- (b) Purchases account
- (c) Profit and loss account
- (d) capital account.

Appendix J

**Model Answers to FAAT (Post-Test)** 

Item No	Correct Option								
1.	В	11.	D	21.	D	31.	C	41.	С
2.	В	12.	В	22.	В	32.	A	42.	В
3.	A	13.	В	23.	A	33.	A	43.	В
4.	C	14.	В	24.	D	34.	A	44.	A
5.	A	15.	D	25.	A	35.	A	45.	D
6.	A	16.	C	26.	В	36.	A	46.	C
7.	В	17.	C	27.	В	37.	D	47.	C
8.	В	18.	В	28.	C	38.	В	48.	A
9.	C	19.	A	29.	В	39.	C	49.	A
10.	A	20.	A	30.	A	40.	A	50.	C

## Appendix K

## Calculation of Internal Consistency of Reliability Coefficient of FAAT using

#### **Kuder-Richardson Formula 21**

Where: K =the total number of items in the test

 $\overline{X}$  = the mean of the test scores

 $S^2$  = the variance of the tests

$$\bar{x} = \frac{\sum fx}{N} = \frac{889}{30} = 29.63$$

$$S^2 = \frac{\sum f(x - \overline{x})^2}{N - 1}$$

$$S^2 = \frac{1,339.06}{30-1}$$

$$S^2 = \frac{1,339.06}{29}$$

$$S^2 = 46.17$$

K-R 21 = 
$$\frac{K}{K-1} \left[ 1 - \frac{\overline{x}(k-\overline{x})}{KS^2} \right]$$

Where 
$$K = 50$$
,  $\overline{X} = 29.63$ ,  $S^2 = 46.17$ 

K-R 21 = 
$$\frac{50}{50-1} \left[ 1 - \frac{29.63(50-29.63)}{50X46.17} \right]$$
  
=  $\frac{50}{49} \left[ 1 - \frac{29.63(20.37)}{2.308.50} \right]$ 

$$= 1.020 \left[ 1 - \frac{603.5631}{2,308.50} \right]$$

$$= 1.020[1 - 0.26145]$$

$$= 1.020[0.73855]$$

$$K-R 21 = 0.75$$

## **Appendix L**

Lesson Plan for Teaching the Experimental Group using Collaborative

Teaching Method

Week one:

Lesson One

**Subject:** 

Financial Accounting

**Class:** 

SS II

**Topic:** 

The Cashbook Accounts

**Duration:** 

50 Minutes

**Entry Behaviours:** Students are already familiar with some cash book specimen used by business organizations such as single column cashbook, double or two column cashbook and three column cashbook.

**Instructional Materials:** Observations, questioning, stimulus variation, planned repetition, motivation, explanation, reinforcement.

Performance Objectives: By the end of the lesson, the students should be able to:

- a. Describe cash book
- b. State types of cashbook
- c. Understand how to make entries in the cash book

**Step 1:** Advanced Preparation by the Teacher: The researcher adopted the work of Elliot Aranson (1971) in carry out the experiment under the following sub headings:

ŀ

- (1) The teacher shares the students in small groups of not more than six per group for effective observation and monitoring. The group should be diverse in terms of gender ethnicity, race, and ability.
- (2) The teacher appoints one student from each group as the leader. Initially, this person should be the most mature person in the group. The teacher leaves the students for about 10- 15 minutes to work with one another.
- (3) The teacher divides the day's lesson into 5-6 segments.
- (4) The teacher assigns each student to learn one segment, and make sure that students have direct access only to their own segment.
- (5) The teacher should be aware that there is no need for the students to memorize the subject.
- (6) The teacher gives students in these expert groups time to discuss the main points of their segment each to rehearse the presentation they will make to their collaborative group.
- (7) The teacher should bring the students back into their collaborative group.
- (8) Teacher asks each student to present her or his segment to their group for discussion.
- (9) The teacher allows students to observe the process. If any group is having trouble (e.g., a member is dominating or disruptive), make an appropriate intervention. Eventually, it's best for the group leader to handle this task. Leaders can be trained by whispering an instruction on how to intervene, until the leader gets the hang of it.
- (10) At the end of the lesson, teacher gives a quiz on the material. Students quickly come to realize that these sessions are not just fun and games but really count.

## **Step 2:** Teacher's Activities:

The teacher leads the students in a discussion about cashbook using the following questions such as (a) how many of you have seen where the cashbook is being used in business or organization?

- (a) Can you calculate the cashbook in financial accounting by following the specimen.
- (b) If yes, name the ones you have calculated.
- (c) Can you identify the specimen of cashbook on your tables?

  While the students are trying to identify and observe what they have, the teacher goes round the group observing their activity and answers their questions.

### **Step 3:** Students' Activities:

The students in their group try to

- (a) Identify the three column cash books specimen used in business.
  - (i) Single column cash book
  - (ii) Two column cash book
  - (iii) Three column cashbook
- (b) Explain the cash books according to their functions
- (c) Show at least two different cashbook specimen used in an organization.

The students while observing the cashbook specimen, group and try to draw them in their books. The students also record their observation as well as share ideas with their fellow students. They hold discussions in their small group with one of them acting as the leader of the group.

Competence Formation	Skills Targeted		
Having placed the students in small	Observation: Displaying types of		
groups, the teacher observes their ability	cashbook used in business studies		
to:	should have the ability to observe and		
a. Use the cashbook specimen.	identify these cashbook specimen used		
b. Use the cashbook specimen for	in business daily transactions.		
specific activities in financial	<b>Drawing:</b> Ability to sketch cashbook		
accounting with little errors under	specimen.		
teacher's guidance.	Apply appropriate techniques in the use		
c. Show how to use cashbook in	of cash book.		
business transactions.			

## **Step 4:** Group Discussion of the Activity:

After the small group discussion the students are brought together to share ideas about their collaborating. Problems arising from different groups are jointly discussed in the class with the teacher and students contributing. The teacher then explains the concept of cash books thus: cashbook is the book for recording detailed particulars of all money received and paid in business activities. All cash transaction and transactions with cheque must pass through the cash book. The

cashbook is a subsidiary book and it is really part of the principal book called ledger. It is the only book that combines the functions of the subsidiary and principal books. The cash and book accounts are taken out of the cash book, the principle of double entry system will remain unchanged. They are grouped according to their functions. The single column cashbook is used to record daily business transactions. The single column cashbook has no two sided part while two columns cashbook has two separate accounts i.e. cash and bank, are combined for the sake of convenience. There will be columns for date, particulars, folio, cash and bank in each side of the accounts. The teacher guides the students to understand three columns cashbook as an account. Three column accounts represents: Cash, bank and discounts combined into one book to follows the principle of the three-column cash book. In the three columns cashbook discounts allowed and discounts received will be introduced. Since cash discount is given as an inducement to the customers to settle their account promptly, then there must be a column for discounts allowed on the debit side of the cashbook and discounts received column on the credit. There are two type of discount: cash and trade discounts. Only cash discount will be recorded in the accounts. Trade discounts will not appear in the book.

The differences between the two discounts are that discount allowed is given to the customers for prompt payment of their accounts. It must be treated as expenses and hence debited to discounts allowed and credited to the personal account of the customers. Discount received from suppliers for prompt payment of their accounts. It is treated as revenue and hence it is credited to the discounts received account and debited to the personal account of the suppliers. The two discounts are classified under nominal accounts. The column on the debit side is the discount allowed and cash discount is centered opposite the name of the customers. It similarly contains all the discounts received from suppliers which are entered opposite their names on the credit side. This guides the students to understand the differences that exist among single, double and three column cash book and sketches them on the chalkboard.

#### **Evaluation and Closure:**

The students will be asked some questions such as

- (1) Describe cash book?
- (2) State types of cashbook?
- (3) Explain how to make entries in the cash book?

Week II: Lesson Two

**Subject:** Financial Accounting

Class: SS II

**Topic:** Trading Accounts

**Duration:** 50 Minutes

**Entry Behaviour:** Students have been seeing specimen of trading accounts

in the classes during the lesson.

**Instructional Materials:** Categories of items contained in the trading account such as opening stock, purchases, carriage outward, return outward, closing stock, cost of goods available for sale, cost of goods sold, gross profit, sales and sales return or return inwards.

**Performance Objectives:** By the end of the lesson, the students should able to:

- (a) Outline the meaning of trading accounts?
- (b) Demonstrate the preliminary entries in the trading accounts?
- (c) Explain the meaning of terminologies that contains in trading accounts?
- (d) Appreciate the relevance of trading account in business?

### **Step 1:** Advanced Preparation by the teacher:

The teacher distributes the specimen of trading account to be used by the students. Then, teacher shares the students in small groups of not more than six per group for effective observation and monitoring and appoints a student as the group head.

## **Step 2:** Teacher's Activity:

The teacher leads the students in a discussion about trading account asking the following questions:

- (a) Have you ever seen the trading account specimen or ledger before?
- (b) Mention the thing you observed in the specimen
- (c) Have you seen the specimen of trading account used in business transactions?
- (d) How many of you can prepare trading account?

## **Step 3:** Students' Activity:

The Students in their group try to:

- (a) Observe the trading account specimen on their tables and try to state their functions.
- (b) Look at the specimen closely taking note of the items contains there (e) itemize some terminologies contained in the trading account?
- (d) Explain the types of column needed to prepare trading account in the final account.

Competence Formation	Skills Targeted		
Having placed the students in small	Observation: Being guided by the		
groups, the teacher observes their	teacher the students should have the		
ability to:	ability to observe and identify trading		
(a) use trading account with limited	account specify trading account		
errors for specific transactions following teacher's guidance.	specimen used during business		
(b) Show confidence in handling the	transactions.		
trading account for recording simple transactions.	Demonstration: ability to set out		
(c) Explain the meaning of trading account and what to ascertain in	trading account column applying		
the account.	appropriate format such as 'T' format		
	and "two sided columnar form".		
	Drawing: ability to draw the format of		
	trading account using 'T' form.		

# **Step 4:** Group Discussion of the Activity:

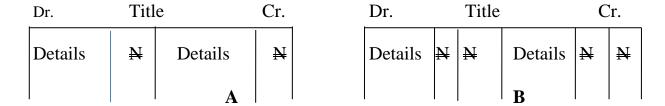
After the small group discussions, the students are brought together to share ideas about their collaborating. Problems arising from different groups are jointly discussed in the class with the teacher and the students contributing. The teacher then explain the concept of trading account preparation and setting out: Trading account is prepared to

ascertain the gross profit or loss for the period. It is prepared to conform to the rules of double entry. Since it contains the result of operation of a business over a period the heading should be Trading account for the year ended...... The trading account looks at the differences between the sales and the cost of goods sold. It is a revenue account which follows the principle of double entry. The left side is the debit side and the right side is the credit side. On the debit side is recorded stock at the beginning. This is added to purchases less returned outwards and then deducts closing stock of goods. The cost of goods sold will be arrived at. On the credit side are recorded sales less return inward or sales returns. The difference between the cost of goods and net sales is the gross profit. This could be done using different format such as 'T' form, Open-ended column form, vertical form and two sided column or form in the charts of different methods. The teacher guides the students to understand different items that contains in the trading account.

#### **Evaluation and Closure:**

The students will be asked the following questions when they come together.

1. Observe the following form used to prepare trading account and name them.



- 'T' form and two sided column form
- i. Ledger form and bank account form
- ii. Income and suspense form
- iii. Profit and loss and manufacturing account form
- 2. Demonstrate the preliminaries entries in the trading accounts?
- 3. Explain the meaning of some terminologies that contained in trading accounts?
- 4. Identify some items that contain on both side of debit and credit side of trading account?

Week III: Lesson Three

**Subject:** Financial Account

Class: SS II

**Topic:** Profit and Loss Account

**Duration:** 50 Minutes

**Entry Behaviour:** Students are aware that Profit and Loss account is used to

ascertain net profit in trading account.

Instructional materials: Categories of items contained in the profit and loss

accounts such as total expenses, net profits, gross profit or

loss, received, reduction in provision, any other income

outside, total gross income, doubtful debts, chalk board.

**Performance Objectives:** By the end of the lesson, the students should be able to:

a. Define profit and loss account

b. Investigate different types of items that contains in Profit and loss account.

c. Make the entries in the profit and loss account

d. Appreciate the relevance of profit and loss account

## **Step 1:** Advanced Preparation by the Teacher

The teacher distributes the specimen of profit and loss account to be used by the students. Then teacher shares the students in small groups

of not more than six per group for effective observation and monitoring and appoints a student as the group head.

### **Step 2:** Teacher Activity:

The teacher leads the students in a discussion about profit and loss account using the following questions such as:

- a. How many of you have seen a specimen of profit and loss account?
- b. What do you think to be ascertained in profits and loss account?
- c. Have you experience the uses of profit and loss account in any business activities before?
- d. If yes, how to prepare profit and loss account?
- e. How can you differentiate between debit side and credit side in the profit and loss account? While the students are trying to collaborate together to get some things, the teacher goes round the groups observing their activities and answers their questions.

## **Step 3:** Students' Activities

The students in their group try to:

- (a) Observe the specimen of profit and loss account on their tables
- (b) Identify items that contains in the specimen
- (c) Notice what to be ascertain in profit and loss account
- (d) Identify the items on both debit and credit side in the specimen

- (e) Looking at how to arrive at Net profit in the specimen
- (f) Consider the appropriate column used to prepare profit and loss account.

Competence Formation	Skills Targeted
The students are placed in their small	<b>Observation:</b> Under the teacher's
groups while the teacher observes	guidance, students should have the ability
them as they	to:
(a) Identify the different items contained in the specimen of	(a) Identify a specimen of profit and loss account.
profit and loss account.	(b) Observe the items contained in the specimen.
(b) Considers the column format used, identify how to arrive at Net profit.	(c) Investigate how to arrive at Net profit.
(c) Trying to sketch out the column used in the specimen with limited errors under	(d) Draw the specimen of profit and loss account.
teacher's guidance.	<b>Drawing:</b> ability to draw simple profit and
	loss account format and state some items
	contained on both debit and credit side.

### **Step 4:** Group Discussion of the Activities

After the small group discussions, the students will come together to share idea about their collaborating. Problems arising from different groups are jointly discussed in the class with the teacher and students contributing. The teacher then explains the concept or profit and loss account thus: The profit and loss account is the account that shows the net profit or net loss of an organization. Income or gains are credited, while expenses are debited. The profit or loss will be taken to the capital account. The teacher guides the students to identify the items contains in credit and debit side of the specimen as

- (a) **Credit Side:** The gross profit from the trading account will be recorded on the credit side and other income or gains will be added.
- (b) **Debit Side:** The students were guided to understand that total expenses will be recorded on the debit side. The difference between the credit and debit side is the Net profit, or Net loss. If the debit side is greater than the credit side we have Net loss and if the credit side is greater there is profit. The expenses incurred in the trading period will vary in accordance with the nature of the business. The profit and loss account must not be

prepared in isolation. It must be prepared with the trading

account. The teacher explains different items being referred to

as total expenses and cites some examples, in the specimen.

Specimen of different forms will be display on the chalkboard.

#### **Evaluation and Closure:**

Teacher evaluates the students' work using the following questions

1. Define Profit and Loss Account?

2. Identify the reasons for preparing profit and loss account?

3. Draw the format for profit and loss account using 'T' form?

4. State some items that appear on debit and credit of the account?

Week IV: Lesson Four

**Subject:** Financial Accounting

Class: SS II

**Topic:** Balance Sheet

**Duration:** 50 minutes

Entry Behaviour: Students are familiar with Balance Sheet in the financial

account textbooks but have not known how to make

entries.

Instructional Materials: The specimen of prepared balance sheet statement, ruler,

calculator and chalkboard.

### **Performance Objective:** Students should be able to:

- a. Identify at least two major methods used to draw balance sheet?
- b. Define balance sheet
- c. Highlight four major sub headings contained on both side of the balance sheet?
- d. Appreciate the relevance of balance sheet

### **Step 1:** Advanced Preparation by the Teacher:

The teacher distributes the specimen of balance sheet for the lesson to different tables to be used by the students. The teacher shares the students in small groups of not more than six per group for effective observation and monitoring and appoints a student as the group head.

### **Step 2:** Teacher's Activity:

The teacher leads the students in a discussion about balance sheet discussing the following questions such as:

- (a) Have you seen balance sheet specimen before?
- (b) If yes, what is it used for?
- (c) What items does it contain?
- (d) What are the informations disclosed in balance sheet?
- (e) Identify why balance sheet is not regarded as an account?

While the students are trying to collaborate together, the teacher goes round the groups, observing their activities and provides answers to their questions

## **Step 3:** Students' Activity:

The students in their group try to:

- (a) Observe the specimen of Balance sheet on their table
- (b) Identify what they are used for
- (c) Observe the different sub-topics contains in the specimen of Balance Sheet
- (d) Look at the various items contains in the specimen
- (e) Practice the contains in the specimen sheet
- (f) Identify what to ascertain or disclose in drawing the balance sheet.

<b>Competence Formation</b>	Skills Targeted			
Under the teachers' guidance, the	Observation: Displaying different column			
students should be able to:	format and the arrangement of the items in			
	the balance sheet.			
(a) Draw the format of balance				
sheet and identify some items	(i) Observe and identify sub-topics			
contains therein.	contain on each side of the balance			
(b) Give the major reasons for	sheet column.			
drawing the balance sheet				
(c) Notice different format used	(ii) Consider different items under each			
for the balance sheet	sub-topics in the balance sheet.			
	(iii) Demonstration: Ability to apply			
	appropriate methods in drawing the			
	specimen and state some items			
	contain on each side of the specimen.			

### **Step 4:** Group Discussion of the Activities

After the small group discussions, the students are brought together to share ideas about their collaborating. Problem arising from different groups are jointly discussed in the class with the teacher and students contributing. The teacher then explains concepts of balance sheet and items contains there in:

Balance sheet is the statement that shows the presentation of the summary of assets and liabilities in a well arranged form, so that the financial position may be clearly ascertained. The teacher guides the students to understand that

- (1) Balance sheet is not an account; it is a statement showing the balance running in the books. The balance sheet must be headed as "The balance sheet as at 31st ...
- (2) That assets are set out in order of permanence or liquidity. To comprehend the rules of balance sheet, teacher guides the students to understand that the various terms must be adequately analyzed. These terms include
  - (a) **Fixed Assets:** That they are of permanent nature and it creates revenue for the business. They are assets that can last

- for a long period of time e.g. land and building, plant and machinery, furniture and fitting, premises etc.
- (b) **Current Assets:** These can last for a short period of time e.g. stock of goods, cash in hand, cash at bank, prepaid expenses and marketable securities. The teacher guides them to know that current assets are easily realizable.
- (c) **Fictitious Assets:** These are merely debit balances not written off, items of expenditure of unusual character which are not recoupable e.g. preliminary expenses. Fictitious assets do not have any realizable value.
- (d) **Liquid Assets:** These are assets that can be easily turned into cash e.g. debtors, investments etc.
- (e) Wasting Assets: These are natural resources like standing timber, minerals deposit and oil that are physically consumed.
- (f) **Liabilities:** These are the indebtedness of the business to outsiders. It is the claim on the assets of the company.
- (g) Long Term Liabilities: These are obligations expected to be paid after one year. They are liabilities payable in the future e.g. % debentures.

- (h) **Current Liabilities:** These are liabilities which are payable within a short period of time, usually a year. They are events that require the enterprise to pay money, and provide goods or perform services which are due, e.g. creditor loan, overdraft and expenses accrued etc.
- (i) Capital: This is the owner's interest in the assets of the business. It can be referred to as owner's equity or proprietorship.
- (j) **Working Capital:** This is the excess of the current assets over the current liabilities i.e. current asset current liability.
- (k) Capital Employed: This is the total assets less current liabilities.
- (l) **Overtrading:** This is a situation whereby a firm has no working capital. The firm cannot meet its current liabilities and it may become bankrupt.

#### **Evaluation and Closure:**

Evaluate students' work using the following questions:

- (1) Mention at least two major methods used to draw balance sheet?
- (2) Define balance sheet?
- (3) Highlight at least four major sub-topics contained in the balance sheet?

(4) Appreciate by given two relevance of the balance sheet?

Step V: LESSON FIVE

**Subject:** Financial Accounting

Class: S. S. II

**Topic:** Bank Reconciliation Statement

**Duration:** 50 minutes

**Entry Behaviour:** Students are familiar with the banks and record money

paid and the sums drawn from the bank with cheques in

the cash book.

**Instruction materials:** The specimen of bank statement, cash book ledgers, long

ruler, calculators and chalk board.

**Performance Objectives:** By the end of the lesson, the students should be able to:

(i) Observe the book which the bank will record all the transactions in its own books.

(ii) Discover the reasons for differences between the cash book and bank statement.

- (iii) Drawing out the specimen of Bank Reconciliation statement and each book of customers.
- (iv) Explain the advantages of bank reconciliation statement.

### **Step 1:** Advanced Preparation by the Teachers:

The teacher distributes the specimen of Bank Statement and cash book for the lesson to different tables to be used by the students. Then, teacher shares the students in small groups of not more than six per group for effective observation and monitoring and appoints a student as the group head.

### **Step 2:** Teacher's Activity

The teacher leads the students in a discussion about operations of the Banks with customers using the following questions such as:

- (a) Have you been transacting business with the bank under current account or you have relatives operating current account?
- (b) How do you reconcile the disagreement of the cash book and that of the bank statement?
- (c) What bring about discrepancies between bank statement and cash book?
- (d) How many of you can identify Bank Statement and cashbook specimen?
- (e) What are the two ways bank reconciliation preparation could be dealt with?

While the students are trying to collaborate together, the teacher goes round the groups observing their activities and answers their questions.

## **Step 3:** Students' Activity:

The students in their group try to:

- (a) Identify the specimen of bank statement and cashbook distributed on the table for students to see.
- (b) Compare the specimen of bank statement together with cashbook.
- (c) Identify factors that may bring about differences between bank statement and cashbook.

<b>Competence Formation</b>	Skills Targeted			
Ability to prepare bank statement and	With the guidance of the teacher			
cashbook with limited control under	students should have the ability to			
the teacher's guidance.	(i) Observe and identify the specimen used for bank			
(b) pointing out some factors that leads	statement and cash book.			
to differences between bank statement	(ii) Identify the reasons for			
and cash book	disagreement between the cash book and bank statement.			
	(iii) Apply the appropriate methods			
	to reconcile the disagreement of			
	the cashbook and bank			
	statement.			

### **Step 4:** Group Discussion of the Activities

After the small group discussions the students are brought together to share ideas among themselves. Problems arising from different groups are jointly discussed in the class with the teacher and students contributing. The teacher explains the concept of Bank Reconciliation to the students thus: Bank reconciliation statement is a statement that is prepared to reconcile the disagreement of the cashbook and that of the bank statement. The conciliation is necessary in order to test the accuracy of the postings in the cash book by reconciling the balance of the cash book with that of the bank statement. The teacher guides the students to sketch and label the specimen of bank statement and cash book. The guiding teacher also explains some reasons for disagreement between the cash book and bank statement. Such as: (i) Unpresented cheques (ii) Uncredited cheques (iii) Dishonoured cheques (iv) Bank charges and Interest (v) Standing order (vi) Dividend (vii) Credit transfer (viii) Errors by the bank (ix) Direct debits (x) Others errors like Undercasting or Overcastting of the cash book balance through drawn.

## **Evaluation and Closure:**

Evaluate students' work using the following questions

- (1) Outline the book which the bank will record all cash book and bank statement?
- (2) Give two factors that brings about differences between bank statement and cash book are \_\_\_\_\_ and \_\_\_\_\_
- (3) Observe the below sketch `and identify its name.

Palanaa as par aash book	N	N
Balance as per cash book	<del>     </del>	<del>11</del>
Add: Unpresented cheque	X	XX
Credit transfers	X	
Dividend	X	
Undercasting of receipt	X	X
Less:		
Uncredited cheque	Xx	
Bank charges	X	
Bank commission etc.	X	X
Balance as per		XX
		I

(1) Explain the advantages of bank reconciliation statements.

## Appendix M

Lesson Plan for Teaching the Control Group using Conventional Teaching

Method

Week I: Lesson One

**Subject:** Financial Accounting

Class: SS II

**Topic:** Cash Book

**Duration:** 50 Minutes

**Performance Objectives:** By the end of the lesson, the students should be able to:

a. Describe cash book in financial accounting

b. State types of cashbook

c. Understand how to make entries in the cash book

Entry Behaviour: Students are already familiar with some cash book

specimen used by a business organization such as Single

column cashbook, double or two column cash book and

three column cash book.

Instructional Methods: Observations, questioning, stimulus variation, planned

repetition, motivation, explanation, reinforcement.

# **Instructional Procedure:**

Content Development	Teacher's Activities	Students Activities		
Step 1 Introduction	The teacher introduces the lesson by	The student pay		
miroduction	showing different types of cash book	attention and jots		
	specimen to the students such as	down points and		
	single column cash book, double	answer questions		
	column cash book and three column			
	cash book			
Step II Definition	The teacher explains that cash book	The students listen		
Definition	is the book for recording detailed	attentively and		
	particulars of all money received and			
	paid. The teacher asks the students to	questions.		
mention some of the items contain				
	in the cash book			
Step III Grouping of Cash	The teacher explains that cash book	The student listens		
book according to their use.	is a subsidiary book and it is really	and it is really attentively and traces		
then use.	part of the principal book called	the specimen or the		
	ledger. It is the only book that	cash book as they are		
	combines the functions of the	being passed around		

subsidiary and principal books. The the class. teacher explains that cash and bank accounts are taken out of the ledger and combined into a single book called cash book. It is the book for cash receipts, payments and transactions with cheques. In the treatment of the cash book. The principle of double entry system will remain unchanged. Any transactions on credit must not appear in the book. Step IV Explains that two column cash book: The students listen, Maintenance of cash book in an double column cash book, two jot down points and organization separable accounts cash and bank are answer questions. combined the sake of for convenience. That there will separate columns for date, particular, folio, cash bank. Teacher and explains that in the cash column:

	cash receipts and payments are	
	recorded in the bank column. All	
	payments made by cheques and	
	money received and paid into the	
	bank are recorded.	
Step V Drawing	The teacher draws some of the	The students sketch
	specimen of cash book on the	the cash book in their
	chalkboard as follows: Single	note books and copy
	Column cash book, two column cash	the chalkboard
	book and three column cash book.	
Summary	The teacher summarizes the whole	Summary
	lesson stressing the main points.	
Evaluation	The teacher evaluates the students	The students answer
	with the following questions:	the questions asked.
	a. Describe cashbook in financial	
	accounting?	
	b. State types of cash book?	
	c. Make entries of cash book used in	
	financial accounting.	

Week II: Lesson Two

**Subject:** Financial Accounting

Class: SS II

**Topic:** Trading Accounts

**Duration:** 50 Minutes

**Performance Objectives:** By the end of the lesson, the students should be able to:

a. Observe the meaning of trading accounts?

b. Demonstrate the preliminary entries in the trading accounts?

c. Explain the meaning of terminologies that contained in trading accounts?

d. Identify some items contains on debit and credit side of trading accounts?

e. Appreciate the relevance of trading account in business?

Entry Behaviour: Students have been seeing the specimen of trading accounts in the classes during the lesson.

**Instructional Materials:** Trading accounts specimen, cheque leave, sales voucher, receipts and chalkboard.

**Instructional Methods:** Observation, questioning, stimulus variation, planned repetition, motivation, explanation, reinforcement.

Content Development	Teacher's Activities	Students Activities
Step 1 Introduction	The teacher introduces the lesson by explaining that trading account is	
	prepared to show the gross profit or gross loss for the period. It is prepared to conform to the rules of double entry.	
	The teacher explains that trading account	The students pay
	looks at the difference between the sales and the cost of goods sold. It is a revenue	attention attentively.
	account which follows the principles of	
	double entry.	
Step II Explanation	The teacher explains that when preparing	
	this account stock of goods at the beginning of the year otherwise known as opening stock should be recorded on the	
	debit side. Purchases, this is, goods bought for resale should be record next,	
	while returns outward should be deducted	

Step III method of	from purchases before recording the net purchases figures and deduct closing stock of goods. The cost of goods sold will be arriving at. On the credit side are recorded sales less returns inwards. The difference between the cost of goods and net sales is the gross profit.  The teacher explains that the methods of	
method of presenting trading account	presenting the trading account used in called the 'T' method and two side columnar forms.	and try to sketch the method in the books.
Step IV setting out items used	The teacher sets some, items used in the trading account such as purchases: which is the goods bought for resale. It is the total of credit and cash purchases.  Purchases do not include the purchase of fixed assets. Purchases must be debited to the trading account.	

Sales: This is the total of cash and credit sale during the trading period. Sales is credited to the trading account and it do not include sales of fixed assets.

Opening Stock: This is the stock of goods available for sale at the beginning of the year.

Closing Stock: This is the stock of goods at the end of the trading period.

Return Outwards: These are goods returned to the suppliers. It must be deducted from the purchases for the period.

Carriage Inwards: This is the cost of transporting goods to the company. It is normally added to purchases.

Carriage Outwards: This is the cost of transporting goods to the customers. It is called carriage on sales and must be treated as expenses.

Cost of goods available for sale: This is the amount arrived at after adding the purchases to the opening stock. Cost of goods sold: This is the cost of goods actually sold. When the closing stock is deducted from the cost of goods available for sale, the remaining balance is the cost of goods sold. Cross Profit: This is the excess of the sale (less returns) over the cost of goods sold. It can equally be defined as the profit arrived at before the expenses are deducted. **Summary** Briefly go through the whole lesson Students are to stressing the main points. follow the summary **Evaluation** The teacher evaluates the students with The students answer the following questions:: the questions on the chalkboard. a. Observe the meaning of trading

account?

- b. Demonstrate the preliminary entries that contained in trading account?
- c. Explain the meaning of terminologies that contained in trading accounts?
- d. Identify some items that contained in trading account?
- e. Appreciate the relevance of trading account.

Week III: Lesson Three

**Subject:** Financial Accounting

Class: SS II

**Topic:** Profit and Loss Account

**Duration:** 50 Minutes

Instructional Materials: Categories of items contained in the profit and loss account such as total expenses, net/loss profits, received, reduction in provision, any other income outside, chalk board.

**Performance Objectives:** By the end of the lesson, the students should be able to:

- a. Define Profit and Loss Account
- b. Identify the reasons for preparing Profit and Loss Account
- c. Draw a format of Profit and Loss Account using 'T' form.
- d. State some items that appears on debit and credit side of the account

Entry Behaviour: Students are familiar with the specimen of Profit and Loss

Account in the class lesson.

**Instructional Methods:** Observations, questioning, Stimulus, Variation, Planned Repetition, Motivation, Explanation, Reinforcement

### **Instructional Procedure:**

Content Development	Teacher's Activities	Students Activities
Step I Introduction	The teacher introduces the lesson by	The students listen,
	explaining that profit and Loss	jot down points.
	Account is the second part of final	
	accounts.	
Step II Explanation on Profit and Loss	The teacher defined the Profit and	The students listen,
Account	Loss Account as the account that	attentively jot down
	shows the net profit or net loss of an	points.

organization. Income or gains are credited, while expenditures debited. The profit or loss will be taken to the capital account The teacher narrates items contained The students listen, Step III **Items** debit and credit side of the account on debit and credit side of the profit jot down points and and loss account as follows: Credit answer questions. side: The gross profit from the trading account will be recorded on the credit side and other income of gains will be added. Debit side: The total expenses will be recorded on side. debit The difference the between the credit side and debit side is the 'net Profit' or 'Net Loss'. If the debit side is greater, there is profit. The expenses incurred in the trading will period vary accordance with the nature of the business. The profit and loss account

	must not be prepared in isolation. It	
	must be prepared with the trading	
	account	
Summary	Briefly go through the whole lessons	The students listen
	stressing the main points.	attentively and jot
		down points. The
		students copy the
		chalkboard summary.
Evaluation	The teacher evaluates the students	The students answer
	with the following questions.	the questions on the
	a. Define Profit and Loss Account?	chalkboard.
	b. Identify the reasons for preparing	
	Profit and Loss Account.	
	c. List out some items that contained	
	on Debit and Credit side of Profit	
	and Loss Account.	
	d. Appreciate the relevance of profit	
	and loss account?	

Week IV: Lesson Four

**Subject:** Financial Accounting

Class: SS II

**Topic:** Balance Sheet

**Duration:** 50 minutes

**Performance Objective:** By the end of the lesson, the students should be able to:

a. Identify at least two methods used to draw Balance Sheet format.

b. Define Balance Sheet

c. Highlight four major sub-topics that appear in both side of Balance Sheet.

**Entry Behaviour:** Students are familiar with specimen of Balance Sheet and seen the format in the classroom setting.

**Instructional Materials:** Specimen of prepared balance sheet, pencil, chalkboard, long ruler.

**Instructional Techniques:** Observation, questioning, stimulus variation, planned repetition, motivation, explanation, reinforcement.

# **Instruction Procedure:**

Content Development	Teacher's Activities	Students Activities
Step I	The teacher introduces the lesson by	The students listen
Introduction	explaining that a balance sheet is not	attentively.
	an account but mere statement that	
	does not conform by the principle of	
	double entry.	
Step II Explanation of balance Sheet	The teacher explains that Balance	The students listen
of balance sheet	Sheet is a mere statement that shows	and jot down points.
	the presentation of the summary of	
	assets and liabilities in a well	
	arranged form, so that the financial	
	position may be clearly ascertained.	
	Balance Sheet is not an account; it is	
	a statement showing the balance	
	remaining in the books. The balance	
	sheet must be headed as "The	
	balance sheet as at 31st	

Step III Setting out of the items.

The teacher explains that the assets are set out in order of performance or liquidity. To comprehend the rules of balance sheet, the various items must be adequately analyzed as follows

a. **Fixed Assets:** These are assets which are of permanent nature and it create revenue for the business.

They can last for a long period of time e.g. Land, building, Equipment, Machinery, furniture

and Fitting etc.

b. Current Assets: These are assets that can last short period of time e.g. stock of goods, cash in hand, cash at bank, prepaid expenses and marketable securities. Current assets are easily realizable.

The students listen and jot down points.

Step IV Types of Assets The teacher explains that there are different types of asset such as **Fictitious assets:** These are merely debit balances not written off items of expenditure of unusual character which are not recoupable e.g. preliminary expenses. Fictitious assets do not have any realizable value.

Intangible assets: These are assets that cannot be seen and touched, although, they have value e.g. goodwill, patent, copy right etc.

**Liquid assets:** They are assets that can be easily tuned into cash e.g. debtors, investments etc.

Wasting Assets: These are natural resources like standing timber, minerals deposit and oil that are physically consumed.

The students pay attention, jot down points

Step V definition and types of liabilities

The teacher defined liabilities as the indebtedness of the business outsiders. It is the claim on the assets the company. The of teacher explains types of liabilities as long Term liabilities: These are obligations expected to be paid after one year. They are liabilities payable in the future, e.g. % Debentures. **Liabilities:** Current These liabilities which are payable within a short period of time, usually a year. They are events that required the enterprise to pay money, and provide goods of perform services which are due e.g. creditors, loan, overdraft and expenses accrued etc.

The students listen attentively and jot down points.

Step VI Definition	The teacher defined capital as the	The students listen
and types of capital	owner's interest in the assets of the	attentively, jot down
	business. It can be referred to as	points.
	owner's equity or proprietorship.	
	The teacher explains types of capital	
	as such	
	Working capital: This is the excess	
	of the current assets over the current	
	assets – current liability	
	Capital employed: This is total	
	assets less current liabilities.	
Summary	Briefly go through the whole lesson	The students copy the
	stressing the main points.	chalkboard summary
Evaluation	The teacher evaluates the students	The students answer
	with the following questions:	the questions on the
	a. Mention two main methods used	chalkboard.
	to draw balance sheet.	
	b. Define balance sheet?	
	c. List some items appears on both	

side of the balance sheet?

d. Highlight four major sub-topics

contained on both side of the

balance sheet?

Week V: Lesson Five

**Subject:** Financial Accounting

Class: SS II

**Topic:** Bank Reconciliation Statement

**Duration:** 50 minutes

**Performance Objectives:** By the end of the lesson, the students should be able to:

- a. Observe the book which the bank will record all the transactions in its own books.
- b. Discover the reasons for differences between the cash book and bank statement.
- c. Drawing out the specimen of Bank Reconciliation statement and cash book of customers
- d. Explain the advantages of bank reconciliation statement.

Entry Behaviour: Students are familiar with the banks and transacting with the bank.

**Instructional Materials:** The specimen of bank statement, cashbook ledgers,

long ruler, calculators and chalkboard.

**Instructional Techniques:** Observation, questioning, stimulus, variation,

planned repetition, motivation, explanation,

reinforcement.

### **Instructional Procedure:**

Content Development	Teacher's Activities	Students Activities
Step I: Introduction	The teacher introduces the lesson by	The students listen
	explaining that a business enterprise	attentively.
	will record money paid into the bank	
	and the sums drawn from the bank with cheque in the cash book. On	
	other hand the bank prepares	
	showing the transactions between it	
	and the customer is known as "Bank	
	Statement".	

### Step II:

# Explanation of Bank reconciliation

The teacher explains that as a matter of necessity, the balances of the cash book and bank statement must be equal. But at a given date the balance of the cashbook is unlikely to agree with the balance on the bank statement due to certain reasons. When there is a difference between the balances then there is a need for reconciliation. Teacher defines bank reconciliation as a statement that is prepared to reconcile the disagreement of the cash book and that of the bank statement. The reconciliation is necessary in order to test the accuracy of the postings in the cash book by reconciling the balance of the cashbook with that of the bank statement.

The students listen attentively and jot down points.

Step III: Reasons for	The teacher explains that there are	The students listen
disagreement in the bank statement and cash book	reasons for disagreement between	attentively and jot
	the cash book and bank statement as	down points.
	follows. Unpresented Cheque: This	
	is the cheque that has been drawn or	
	written but has not been presented	
	for payment at the bank.	
	Uncredited Cheque: This is the	
	cheques paid into the bank which the	
	bank has not credited into the	
	customer's bank account or the	
	cheque that a bank refused to pay.	
Step IV:	The teacher explains more on the	The students pay
More explanation on disagreement	factors that can bring disagreement	attention and jot
	between cashbook and bank	down points
	statement as such:	
	Standing order: This is an order	
	made by the customer to the bank to	
	make regular payment to somebody.	

e.g. hire purchase installments. It can be weekly, quarterly or yearly. Bank Charges: Bank usually charge money on current account, this would have been debited into the customer's account. **Credit transfer:** These are the payment made by customers of the firm directly into their account in the bank without the awareness of the firm. Errors by the bank, undercasting or overcasting, direct debit etc. **Summary** Briefly go through the whole lesson The students asks stressing the main points. questions and copy the chalkboard summary **Evaluation** The teacher evaluates the students The students answer with the following questions the questions on the

a. State the book which the bank will record all the transactions in its own books?

b. Give the reasons foe differences between the cash book and bank statement?

c. Drawing out the specimen of Bank Reconciliation Statement and cash book of customers?

d. Explain the advantages of bank reconciliation statement?

# Appendix N

# Format of Cash Book (Three Columns)

Dr. Cr.

Date	Particular	Folio	Discount	Cash	Bank	Date	Particular	Folio	Discount	Cash	Bank
			Allowed						Received		
			₩	₩	₩				₩	N	₩
	Customer		X	X	X		Supplies		X	X	X
			X	X	X				X	X	X
			XX	XX	XX 				XX	XX	XX —

**Appendix O** 

### Format of Trading Account for the Year Ended using ("T" Method).

DR. CR. N N Opening stock X Sales XXAdd purchases X Less: Returns Inwards X XXAdd carriage inwards X  $\mathbf{X}$ X Less: returns outwards Cost of goods available for sales X Less closing stock  $\mathbf{X}$ Cost of goods sold X Gross profit XXX

# Appendix P

Format of Profit and Loss Account for the Year Ended using ("T" Method)

DR.	101 1110 1 01	CR.
Add Total Expenses	N	N
Wages and salaries	X	Gross profit b/d X
Telephone	X	Discounts Received X
Bad debt	X	Bank Interest X
Increase in provision for bad debt	X	Reduction in provision
Motor Expenses	X	for bad debt X
Stationery	X	Commission Received X
Bank charges	X	Profit on Sales of Assets X
Loss on sales of assets	X	Recovery of bad debts X
Telephone	X	
Advertising	X	
Lighting and heating	X	
Repair	X	
Postages	X	
Rent	X	
Rate	X	
Discount allowed	X	
Motor	X	
Expenses	X	
General expenses	X	
Depreciation	X	
Net profit	X	
	X	
	XXX	XXX

Appendix Q

Format of Balance Sheet for the Year Ended using ("T" Method)

DR				C	<u>'R</u>
	N		₩		
Capital	XX		Fixed Assets		
Add net Profit	XX		Plant and Machinery	X	
Less cash or goods Drawing	XX		Premises	X	
<b>Long term Liabilities</b>	XX		Equipment	X	
% Debenture	XX		Motor Van	X	
Bonds	<u>X</u>	XX	Fixture and Fittings	X	
		XX	Investments	X	XX
<b>Currents Liabilities:</b>			<b>Current Assets</b>		
Loan	X		Stock	X	
Creditor	X		Debtor	X	
Bank overdraft	X	XX	Bank	X	
			Cash in hand	X	
			Bills Receivable	X	
			Income- in- arrears	X	
		****	Payment in Advance	X	XX
	=	XX			XX

# Appendix R

# Format of Bank Reconciliation and Adjusted Cash Book

# Starting with the adjusted cashbook balance

	N
Balance per adjusted cashbook	X
Add: Unpresented cheques	X
	X
	XX
Less: Uncredited cheques/lodgements	(X)
Add/ (Deduct): Bank erro(s)	X
Balance per bank statement	<u>X</u> <u>X</u>
Format 2	
Starting with bank statement balance	X
Balance per bank statement	X
Less: Unpresented cheques	X
Add: Uncredited cheques/lodgement	$\frac{X}{Y}$
Add/(deduct): Bank error	$\frac{X}{X}$
Balance per adjusted cash book	<u>X</u> <u>X</u>

### **Bank Reconciliation Statement as at the Date**

	N	¥
Overdraft as per cash book		XX (OD)
Add: Uncredited Cheque	XX	
Standing Order	XX	
Bank Charges	XX	XX
		XX
Less: Unpresented Cheque	XX	
Dividend	XX	
Credit Transfer <b>Balance as per bank Statement</b>	XX	$\frac{XX}{XX}$

If the overdraft as per bank statement is used, then the reverse will be the case.

#### 

 $\begin{array}{ccc} \text{Dividend} & \text{XX} & \text{XX} \\ \text{Credit Transfer} & \underline{\text{XX}} & \underline{\text{XX}} \\ & & \underline{\text{XX}} \end{array}$ 

Less: Uncredited Cheque XX

Bank Charges XX

Standing Order XX

Dishonoured Cheque XX XX Balances as per bank Statement XXX

### **APPENDIX S**

### **SPSS DATA OTPUT**

### **Research Question 1**

```
SAVE OUTFILE='C:\Users\DELL\Desktop\jega spss.sav' /COMPRESSED.

UNIANOVA Posttest BY Treatment WITH Pretest /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /PLOT=PROFILE(Treatment) /EMMEANS=TABLES(Treatment) WITH(Pretest=MEAN) /PRINT=ETASQ HOMOGENEITY DESCRIPTIVE /CRITERIA=ALPHA(.05) /DESIGN=Pretest Treatment.
```

### **Univariate Analysis of Variance**

[DataSet2] C:\Users\DELL\Desktop\jega spss.sav

#### **Between-Subjects Factors**

		Value Label	N
Treatment	1.00	Collaborative method	54
	2.00	conventional method	48

### **Descriptive Statistics**

	Treatment	Mean	Std. Deviation	N
Pre_test	Collaborative method	44.4133	7.75845	54
	conventional method	39.5228	8.37008	48
	Total	83.9361	16.12853	102
Post_test	Collaborative method	69.1233	4.10738	54
	conventional method	54.8945	5.44370	48
	Total	124.0178	9.55108	102

### **Hypothesis 1**

### **Tests of Between-Subjects Effects**

Dependent Variable: Post test

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Cource	Oquaics	Di	Mcan oquarc	'	Oig.	Oquarca
Corrected Model	1445.007 <sup>a</sup>	2	722.504	100.473	.000	.636
Intercept	4369.875	1	4369.875	607.685	.000	.841
Pretest	.397	1	.397	.055	.815	.000
Treatment	1308.402	1	1308.402	181.949	.000	.613
Error	826.968	115	7.191			
Total	164629.000	118				
Corrected Total	2271.975	117				

a. R Squared = .636 (Adjusted R Squared = .630)

### Research Questions 2 and 3

UNIANOVA Pretest BY Gender /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /PRINT=DESCRIPTIVE /CRITERIA=ALPHA(.05) /DESIGN=Gender.

### **Group Statistics**

	Gender	N	Mean	Std. Deviation	Std. Error Mean
СТМ	Male	33	21.4523	7.09090	1.09872
	Female	21	33.4134	6.25226	.76544

UNIANOVA Pretest BY Gender /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /PRINT=DESCRIPTIVE /CRITERIA=ALPHA(.05) /DESIGN=Gender.

#### **Group Statistics**

	Gender	N	Mean	Std. Deviation	Std. Error Mean	
Conventio	Male	25	25.5680	7.81249	1.91829	
nal	Female	23	29.2923	7.18247	.34747	

UNIANOVA Posttest BY Gender /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /PRINT=DESCRIPTIVE /CRITERIA=ALPHA(.05) /DESIGN=Gender.

#### **Group Statistics**

	Gender	N	Mean	Std. Deviation	Std. Error Mean
СТМ	Male	33	65.8523	4.96123	1.65432
	Female	21	71.2569	4.22826	.43345

UNIANOVA Posttest BY Gender /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /PRINT=DESCRIPTIVE /CRITERIA=ALPHA(.05) /DESIGN=Gender.

#### **Group Statistics**

	Gender	N	Mean	Std. Deviation	Std. Error Mean
Conventio	Male	25	61.1410	4.96249	1.54589
nal	Female	23	59.2823	4.56247	.78765

# **Hypothesis 2**

### **Tests of Between-Subjects Effects**

Dependent Variable: Posttest

	Type III Sum of				
Source	Squares	Df	Mean Square	F	Sig.
Corrected Model	1160.929ª	1	1160.929	67.876	.000
Intercept	40725.392	1	40725.392	2381.101	.000
Gender	1160.929	1	1160.929	67.876	.000
Error	1145.941	78	17.104		
Total	45582.000	81			
Corrected Total	2306.870	80			

a. R Squared = .000 (Adjusted R Squared = .000)

# **Hypothesis 5**

### **Tests of Between-Subjects Effects**

Dependent Variable: Post\_test

Caura	Type III Sum of	D's	Maga Cayana	-	C: -
Source	Squares	Df	Mean Square	F	Sig.
Corrected Model	887.654ª	4	121.431	6.667	.000
Intercept	102.504	1	102.504	9.345	.008
Achievement	946.939	1	946.939	31.436	.000
Gender	4.822	1	4.822	.432	.568
Treatment	41.915	1	41.915	1.999	.341
Treatment * Gender	15.93	1	15.93	.549	.416
Error	1231.742	201	19.286		
Total	18001.011	204			
Corrected Total	1505.553	203			

a. R Squared = .670 (Adjusted R Squared = .658)

### Hypothesis 3

### Levene's Test of Equality of Error Variances<sup>a</sup>

Dependent Variable: Post\_test

F	df1	df2	Sig.
5.598	3	114	.001

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Pretest + Treatment +

Gender + Treatment \* Gender

#### **Tests of Between-Subjects Effects**

Dependent Variable: Post\_test

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	1521.309ª	4	380.327	57.252	.000	.670
Intercept	4102.541	1	4102.541	617.568	.000	.845
Pretest	.085	1	.085	.013	.910	.000
Treatment	1179.924	1	1179.924	177.617	.000	.611
Gender	.064	1	.064	.010	.922	.000
Treatment * Gender	76.201	1	76.201	11.471	.001	.092
Error	750.666	52	6.643			
Total	164629.000	54				
Corrected Total	2271.975	53				

a. R Squared = .670 (Adjusted R Squared = .658)

### **Estimates**

Dependent Variable: Post\_test

			95% Confidence Interval		
Treatment	Mean	Std. Error	Lower Bound	Upper Bound	
Guided Inquiry	41.200 <sup>a</sup>	.435	40.339	42.062	
conventional method	32.918 <sup>a</sup>	.435	32.056	33.781	

a. Covariates appearing in the model are evaluated at the following values: Pre\_test = 13.7712.

#### **Pairwise Comparisons**

Dependent Variable: Post\_test

		Mean Difference (I-			95% Confidence Interval	
(I) Treatment	(J) Treatment	J)	Std. Error	Sig. <sup>b</sup>	Lower Bound	Upper Bound
Guided Inquiry	conventional method	8.282 <sup>*</sup>	.621	.000	7.051	9.513
conventional method	Guided Inquiry	-8.282 <sup>*</sup>	.621	.000	-9.513	-7.051

Based on estimated marginal means

- \*. The mean difference is significant at the .05 level.
- b. Adjustment for multiple comparisons: Bonferroni.

#### **Univariate Tests**

Dependent Variable: Post\_test

	0 (0			,	0:	Partial Eta
	Sum of Squares	df	Mean Square	F	Sig.	Squared
Contrast	1179.924	1	1179.924	177.617	.000	.611
Error	750.666	113	6.643			

The F tests the effect of Treatment. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

### 2. Gender

#### **Estimates**

Dependent Variable: Post\_test

			95% Confidence Interval					
Gender	Mean	Std. Error	Lower Bound	Upper Bound				
Male	37.029ª	.263	36.508	37.551				
Female	37.089 <sup>a</sup>	.550	36.000	38.178				

a. Covariates appearing in the model are evaluated at the following values: Pre\_test = 13.7712.

### **Pairwise Comparisons**

Dependent Variable: Post\_test

		Mean			95% Confidence Interval for Difference <sup>a</sup>	
(I) Gender	(J) Gender	Difference (I-J)	Std. Error	Sig.ª	Lower Bound	Upper Bound
Male	Female	060	.610	.922	-1.267	1.148
Female	Male	.060	.610	.922	-1.148	1.267

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

#### **Univariate Tests**

Dependent Variable: Post\_test

						Partial Eta
	Sum of Squares	df	Mean Square	F	Sig.	Squared
Contrast	.064	1	.064	.010	.922	.000
Error	750.666	113	6.643			

The F tests the effect of Gender. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.