EFFECTS OF ACTIVITY-BASED METHOD AND CONCEPT MAPPING STRATEGIES ON STUDENTS' ACADEMIC ACHIEVEMENT IN FINANCIAL ACCOUNTING IN SECONDARY SCHOOLS IN KADUNA STATE

Abubakar Sani
saniabubakaribrahim@gmail.com
Department of Vocational and Technical Education
Ahmadu Bello University Zaria
Kaduna State, Nigeria

&

Abubakar Jamila Muazu
jamilamuazuabubakar@gmail.com
Department of Business Education
Adamawa State Polytechnic, Yola

Abstract

The study was carried out to determine the effects of activity-based learning and concept mapping on students' academic achievement in financial accounting in secondary schools in Kaduna State, Nigeria. Two specific objectives are to determine the difference between the mean academic achievement scores of financial accounting students taught using the activity-based method and the lecture method in secondary schools in Kaduna State, Nigeria. Two research questions guided the study, which include: - What is the difference between the mean academic achievement scores of financial accounting students taught using the activity-based method and the lecture method in secondary schools in Kaduna State, Nigeria? Two null hypotheses were formulated, namely: there is no significant difference between the mean academic achievement scores of Students taught financial accounting using the activity-based method and those taught using the lecture method in secondary schools in Kaduna State, Nigeria. A quasi-experimental research design was adopted for this study. The study population comprised 751 SS 11 students. A total of 71 students were sampled using a purposive sampling technique. Three secondary schools were selected and randomly assigned to experimental groups and a control group. The instrument for data collection was the Financial Accounting Achievement Test (FAAT). This instrument was trial-tested and the reliability coefficient obtained was 0.72. The research questions were answered using mean and standard deviation, while the null hypotheses were tested at 0.05 level of significance using t-test and Analysis of Covariance (ANCOVA). The study found a significant difference in the mean academic achievement scores of students taught financial accounting using activity-based learning versus those taught using the lecture method. Both activity-based learning strategies had a significant effect on students' academic achievement in financial accounting. It was recommended that school administrators encourage financial accounting teachers to use activity-based learning strategies when teaching financial accounting in secondary schools. Kaduna State.

Keywords: Activity-based learning, concept mapping, academic achievement and financial accounting.

Introduction

Accounting is one of the most effective decision-making tools for management. It is an information and measurement system that records and communicates relevant, reliable, and comparable financial data about organizational business activities. It provides quantitative information about economic entities for internal and external users to use in making decisions. It helps in making better decisions, including assessing opportunities, product investment, social and community responsibilities. According to Udo (2017), data relating to economic activities of an organization are measured, recorded, and communicated to the interested parties for analysis, interpretation, and decision-making. Financial accounting is a branch of accounting that gathers and summarizes financial data for organizations. It is a concept and technique, according to Oguora (2025), by which financial data are processed into meaningful information for reporting, planning, controlling, and decision-making purposes.

Okonkwo (2024) stated that financial accounting is the aspect of accounting concerned with recording business transactions and the preparation of financial statements and reports to be used internally by management for planning and decision-making and externally by investors, creditors, and government agencies for investment decisions, tax returns, computation, and assessment. Generally, financial accounting is the scope of accounting covered in the Nigerian secondary schools and technical colleges. It is one of the vocational subjects offered at the senior secondary education level to enable students to acquire relevant knowledge and skills that are necessary for national growth and development (Seyi, 2024). Financial accounting, according to Ifedayo, Sheriff and Yetunde (2019), is tremendously important to the economy of Nigeria as it provides a solid foundation for the training of future accountants, managers, and entrepreneurs. It is evidence of responsibility in any human endeavor, be it in business, politics, and medicine, among others, because every individual, irrespective of his class, requires the knowledge of accounting to meet his day-to-day activities.

Dauderis and Annand (2024) defined financial accounting as the process of identifying, measuring, recording, and communicating organization's economic activities to users for decision-making. According to John (2009) the objectives of financial accounting at senior secondary schools include the enabling of students to appreciate the basic rules, functions and principles of accounting. The subject also helps to lay a proper foundation for further study of accounting and allied courses at a higher level to enable the students to understand basic accounting principles, practice, and their applications to modern business activities. To achieve the stated objectives, financial accounting teachers employ various instructional methods in the same to others class room for them to teach financial accounting effectively.

The teaching method comprises the principles and methods used for instruction to be implemented by the teacher to achieve the desired learning by students. These methods are determined partly on the subject matter to be taught and partly on the nature of the learners. For a particular teaching method to be appropriate and efficient, it has to be in relation to the characteristics of the learner and the type of method it is supposed to bring about. No single teaching method is appropriate in all situations and for all students. Many teaching methods and approaches have been in use in the teaching of financial accounting such as lecture and discussion among others (Pilato and Ulrich, 2014). However, these methods do not seem to be

yielding the expected results. Currently, there are opinions that activity-simulating and student-centered methods could improve students' academic achievement in different subjects better than teacher-centered methods. Umar, Abdullahi and Hassan (2015) advocated for use of activity-simulating and student-centered methods, such as the activity-based method and concept mapping, among others in the teaching of financial accounting, yet most teachers at the post basic education still use the conventional (lecture) method, which is teacher-centered in teaching financial accounting.

The activity-based method (ABL) is an innovative strategy that involves the participation of students in carrying out activities as part of the learning process. It is a range of pedagogical approaches to teaching the main concern is based upon the fact that the method should be based on doing some hands-on, minds-on or hearts-on experiments and activities. The idea of the activity-based method strategy is said to be rooted in the common notion that students are active learners rather than passive recipients of information (Golji and Dangpe, 2016). The method strategy, according to the researchers, means reversing the traditional teacher-centered understanding of the method process and putting the students at the Centre of the method process.

Research indicates that the activity-based method allows students to explore their own selves, provides students with a similar set of experiences so that everyone can participate in discussion on a level playing field, regardless of their socio-economic status. The strategy also stimulates students' thinking by requiring an understanding of the observed events rather than memorizing the correct responses. It encourages questioning of the observed events, promotes cause and effect thinking, and diminishes dependence upon authority (Malhotra *et al*., 2015). Using activities during the classroom to teach financial accounting may contribute to making the method permanent, creating positive attitudes towards the class and attracting interest for the class (Camci, 2022). Activity-based method engages students' ingenious, creative, and heuristic energies to build new knowledge on the existing knowledge acquired using hands-on materials to solve problems. Therefore, proper implementation of the activity-based method requires teachers to develop the appropriate mindset to meet their new roles (Danjuma, 2025).

Concept mapping is a new emerging strategy. It is a technique of visually representing the structure of information, concepts and their relationship. It can be used as a successful teaching-method strategy from primary school to university level (Cheema and Mirza, 2023). Concept maps are forms of graphic organizers that allow students to perceive the relationship between concepts through diagrammatic representation of concepts using key words. It helps students to organize concepts into hierarchies. Jacob, Joel, Linus and Lazarus (2016), concept maps are means of developing logical thinking and study skills by revealing connections and helping learners see how individual ideas or concepts relate for a larger whole.

Students' academic achievement according to Dhull (2017) is the extent to which a learner is profiting from instructions in a given area of method. It is the knowledge attained or skill developed in the school subject usually determined by test scores or marks assigned by teachers. It is an assessment strategy by which evidence about student's method is gathered through students work on performed task. Joseph and Thomas (2012) stressed that it is not easy to measure students' academic achievement. The common indicator of achievement generally measures by achievement test. These include National exams like NECO, WAEC, NABTEB and NAEP. However, academic achievement depends on the students' circumstances and situation, the quality of school's teachers as well as teaching strategies and many other factors. It is observed according to El Yakub (2016) that using varied and appropriate strategies of teaching like activity-based method and concept mapping will advance students in their quest to acquire

new knowledge, skills, attitudes and values particularly in financial accounting. In this study, such advances have implication beyond WAEC or NECO. Therefore, Students' academic achievement is very important because, it appears to be the major criterion by which the effectiveness and success of any educational institution could be judged. Okoro (2011) stated that there is a significant difference in the method and academic achievement of males and females in some subjects. Example, financial accounting, males and females adapt differently to different teaching methods, strategies and approaches.

Statement of the Problem

Many teaching methods have been in use by financial accounting teachers in secondary schools which include lecture, demonstration and discussion, among others. Lecture method was reported to be the dominant and traditional method of instruction (Ezenwafor and Akpobome, 2017). However, the method was not effective in enhancing students' academic achievement and has failed to cope with the problem of low academic achievement among secondary schools' students. The method completely focuses on the intellectual and disregards experiential method. Also, students do not fully partake in the method process. The researchers argued that a class room is no longer a place where learners just wait for an instructor to impart knowledge; students should also learn by generating their own ideas through active participation in the method process. Okoiye, Ofoegbu and Nlemadim, (2016) were of the same view that financial accounting teachers in secondary schools used teaching methods that always failed to take into consideration differences in ability and capability of students and this ultimately defeats the aim of teaching the subject in Nigerian secondary schools.

Rahman and Rahman (2021) posited that teacher-centered method, like lecture method, is widely used in the class room for teaching financial accounting in secondary schools and that teachers need to move from the teacher-centered to student-centered approach, such as activity-based method and concept mapping strategies, among others with a view to make teaching-method more effective for students in financial accounting classes. Hence this study sought to adopt the use of the two teaching strategies above in teaching financial accounting for an improvement in academic achievement in the subject.

Purpose of the Study

The main purpose of the study was to determine the effects of activity- based method and concept mapping strategies on students' academic achievement in financial accounting in secondary schools in Kaduna State. Specifically, the study sought to:

1. Determine the difference between the mean academic achievement scores of financial accounting students taught using the activity-based method and the lecture method in secondary schools in Kaduna State, Nigeria.
2. Determine the difference between the mean academic achievement scores of financial accounting students taught using the concept mapping and the lecture method in secondary schools in Kaduna State, Nigeria.

Research Questions

The study was guided by the following research questions:

1. What is the difference between mean academic achievement scores of financial accounting students taught using the activity-based method and the lecture method in secondary schools in Kaduna State, Nigeria?

2. What is the difference between the mean academic achievement scores of financial accounting students taught using concept mapping and the lecture method in secondary schools in Kaduna State, Nigeria?

Research Hypotheses

Based on the specific purposes, two hypotheses were tested at 0.05 level of significance:

$H0_1$ There is no significant difference between mean academic achievement scores of Students taught financial accounting using the activity-based method and those taught using the lecture method in secondary schools in Kaduna State, Nigeria.

$H0_2$ There is no significant difference between the mean academic achievement scores of students taught financial accounting using concept mapping and those taught using the lecture method in secondary schools in Kaduna State, Nigeria.

Methods

The design of the study was a quasi-experimental. Specifically, the non-equivalent, non-randomized control group, pretest, post-test design was adopted. It is a suitable alternative according to Okonkwo (2024), because it was not possible to have complete randomization of the subjects to avoid the disruption of the school organisation. The design was chosen because it aimed at establishing the effects of teaching strategies on students' academic achievement in financial accounting. The population of the study comprised 751 SS11 students offering financial accounting from 49 senior secondary schools in Kaduna State. The sample for the study consisted of 71 SS11 financial accounting students from in Kaduna State. This was made up of 33 male and 38 female students from three secondary schools. The instrument for collecting data in this study was the Financial Accounting Achievement Test (FAAT). The Financial Accounting Achievement Test contained two sections (A and B). Section A sought information on the personal information of the students in respect to gender. Section B constitutes the test items. The test item comprised 50 multiple-choice questions on company accounts. Each multiple-choice question has four optional answers (A - D), but only one correct answer. In order to ensure standard, all the test items were adapted from WAEC past question papers from 2011 to 2024 based on the selected topics. The instrument was validated by three lecturers, one from the Department of Accounting and two from Business Education in Ahmadu Bello University, Zaria. The validators were requested to scrutinize the items of the instrument in terms of their appropriateness and to ensure the relevance of the contents and clarity of statements. The inputs of the validators were useful in the modification of the instruments for data collection. A trial test was conducted at Government Secondary School, Sabon-gari, Kaduna State, using 28 Senior School (SS11) students offering financial accounting. The result of the instrument was used to conduct the difficulty index and discrimination index test in order to identify the difficulty and discriminating items. The result of the difficulty index was obtained at 77.11. For the discrimination index, it was 0.80. Also, the internal consistency of the instrument was established using Kuder Richardson formula (KR- 20), where the reliability coefficient was obtained at 0.78, indicating that the instrument was reliable. KR- 20 was chosen because it is the most suitable in multiple-choice items with right or wrong answers (Enemali, 2020).

This procedure was used for establishing the reliability of a test score obtained from a single administration of a single test form. An introductory letter was collected from the Department of Vocational and Technical Education, Ahmadu Bello University, Zaria, which was presented to the authorities of all the sampled schools to seek permission in order to use the

facilities in the schools to experiment. The researcher also met the teachers who assisted in conducting the experiment to solicit for their cooperation. Three financial accounting teachers were selected as research assistants (one from each school). The researcher organized a training session for each of the research assistants separately on how to deliver the activity-based method and concept mapping strategies effectively. A lesson plan and lesson notes were provided by the researcher to each research assistant. The research assistants helped the researcher in the delivery of the lessons to both experimental groups and the control group, as well as the administration of the instruments. With the aid of the research assistants, the two groups were subjected to a pretest with the Financial Accounting Achievement Test.

Thereafter, the experimental groups were taught using activity-based methods and concept mapping strategies, while the control group was taught using the lecture method. Immediately after delivery of the lessons, the post-test was administered to both groups. The data collection period lasted for sixth week. The first experimental group received instruction on the company, types of companies, shares and illustrations on shares using an activity-based method strategy. The second experimental group also received instructions on the company, types of companies, shares and illustrations on shares using the concept mapping strategy. The control group received instruction on the same topics using the lecture method (conventional method) for four weeks (one day each school in a week). The data obtained from the pretest and posttests in FAAT were analyzed using mean and standard deviation for answering the research questions, while t-test and Analysis of Covariance (ANCOVA) were used to test the null hypotheses at a 0.05 level of significance. The t-test was used to test the null hypotheses in order to determine the differences in the mean academic achievement scores of each of the experimental groups and the control group. For the hypotheses, if the computed p-value is greater than the 0.05 level of significance, the null hypothesis is accepted. But if the computed P-value is less than the 0.05 level of significance, the null hypothesis is rejected.

Results

Research Question One: What is the difference between the mean academic achievement scores of financial accounting students taught using the activity-based method and the lecture method in secondary schools in Kaduna State, Nigeria?

To answer research question one, the responses obtained from respondents was analysed using mean and standard deviation as shown below.

Table 1: Mean of Academic Achievement Scores of Financial Accounting Students Taught using the Activity-based Method and Lecture Method before Treatment in Secondary Schools in Kaduna State.

			Pretest
Group	N	Mean	SD
Activity Based	25	45.64	5.72
Lecture	27	44.74	11.04
Mean difference		0.90	

Source: Field Study 2026

Table 1 revealed that the difference between the mean academic achievement scores of financial accounting students taught using the activity-based method and the lecture method before treatment is 0.90. The pretest of the activity-based method had a mean gain of 0.90 above

the pretest of the lecture method. This means that both students in the activity-based method and the lecture method were on the same level of academic achievement before treatment.

Research Question Two

What is the difference between the mean academic achievement scores of financial accounting students taught using concept mapping and the lecture method in secondary schools in Kaduna State?

To answer research question one, the responses obtained from respondents were analysed using mean and standard deviation as shown below.

Table 2: Mean of Academic Achievement Scores of Financial Accounting Students Taught using Concept Mapping and the Lecture Method Before Treatment in Secondary Schools in Kaduna State.

		Pretest	
Group	N	Mean	SD
Concept mapping	19	47.57	4.93
Lecture	27	44.74	11.04
Mean difference		2.83	

Source: Field Study 2026

Table 2 revealed that the difference between the mean academic achievement scores of financial accounting students in the concept mapping and the lecture method is 2.83. As the pretest of concept mapping had a mean gain of 2.83, above the pretest of the lecture method. This means that there was only a slight difference in the pre-test mean score of academic achievement.

Test of Research Hypotheses

There is no significant difference between the mean academic achievement scores of students taught financial accounting using the activity-based method and those taught using the lecture method in secondary schools in Kaduna State.

Table 3: t-test Analysis of Significant Difference between Mean Academic Achievement Scores of Financial Accounting Students Taught using Activity-based Method and those Taught Using Lecture Method in Secondary Schools in Kaduna State.

Group	N	Mean	SD	Df	T	Sig. (2tailed)
Activit-y based	25	61.76	9.23	50	2.53	0.02
Lecture	27	55.19	9.50			

***Significant, p< 0.05. Source: Field Study 2026**

The result of the t-test analysis of independent samples in Table 2 indicates that there exists a significant difference between the mean academic achievement scores of students taught financial accounting using the activity-based method and those taught using the lecture method. Since the computed p-value (0.02) is less than the alpha value of 0.05, the null hypothesis was therefore rejected and concluded that there is a significant difference in mean academic

achievement scores of students taught financial accounting using the activity-based method and those taught using the lecture method. The finding suggested that teaching with an activity-based method had a significant effect on students' academic achievement in financial accounting than teaching with the lecture method.

Hypothesis Two

There is no significant difference between the mean academic achievement scores of students taught financial accounting using concept mapping and those taught using the lecture method in secondary schools in Kaduna State.

Table 4: t-test Analysis of Significant Difference between the Mean Academic Achievement Scores of Financial Accounting Students Taught using Concept Mapping and those Taught Using the Lecture Method in Secondary Schools in Kaduna State.

Group	N	Mean	SD	Df	T	Sig. (2-tailed)
Concept Mapping	19	62.84	7.93	44	2.87	0.01
Lecture	27	55.18	9.49			

***Significant, p< 0.05. Source: Field Study 2026**

The result of the t-test analysis of independent samples in Table 4 revealed that there exists a significant difference between the mean academic achievement scores of students taught financial accounting using concept mapping and those taught using the lecture method. Since the computed p-value (0.01) is less than the alpha value of 0.05, the null hypothesis was therefore rejected and concluded that there is a significant difference in mean academic achievement scores of students taught financial accounting using concept mapping and those taught using the lecture method. The finding suggested that teaching with concept mapping had a significant effect on students' academic achievement in financial accounting than teaching with the lecture method.

Findings of the Study

The following were the findings of the study:

1. There was no significant difference between the mean academic achievement scores of financial accounting students taught using the activity-based method and the lecture method before treatment.
2. There was no significant difference between the mean academic achievement scores of financial accounting students taught using concept mapping and the lecture method before treatment.

Discussion of Findings

The findings of the study revealed that teaching with an activity-based method is more effective than teaching with a lecture method as the post-test of the activity-based method had a mean gain of 6.57, above the post-test of the lecture method, where the null hypothesis stated that there was a significant difference between the mean academic achievement scores of students taught financial accounting using an activity-based and those taught using lecture method. The finding implied that teaching with an activity-based method had a more significant

effect on students' academic achievement than teaching with the lecture method. This is in line with the findings of Iwaju (2012), El Yakub (2016) and Mokiwa and Agbenyeku (2019), who all reported that teaching with an activity-based method is more effective than teaching with a lecture method and also reported that there is a significant difference in mean academic achievement scores of students taught using an activity-based method and those taught using a lecture method.

The findings of the study also revealed that the concept mapping strategy is more effective in teaching financial accounting in secondary schools than the lecture method. This implies that teaching with the concept mapping strategy improved students' academic achievement in financial accounting more than teaching with the lecture method. The null hypothesis stated that there was a significant difference between the mean academic achievement scores of students taught financial accounting using the concept mapping strategy and those taught using the lecture method. The finding corroborates that of Jacob, Joel, Linus and Lazarus (2016), Joseph, Jovita and Njideka (2016) and Gamnjoh (2019) who all stated that there is a significant difference in mean academic achievement scores of students taught using the concept mapping strategy and those taught using the lecture method. Similarly, the finding confirmed that of Chalwa (2024), Lawan Aminu and Gambo (2017) and Jack (2019), who also stated that those students taught using the concept mapping strategy achieved higher than those taught using the lecture method.

Conclusion

Based on the findings of the study, it was concluded that teaching with activity-based methods and concept mapping strategies was more effective than teaching with the lecture method. The implication is that the lecture method that is predominantly used in teaching financial accounting is not as effective as the activity-based method and concept mapping strategies. Therefore, if the lecture method alone is relied upon in teaching financial accounting, the improvement of the academic achievement of students will be difficult. Also, the activity-based method and concept mapping had significant effects on students' academic achievement.

Recommendations

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

1. Financial accounting teachers should be encouraged by the school administrators to use activity-based method and concept mapping strategies in teaching financial accounting in secondary schools as its improved students' academic achievement more than the lecture method.
2. The Kaduna state government and school administrators should incorporate the use of activity-based methods and concept mapping strategies in teaching financial accounting in secondary schools.

References

Camci, F. (2022). Effects of activity-based teaching grounded on active method on students' academic skills and method process. (Unpublished Master's thesis). Adiyam University, institute of sciences.

Chalwa, J. (2024). Effect of concept mapping strategy on achievement in chemistry of IX grades in relation to gender. *International Journal of Science and Research* (IJSR) ISSN (Online), 2319-7064.

Cheema, A.B & Mirza, M.S. (2023). Effects of concept mapping on academic achievement. *Journal of Research and Reflection in Education,* 7(2), 125-132.

Dhull, K. C. (2017). Concept mapping: Apragramatic approach to teaching social studies for citizenship education in Nigeria. *Nigerian Journal of Social Studies*, 25(1), 133-148.

Danjuma, G.S (2015). Effects of collaborative and competitive method on upper basic 11 students' interest and achievement basic science. A published PhD thesis submitted to the Department of Science Education University of Nigeria, Nsukka.

Dauderis, H. & Annand, D. (2024). Introduction to financial accounting (2nd edition) Canada: Printed and bound in Canada by Athabasca University; Published by Valley Educational Services Ltd, 1(21).

El-Yakubu, L.I. (2016). Effects of activity-based method and computer simulation strategies on students' interest and achievement in map reading and interpretation in Taraba State. A Thesis Submitted to the School of Post Graduate, Benue State University, Makurdi.

Enemali, J.D. (2020). Education and training for industrialization: Benin City: Stirling-Horden Publishers Ltd.

Ezenwafor, J.I. & Akpobome, C.E. (2017). Strategy consider effective for teaching accounting by Business Educators in Tertiary Institutions in Delta State. *International Journal of Educative Social & Science Education Research,* 5(3), 36-44.

Gamnjoh, D.D (2019). Effects of concept mapping and computer simulation teaching strategies on students' academic achievement in environmental concepts in Chemistry in Jalingo Education Zone. Unpublished master's thesis submitted to the Department of Science Education, Faculty of Education, Taraba State University.

Golji, G.G. & Dangpe, A.K.D. (2016). Activity-based method strategy (ABLS) as best practice for secondary mathematics teaching and method. *International Advanced Journal of Teaching and Method,* 2(9), 106-116.

Ifedayo, O.A., Sheriff, A.A., & Yatunde, T.O. (2019). A comparative analysis of academic performance of financial accounting students in Day and Boarding School. *International Journal of Educational Benchmark,* 13(1).

Iwaju, N. P. (2012). Effects of activity-based teaching strategy on academic achievement and retention in basic science concepts among Junior Secondary Schools Students. A thesis submitted to the Department of Post Graduate Studies, Ahmadu Bello University Zaria, June, 2012.

Jack, G. (2019). Effect of concept mapping instructional strategy on secondary school students' academic achievement in acids, bases, and Salts. *Ilorin Journal of Education,* 39, 74-84.

Jacob, F. Joel, F., Linus, K. S., & Lazarus, G.N. (2016). Effects of concept mapping and brainstorming instructional strategies on Junior Secondary School Students' achievement in social studies in Mubi Education Zone, Nigeria. *British Journal of Education, Society and Behavioral Science, 18*(2), 1-18.

John, 1. (2009). History of Accounting. Retrieved from http://www.articlealley.com/article 781249 22.html on 17/6/2017.

Joseph, C.O., Jovita, C.E. & Njideka, E. (2016). Effect of concept mapping instructional strategy on students' achievement and interest in economics in secondary schools in Enugu Education Zone. Transylvanian Special Review: xxiv, (8), 1222-1230.

Joseph, L., & Thomas, A.D. (2012). School context and gender gap in education achievement. Retrieved on 6th June, 2014 from *http://asr.sagepub.com.*

Lawal, I. L., Aminu, S. & Gambo, D. A. (2017). Effects of the concept mapping method on the academic performance of agricultural science in senior secondary schools in Kaduna State.

Malhotra, S., Singh, S.K., Pandey, G.P., Nayyar, S., Sharma, A. & Singh, T. (2015). Study package for CETE (paper 1). McGraw Hill education (India).

Mokiwa, H.O & Agbenyeku, E.U (2019). Impact of activity-based teaching strategy on gifted students in Junior secondary schools in Nigeria. *Journal for Education of Gifted Young Scientist*, 7(3), 421-434.

Oguora, E.U. (2025). Basic financial accounting skills required for entrepreneurship development by Senior Secondary School students in Anambra State. Published master's thesis submitted to the Department of Business Education, Faculty of Vocational Teacher Education, University of Nigeria, Nsukka.

Okoiye, O.E., Ofoegbu, R.O. & Nlemadim, M.C. (2016). Effectiveness of collaborative method and emotional intelligence technique in enhancing managerial accounting competence among accounting undergraduates in South East. *British Journal of* Education*,* 4(2), 1-2.

Okonkwo, I.G. (2024). Effects of concept mapping and simulation-game teaching strategies on students' achievement and interest in environmental concepts in chemistry. A thesis submitted to the Department of Science Education, Faculty of Education, University of Nigeria, Nsukka.

Pilato, B. & Ulrich M.M. (2014). Is the case study method an effective pedagogical method for students to learn the fundamentals of financial accounting*? Proceedings of ASBBS*, 21(1), 541-555.

Rahman, K. & Rahman, W. (2021). Exploring the effective teaching methods for accounting subject in secondary schools. *Journal of Humanities & Social Science,* 26(4), 50-57.

Seyi, D. (2024). An overview of vocational and technical education in Nigeria under secondary school education system. *International Journal of Technology Enhancements and Emerging Engineering Research,* 2(6), 11-122.

Udo, A. (2017). Accounting education skills and competencies required by business education students for self- reliance in Nigeria. *Multi-disciplinary Journal of Science, Technology and Vocational Education.*

Umar, I. Abdullahi, Z. & Hassan H. (2015). Effects of cooperative method on secondary school students' achievement in financial accounting. *Paper presented at the International Conference on Accounting Studies, Johor, Malaysia, Retrieved from www.icas.my.*