

SD DOMBO UNIVERSITY OF BUSINESS AND INTEGRATED
DEVELOPMENT STUDIES (UBIDS)

TEACHING STRATEGIES AND SENIOR HIGH SCHOOL ACCOUNTING
STUDENTS' ACADEMIC PERFORMANCE: THE CASE OF SOME
SELECTED SCHOOLS IN THE WA TOWNSHIP.

ABUBAKARI KASSIM MAHASUS

2024

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BY

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A thesis submitted to the Department of Social and Business Education.

Faculty of Education and Life-Long Learning, SD Dombo University of
Business and Integrated Development Studies (Ubids), in partial fulfillment of
the requirements for the award of a Master of Philosophy Degree in Business
Education (Accounting Option)

September, 2024

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature..... Date.....

Name: Abubakari Kassim Mahasus

Supervisors' Declaration

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of the thesis laid down by the University of Business and Integrated Development Studies (Ubids).

Supervisor's Signature..... Date.....

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ABSTRACT

In Ghana, teachers in the various Senior high schools (SHSs) have employed various teacher-centered and student-centered strategies. However, the West African Examination Council (WAEC) results showed that the performance of financial accounting students in the Wa Township in the Upper West Region has been appalling for some time now. The study therefore examined various teaching strategies and how they influence the academic performance of students in Financial Accounting. Three SHSs were selected in a mixed-method research approach. A descriptive survey was used. A simple random sampling, informed by the Yamane sample selection approach, was used to select 179 second and third-year financial accounting students. Besides, 9 accounting teachers were interviewed as part of the study. Data collection was facilitated using questionnaires and interview guides as the primary instruments. Descriptive and inferential statistical techniques were employed in the data analysis. The study revealed that various teaching strategies, including lecture-based instruction, explanatory examples, real-world examples, case studies, group projects, technology integration, and cooperative learning, were employed in the instruction of financial accounting. The study further found that demonstration methods, group projects, role-playing, and cooperative learning significantly influence students' academic performance. In contrast, lecture-based instruction, guided practice, explanatory examples, visual aids, case studies, and technology integration do not significantly influence students' academic performance. It was recommended that the Ministry of Education through periodic in-service training should encourage teachers to integrate impactful teacher-centered methods, such as demonstration methods with student-centered strategies including, group projects, role-playing, and cooperative learning to enhance comprehensive learning and meet the diverse needs of students. The Ministry of Education and stakeholders such as school administrators, and teachers, are urged to adopt a teacher-centered and student-centered approach to financial accounting teaching in Wa township, focusing on regular assessment, feedback, and innovative techniques.

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to Prof. Marfo, my supervisor, for his invaluable guidance and insightful suggestions throughout the entire duration of this research. I extend special appreciation to the participants who took part in this study as respondents and generously shared the necessary information. I also wish to acknowledge the unwavering support of my colleagues and the dedicated staff of the Department of Social and Business Education. To all of them, I extend a heartfelt "thank you" for their assistance and encouragement throughout this research endeavor.

DEDICATION

To my HOD (Paul Tongkomah Saayir), Abdul-Hakeem Mufida, Nasiredeen Nurideen, Yakubu Abdul-Karim, Mr. Suleman Daud, Mr. Nuhu and Suleman.

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CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Teaching plays a critical role in the realization of the educational goals of a nation. Consequently, across the globe, to promote the successful delivery of curricula in schools, specific guidelines for the different levels of the education system have been developed (Almusharraf & Khahro, 2020). This is to ensure that the nation's educational goals benefit all people in terms of their relevance to personal and societal needs, consistent with environmental and contemporary realities (Leal Filho et al., 2019). In Ghana, to ensure the holistic development of citizenship, the national education policy has made provisions such as providing teaching learning resources and organizing in-severe training for teachers and supervisors to enhance quality service delivery (Donkoh, Wing-on, & Donkor, 2020). These provisions, are envisaged to help all children with various educational necessities have access to high-quality education intended to make education both functional and relevant (Addo, 2019). Ugwuadu and Junduwa (2021) contend that the achievement of the educational goals of a nation is contingent upon the availability of certain critical factors including teaching materials, curriculum, teachers, and students' interests.

To help students develop their knowledge and skills, in Ghana, various disciplines have been added to the secondary school curriculum. Notable among the subjects are vocational electives or non-vocational electives. Besides, to assist students in gaining the information and skills needed for national growth and development, the country offers financial accounting as

one of the vocational subjects in secondary schools (Alao & Ukpong, 2020). According to Annand and Dauderis (2021), accounting concerns itself with finding out, quantifying, recording, and providing an explanation to the users of an organization's financial activities, with the view to making sound judgments. Those who work for an establishment and are responsible for planning, structuring, and managing the business are internal consumers of accounting information. As explained by the American Institute of Certified Public Accountants, financial accounting involves accurately documenting, categorizing, and summarizing financial events and finance-related activities and evaluating their results. It implies that accounting needs to figure out how much money is, has been, or will be spent on transactions (usually buying and selling transactions). The goal of financial accounting at the secondary level is thus, to help students become more mathematically inclined and give them more background knowledge for future business courses (Nacca, 2019)

Students who excel in financial accounting can immediately find a job in various life-enriching careers, including accountant, chartered accountant, banker, financial analyst, tax consultant, management consultant, lecturer, or teacher in accounting, etc. Abanyam and Terkuma's (2021) study revealed that financial accounting is taught to help students comprehend the fundamentals of the subject and provide them with the skills and information needed to function as a cashier, accountant, or other financial services professional. As the study of financial accounting sets the groundwork for the education of future business owners, accountants, managers, and other financial directors, it is essentially pivotal for developing the Ghanaian economy (Saayir & Bosu, 2021). This accentuates the relevance of effective teaching in accounting as a

subject. Brown and Warschauer (2017) said that effective teaching strategies engage students in the learning process through active participation, reflection, and feedback. As identified in the literature, Various effective teaching strategies in accounting education include; case studies, problem-based learning, and simulation exercises (Karpicke & Roediger, 2008; Komara & Sari, 2020). The application of these teaching strategies is to enable students to apply accounting concepts in real-world situations, enhancing their comprehension and retention of accounting principles.

The academic performance of senior high school accounting students is an essential indicator of the effectiveness of teaching strategies. Various studies have established a positive relationship between teaching strategies and academic performance in accounting education (Al-Jabari, 2018; Durso & Decoster, 2022; Sabri et al., 2020). Understanding strategies adopted by financial accounting teachers is of much public interest. As Alao and Ukpong (2020), poor student performance in financial accounting indicates a lack of satisfactory acquisition of knowledge and skills essential for individual and national sustainability. In this regard, the efficiency and productivity implications of financial accounting cannot be overstated in any business, especially in developing the economy of Ghana. The emerging picture is that Financial accounting is a challenging subject for students in many countries, and the causes of low performance have been studied extensively (Azangwe, Aziakpono, & Gavor, 2021).

1.2 Statement of the Problem.

In Ghana, previous studies have identified various factors affecting financial accounting students' performance (Ahinful & Tauringana, 2018; Effah & Nkwantabisa, 2022; Joseph, 2014). They often cited reasons to include economic factors, learner study habits, gender, mathematical ability, enthusiasm, family involvement, participation, academic effort, and academic environment (Mahboub, 2022). To overcome this problem, the government introduced various interventions such as training of professional accounting teachers, free education, free supply of textbooks, and extra teaching hours among others (Atta & Manu, 2015; Donkoh, Wing-on, & Donkor, 2020; Thompson & Casely-Hayford, 2008). However, the results of the West African Examinations Council (WAEC) from 2018-2022 consistently showed that students' financial accounting performance in Wa Township, has not been encouraging (see Table 1 below).

Table 1.0: Students' Performance in Financial Accounting

Wa Senior High School											
Year	Total	A1	B2	B3	C4	C5	C6	D7	E8	F9	P% pass
2018	68	0	0	2	2	1	8	7	15	33	19%
2019	84	0	0	1	6	1	9	19	15	33	20%
2020	99	0	0	5	6	3	17	15	21	32	31%
2021	30	0	0	0	0	2	2	1	10	15	13%
2022	52	1	5	23	9	7	4	3	0	0	94%
Average											35%
Islamic Senior High, Wa											
2018	54	1	2	16	0	7	0	19	9	0	48%
2019	43	0	0	0	0	1	1	4	3	34	5%
2020	67	0	5	11	9	4	17	7	10	4	68%
2021	61	0	0	7	4	5	14	12	11	8	49%
2022	59	0	0	0	1	1	3	6	13	35	8%
Average											36%
Jamiat Islamic Senior High											
2018	0	0	0	0	0	0	0	0	0	0	0%
2019	0	0	0	0	0	0	0	0	0	0	0%
2020	10	0	0	0	0	1	3	4	2	0	40%
2021	10	0	0	0	0	1	1	2	6	0	20%
2022	29	0	0	0	0	2	2	6	9	10	14%
Average											25%

Source: WAEC (2018- 2022).

Table 1.1: Regional Analysis of Students' Performance in Financial Accounting in Wa Township.

Year	Total	A1	B2	B3	C4	C5	C6	D7	E8	F9	P% pass
2018	818	14	15	66	48	47	313	104	82	129	61%
2019	670	3	8	40	39	19	306	90	98	67	62%
2020	1269	27	40	140	236	74	230	209	223	90	59%
2021	959	32	67	97	137	100	158	99	112	157	62%
2022	883	14	20	96	69	221	154	122	127	60	65%
Average											62%

Source: WAEC (2018- 2022).

Analysis of examination results from local schools in Table 1 indicates a significant decline in both pass rates and average scores. Over the past five years, the average pass rate has been below 50%. Specifically, Wa Senior High School had an average pass rate of 35%, Islamic Senior High School had an average pass rate of 36%, and Jamiate Islamic Girls Senior High School had an average pass rate of 25%. Many students are failing to meet even the minimum required standards. This is of major concern since any grade above C6 technically means disqualification of a student from gaining access to tertiary education in the country. The implication is that a significant number of potential students in the Wa township are prevented from pursuing a university education in Ghana. Comparing these local results with regional performance data in Table 2 above, regionally, the pass rate for financial accounting has been relatively stable, averaging around 62% over the same period. This stark contrast highlights a significant discrepancy between Wa Township and the regional average, underscoring a localized issue that warrants further investigation.

This low achievement is premised on outdated and ineffective teaching methods, such as rote memorization and lecture-based instruction, coupled with inadequate in-service teacher training and professional development (Abu, Marfo, & Ngmenkpiao, 2023; Osei-Owusu, 2022). These deficiencies lead to low student engagement, poor retention of subject matter, high failure rates, and limited preparedness for future opportunities (Baafi, 2020; Hervie & Winful, 2018).

Kwarteng and Sappor (2021) carried out a descriptive cross-sectional survey investigating the self-efficacy of final-year preservice teachers in teaching cost accounting at the pre-tertiary level. The study focused on preservice accounting teachers from the University of Cape Coast. Results indicated that these teachers demonstrated strong self-efficacy in classroom management, although their confidence in student engagement and instructional practices was comparatively lower. Moreover, the research highlighted that gaining mastery experience positively impacted preservice accounting teachers' self-efficacy in teaching cost accounting. Even though their study did not focus on financial accounting, the lesson gained from the study is that teaching strategies play an instrumental role in teaching and learning.

Osei-Tutu, Appiagyei, and Fentim (2014) conducted a descriptive study using a questionnaire to gather data from 29 teachers and 260 financial accounting students across seven senior high schools in the Tamale metropolis. Their research aimed to investigate how environmental factors within schools impact the academic performance of Senior High Financial Accounting Students in the Northern Region of Ghana. The findings indicated that the presence of residential facilities and adequate instructional materials positively correlates with students' academic achievements in financial accounting. Additionally, students who had access to essential instructional resources such as recommended textbooks, ICT tools, and library facilities utilized these resources to enhance their learning outcomes.

Ahinful and Taurigana (2018) conducted a descriptive study aimed at investigating the determinants of academic performance of accounting

students in Ghanaian secondary and tertiary education institutions. The study involved 500 respondents drawn from across the country. The findings indicated that motivational factors (expectation and volition) and engagement and commitment factors (academic interest and learning attitude) are related to performance in senior high schools. These studies highlight the need for a comprehensive examination of the factors contributing to the (low) performance of financial accounting students at the senior high school level. Helpful as these studies are, a critical factor that influences student behavior in terms of achievement, and teaching strategies, were silent in these studies.

In a survey conducted by Osei-Owusu (2022), 4,102 teachers from selected public senior high schools across four regions in Ghana (encompassing 77 districts and 97 schools in the Southern, Middle, and Northern belts) participated. The results indicated a significant positive association between professional development and professional knowledge ($\gamma = 0.26, p < 0.001$). Moreover, both professional development ($\gamma = 0.08, p < 0.001$) and professional knowledge ($\gamma = 0.04, p < 0.001$) showed positive correlations with academic performance. The study also discovered that professional knowledge partly mediated the link between professional development and academic performance.

Marcourt et al. (2022) investigated the impact of teaching methods on the comprehension and study of science education in Ghana. Their research identified teaching methods as a significant issue in science education within the country. The study recommended adopting learner-centered teaching

approaches as the most effective pedagogy for fostering student interest and understanding in science education. Although the study by Marcourt et al. (2022) concentrated on science education, it nonetheless, points to the critical role of teaching strategies in enhancing students' understanding, interest, and academic performance.

The foregoing discussions suggest that teaching strategies may be associated with students' academic performance. This relationship has attracted less scholarly attention. Hervie and Winful (2018), and Abreh (2017) wrote that efforts to address the issue of poor performance have included innovative teacher training programs, school-based management committees, piloting state-of-the-art teaching practices, and support from government and non-governmental organizations. These initiatives have had some positive impacts. Nonetheless, their success has been inconsistent (Hervie & Winful 2018). *The question then is, 'why despite efforts to improve student achievement rates through school-based management committees, steering ground-breaking teaching practices, and backing from government and non-governmental organizations (Abreh, 2017; Osei-Owusu, 2012), students' performance in financial accounting in the Wa senior high school, Islamic senior high school Wa, and Jamiat Islamic Girls senior high school have been low as per WASSCE summary results (2018-2022)?' Could this be attributed to poor systematic integration of modern teaching strategies?'*

1.3 Purpose of the Study

The study aimed to determine the relationship between teaching strategies and senior high school students financial accounting academic performance in Wa Township.

1.3.1 Specific Research Objectives

1. To investigate the teacher-centered strategies adopted in teaching senior high school financial accounting in Wa.
2. To investigate the student-centered strategies adopted in teaching senior high school financial accounting in Wa.
3. To examine how teacher-centered strategies influence the academic performance of senior high school financial accounting in Wa.
4. To examine how student-centered strategies influence the academic performance of senior high school financial accounting in Wa.

1.4 Research Questions

The researcher developed the following research questions to satisfy the study's goals.

1. What teacher-centered strategies are adopted in teaching senior high school financial accounting in Wa?
2. What student-centered strategies are adopted in teaching senior high school financial accounting in Wa?
3. How do teacher-centered strategies influence the academic performance of senior high school financial accounting in Wa?
4. How do the student-centered strategies influence the academic performance of senior high school financial accounting in Wa?

1.5 Research Hypothesis

1. H_0 : There is no significant influence of teacher-centered strategies on the academic performance of financial accounting students.
 H_1 : There is a significant influence of teacher-centered strategies on the academic performance of financial accounting students.

2. H_0 : There is no significant influence of student-centered strategies on the academic performance of financial accounting students.

H_1 : There is a significant influence of student-centered strategies on the academic performance of financial accounting students.

1.6 Significance of the Study

This study aims to provide practical guidance to teachers in senior high schools in Wa Township by offering effective teaching strategies for enhancing students' understanding of financial accounting. By equipping educators with evidence-based approaches, the research seeks to empower them to engage students more effectively and improve academic performance in this subject.

Additionally, the research aims to advance scholarly understanding by building upon existing literature on teaching strategies and academic performance in financial accounting education. Existing studies have looked at what motivates students to offer financial accounting at the senior high school (Abu, Marfo, & Ngmenkpiao 2023), how the school environmental factors impart students' performance (Appiagyeyi et al., 2014), and the effects of professional development and self-efficacy on teaching (Osei-Owusu, 2022; Kwarteng & Sappor, 2021). These studies, regardless of their contributions however, did not look at the association between teaching strategies and that of students' academic performance in financial accounting which is critical. The study contributes to the existing knowledge and also fills the knowledge gap in the literature by analyzing the association between the independent variable- teaching strategies and the dependent variable, academic

performance. Through a comprehensive review and synthesis of empirical studies and educational theories, the study aims to deepen insights into the relationship between teaching methodologies and student outcomes.

Moreover, the study aims to influence policymaking through evidence-based suggestions to enhance the teaching of financial accounting in secondary schools. By pinpointing effective strategies and areas needing improvement, the research intends to shape focused policy interventions and initiatives. These efforts are geared towards improving student learning outcomes in financial accounting at senior high schools in Wa Township and beyond.

1.7 Delimitation of the study

Contextually, this study is limited to teaching strategies, both teacher-centered and student-centered, and their association with students' academic performance. This has become necessary given the existing scholarly gap in how teaching strategies affect students' academic outcomes concerning financial accounting in senior high schools in the study locality.

Geographically, the study focuses on Wa Township. The justification is that it has in recent times witnessed an appalling result in the financial accounting as presented by the WASSCE summary results from 2018-2022. Notwithstanding the limited scope of the study, given the fact that other communities in the study region and Ghana as a whole, share similar characteristics, the results from the current study could be replicated in those areas or serve as a database for further comparative studies in the subject area.

1.8 Limitations of the Study

The sample size of the study was limited to selected schools in Wa Township. As such, generalization of the findings may pose a challenge. Future studies

could consider increasing the sample size to improve the generalizability of the findings. Moreover, the study relied on self-reported data from students, which may have introduced social desirability bias. Finally, the study did not investigate the influence of external factors such as parental involvement, socio-economic status, and student motivation on academic performance. These factors may have an impact on academic performance and could be considered in future studies.

1.9 Definition of Terms.

Teaching: It is the involvement of students to facilitate comprehensive learning as well as the application of knowledge, ideas, and procedures.

Teaching strategies: It is the tactics, steps, and processes an instructor uses when teaching.

Academic performance: A degree of success a person has had in completing a certain academic activity.

1.10 Organization of the Study

The study is divided into five chapters. The first chapter provides basic background information about the study, a description of the problem, the objective of the study, and the research questions. The chapter also discusses the study's relevance, boundaries as well as limitations. The second chapter reviews relevant literature concerning the study. It reviews the theoretical, conceptual, and empirical investigations pertinent to the study. The third chapter describes the research methodologies employed in the study. The research philosophy, approach, design, population, sampling, sampling technique, data collecting processes, instrument validity and reliability, and data collection and analysis procedures are all captured in the study. The

fourth chapter is devoted to the presentation and discussions of results. The overview of the study, conclusions drawn from the findings, and suggestions are all included in the last chapter, chapter five.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, the theoretical framework, conceptual review, and empirical review pertinent to the study are examined. The literature review enables the comparison of this study's findings with similar research to validate or refute previous assertions. The Social Constructivist Learning Theory is one of the primary theories analyzed in this chapter.

2.2 The Theoretical Framework

The study is grounded in the Social Constructivist Learning Theory, and Didactic Teaching Theory. The social constructivist theory is a prominent theoretical framework that has gained significant recognition in the field of education. This theory posits that knowledge is constructed through social interaction and collaboration (Vygotsky, 1978). The social constructivist theory is grounded in the notion that learning is an active and collaborative process. Vygotsky (1978) argued that knowledge is constructed through social interaction, and learning occurs through collaboration with peers and teachers. He asserted that students actively participate in their learning and that teachers play a crucial role in facilitating this process. This theory emphasizes the importance of the learning environment in promoting students' active engagement in the learning process.

The utilization of the social constructivist learning model can aid in the creation of a favorable learning atmosphere for students. Amna Saleem et al. (2021) presented an instructional model involving drawing from Piaget's early

1960s work. This model is highly feasible to implement within a classroom setting. The 5 E's instructional model encompasses five distinct stages: engage, explore, explain, elaborate, and evaluate, all of which serve a unique purpose in promoting a constructivist approach in the classroom (Omotayo & Adeleke, 2017). To fully comprehend this model, it is essential to understand the function and contribution of each phase. Figure 2.1 below, provides a detailed description of the five phases of this instructional model.

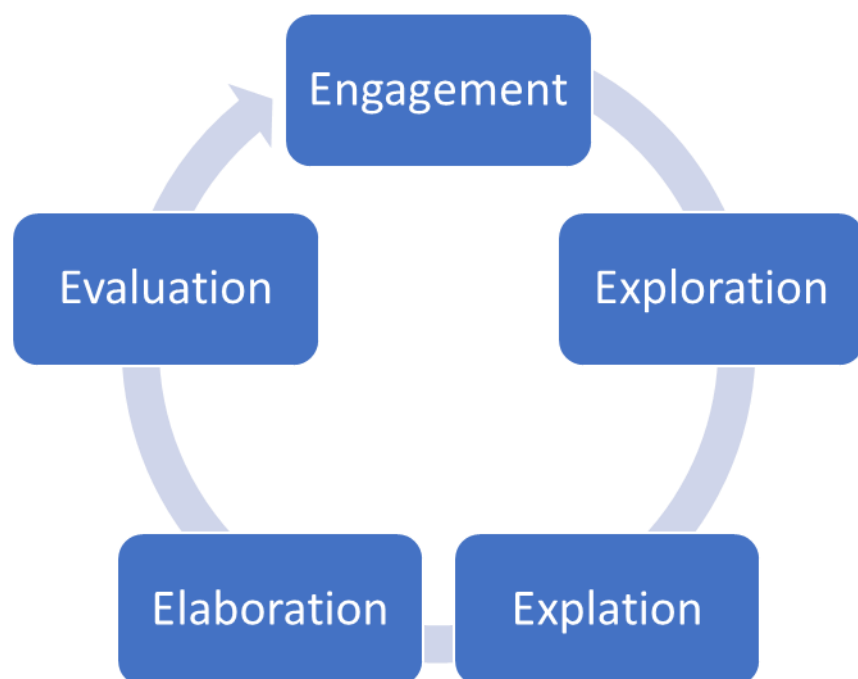


Figure 1: The 5 E's instructional model.

Source: (Omotayo and Adeleke, 2017)

Engagement

The instructional strategies used in this model involve encouraging learners to participate actively in classroom events by relating current knowledge understandings to their prior knowledge. These connections may involve understanding concepts, procedures, and behaviors. In this method, the teacher presents a situation, and the learners are tasked with identifying a solution to the problem. The teacher's role is to define the learning objective and create a

situation that involves the learners (Omotayo, & Adeleke, 2017). George (2020) asserts that the focus lies on the significance of the social constructivist theory in shaping effective teaching strategies. Geoge (2020) emphasizes the importance of employing engaging teaching methods that foster group projects and student participation. Creating a collaborative learning environment becomes key to motivating students to take an active role in their educational journey. The social constructivist educational theory places high value on students' involvement in their learning, aligning perfectly with the instructional approach teachers adopt. The social constructivist approach underscores the vital role of teachers as facilitators of learning.

According to Yang (2017), effective learning depends on instructional practices that encourage student engagement and teamwork. He suggested that teachers create an environment that encourages student and teacher communication. The social constructivist theory, which maintains that social interaction is a crucial aspect of learning, is consistent with this teaching approach. The theory also highlights the importance of collaboration among students. Amatepeh and Asabere-Ameyaw (2018) have discovered that active teaching strategies that encourage student collaboration can significantly improve academic performance in science. This conclusion aligns with the principles of social constructivist theory, which proposes that collaborative and interactive experience facilitates learning.

In General, the authors' argument is supported by current research and aligns with the principles of social constructivist theory. The use of instructional strategies that encourage active engagement, collaboration, and interaction

among students has significantly improved academic performance in various subjects. However, there are a few boundaries to consider. Firstly, the writers do not give examples of the teaching techniques they suggest using to encourage students' active participation and teamwork. A more thorough explanation of the exact methods and techniques that instructors might employ to foster a positive learning environment would have been beneficial. Secondly, while the social constructivist theory emphasizes the value of student participation, it is critical to understand that not every student may succeed in such settings. Some students can choose to work alone or have trouble interacting with others. To accommodate various learning styles and demands, teachers must use a range of teaching strategies. Overall, based on the evidence presented, it is reasonable to support the authors' argument that instructional strategies that encourage active engagement, collaboration, and interaction among students can improve academic performance. However, teachers need to use a range of instructional strategies that cater to diverse student needs and learning styles.

Exploration

The teacher creates the learning activities and conditions to give common and tangible learning experiences in this phase. The fundamental objective of exploration assignments is to produce learning experiences that may be exploited for subsequent teaching and learning, such as presenting a new topic or concepts, discussion, and skills development. This step cognitively and physically entails the learners identifying the specific circumstances, processes, and creating connections. At the same time, the teacher facilitates and gives coaching to their pupils in learning tasks (Sharma & Bansal 2017).

Also, exploration connotes the act of searching for or investigating something unknown or unfamiliar (Makel & Plucker 2019). In, exploration is conceived as the process where students actively seek out new information and make connections between ideas. This can be a valuable teaching strategy for promoting student learning and engagement.

Research has shown that exploration can lead to better academic performance among students. For example, a study by Gwekwerere and Gwekwerere, (2019) established that using exploration as a teaching strategy in a business education course improved students' academic performance. Specifically, the students exposed to the exploration-based teaching approach had higher average scores on their assessments than those taught using traditional lecture-based methods. In the context of senior high school accounting, exploration may be a very successful teaching strategy. Accounting contains difficult concepts and numbers, thus enabling students to investigate these concepts independently can result in a deeper comprehension and improved recall of the subject. Opoku and Ofori's (2018) study found that employing exploration-based teaching strategies was favorably connected with academic achievement in their research of senior high school accounting students in Nigeria.

Know that not all students or situations will respond well to exploration as a teaching technique is instructive. For instance, physically challenged students could struggle with exploration-based methods since they might need more organized and clear instruction (Makel & Plucker 2019). Additionally, depending on the type of content, exploration may be more effective in some subject areas than others. Overall, exploration is a promising teaching strategy

for promoting student learning and academic performance, particularly in the context of senior high school accounting. However, further research is needed to explore the effectiveness of this approach in other subject areas and with different student populations.

The author's argument regarding the use of exploration as a teaching strategy in the context of senior high school accounting appears to be well-supported by research evidence. The author highlights that exploration-based teaching can result in better academic performance among students and can be particularly effective in teaching complex concepts and calculations in accounting. The author also acknowledges that exploration as a teaching strategy may not be effective for all students or in all contexts and suggests that further research is needed to explore the effectiveness of this approach in other subject areas and with different student populations. The author's argument could be strengthened by providing more specific examples of exploration-based teaching strategies that are effective in accounting education. Additionally, the author envisages some of the potential challenges or limitations of using exploration as a teaching strategy, such as the need for careful scaffolding and guidance to ensure that students can effectively explore activities. Overall, the text's evidence seems to support the author's contention that exploration can be a promising teaching strategy for enhancing student learning and academic performance in senior high school accounting, but that more research is required to fully understand its potential advantages and drawbacks.

Explanation

The explanation phase furnishes the teacher and learners with related learning experiences to clarify the concepts, procedures, and skills. The explanation phase is known as teacher-directed or direct instruction that helps explain the concepts and skills that the learners have already explored in the previous phase. The most important feature of this phase is to present the concept concisely, clearly, and directly and move to the next phase (Amna Saleem et al., 2021). According to Boula et al. (2017), explanation as an instructional model involves providing students with a clear understanding of the underlying principles or concepts of a topic, which allows them to apply this understanding to new situations. This model emphasizes the importance of providing clear explanations, examples, and opportunities for practice to facilitate learning.

Accounting teachers can use an explanation to assist students to grasp the principles and ideas of accounting in the context of teaching strategies to enhance senior high school accounting students' academic performance. Students can get a greater comprehension of the subject matter by receiving concise explanations of accounting concepts such as financial statements, balance sheets, and income statements. Furthermore, presenting examples and case studies can assist students in applying these ideas to real-life circumstances (Molderez & Fonseca, 2018). Research has shown that 'Explanation' can be an effective teaching strategy for improving academic performance. For example, a study by Boula et al. (2017) discovered that using explanation as an instructional model improved students' academic achievement in accounting. Similarly, a study by Karim and Kaur (2017),

uncovered that this model improved students' critical thinking and problem-solving skills. Therefore, it is assumed that the use of Explanation as an instructional model will positively impact the academic performance of senior high school accounting students in the selected schools in Wa Township. To further support this suggestion, previous studies have also shown that the use of Explanation as an instructional model can help students develop a deeper understanding of the subject matter (Nokes, 2007; Desimone & Pak, 2017). Additionally, providing clear explanations can help reduce students' cognitive load and increase their motivation to learn (Stiller & Schworm, 2019).

On the other hand, it is essential to remember that this research has limitations. For instance, it is possible that the research by Boula et al. (2017) and Karim and Kaur (2017) had sample groups or instructional situations that prevented it from being generalized to other contexts. The validity of some of the listed research may also be weakened because it is new and may not have undergone extensive replication or testing. As a result, even if the general notion that explanation might increase academic performance in accounting sounds plausible, it is crucial to take more context and facts into account before coming to any solid conclusions or suggesting any instructional changes.

Elaboration

After the exploration and explanation phases, learners should be allowed and provided further experiences to extend, implement, and elaborate the concepts and skills. Moreover, the elaboration tasks provide learning experiences that contribute to learning (Amna Saleem et al., 2021). Elaboration is a critical

component of instructional models that enhances students' comprehension and retention of information (Endres et al., 2017). According to the cognitive load theory of Asma and Dallel (2020), working memory has a limited capacity to process information, and learning is optimized when instructional materials are presented in a way that minimizes cognitive load.

As a teaching strategy, elaboration involves expanding on the key points of a topic by providing additional information or examples that aid in understanding (Meter et al., 2016). In the context of senior high school accounting education, teaching strategies incorporating elaboration can effectively improve students' academic performance (Kumar & Muthukumar, 2021; Yawson, 2020). Kumar and Muthukumar's (2021) study revealed that a teaching model that included elaboration as a component significantly improved students' academic achievement in accounting. Similarly, Yawson's (2020) study reported that students who received instruction using elaboration had higher scores on accounting assessments than those who did not.

Research has further shown that the effectiveness of elaboration as a teaching strategy is influenced by several factors. For instance, the level of prior knowledge and cognitive abilities of students can affect their ability to comprehend and apply elaborative techniques (Endres et al., 2017). Also, the type of elaboration used, such as the relevance and novelty of examples, can impact its effectiveness (Arguel et al., 2019). However, it would have been beneficial if the authors had discussed some of the limitations of their argument, such as the potential for individual differences in the effectiveness

of elaboration, and the possibility that other factors may also impact student performance in accounting assessments. Additionally, the authors could have provided more information about the specific elaborative techniques used in the teaching model and how they were implemented in the classroom.

The available evidence suggests that elaboration is a promising teaching strategy that can be effective in improving students' academic performance in accounting. Therefore, it would be reasonable to recommend that accounting teachers consider incorporating elaborative techniques into their instructional practices. However, it is important to note that the effectiveness of elaboration may vary depending on individual differences and other contextual factors, and thus it should not be considered a one-size-fits-all solution to improve student achievement in accounting.

Evaluation

This phase provides feedback to the learners on the adequacy of their explanations and capabilities. Teachers can conduct the formal evaluation after their elaboration phase. This is the last phase of the 5 E's which encourages learners to assess their understanding and abilities and enables teachers to evaluate their understanding of key concepts and skill development (Amna Saleem et al., 2021). Evaluation is an essential component of instructional models and has been widely studied in educational research (Fathman, & Walley, 2018; Scriven, 2017). According to Scriven (2017), evaluation is conceptualized as the systematic assessment of educational programs and instructional strategies to determine their effectiveness, and the use of data to make informed decisions about program improvements. It is a critical aspect

of instructional models because it helps teachers assess the effectiveness of their teaching strategies and make data-driven decisions about how to improve student learning outcomes.

Evaluation can be critical in determining which instructional strategies are most successful for a given set of students when it comes to teaching strategies and senior high school accounting students' academic achievement. According to Fathman and Walley (2018), evaluation can assist teachers in identifying areas where students struggle and adjusting their teaching strategies accordingly. According to the research of Ribeiro and Ferreira (2019), students from different cultural and socio-economic backgrounds may require different teaching strategies to effectively engage with the subject matter. For example, if evaluation data indicates that senior high school accounting students are struggling with a particular concept, such as double-entry bookkeeping, teachers can use this information to modify their instructional strategies, such as providing more practice exercises or using visual aids to reinforce the concept. By doing so, teachers can improve students' understanding of the subject matter and ultimately enhance their academic performance.

The authors' claim is well-supported and provides a strong rationale for the importance of evaluation in instructional models. They effectively highlight the benefits of evaluating students' understanding and capabilities and using that information to make data-driven decisions about how to improve teaching strategies and enhance student learning outcomes. One potential area for improvement is the lack of specific details on how the evaluation process will

be conducted. It would be helpful for the authors to provide more information on the methods and tools that will be used to collect and analyze data, as well as how the results will be interpreted and used to inform future teaching strategies.

In summary, the literature suggests that the social constructivist theory, which posits that knowledge is constructed through social interaction and collaboration, is highly relevant to this study. Vygotsky's (1978) work on learning through social interaction and collaboration, along with his emphasis on the teacher's role in facilitating students' learning, supports the idea that effective teaching strategies can positively impact students' academic performance.

2.2.1 Didactic Teaching Theory

Didactic Teaching Theory emphasizes the role of the teacher as the central authority in the educational process, where teaching is viewed as a systematic and structured transmission of knowledge from the teacher to the student (Riskulova, 2020). This theory is characterized by direct instruction, clear communication of content, and teacher-led assessment, which collectively aim to ensure that students receive a consistent and comprehensive education (Gómez, 2004; Recio, 2011; Cruz, 2019).

In a teacher-centered classroom, particularly in the context of financial accounting, Didactic Teaching Theory serves as a guiding framework for designing instructional practices aimed at achieving clarity, consistency, and precision in the delivery of complex subject matter. This pedagogical

approach emphasizes structured content delivery, where teachers meticulously plan and present lessons to ensure all students receive the same foundational knowledge. By providing clear explanations of accounting principles, standards, and procedures, teachers minimize the risk of misunderstandings (Rusznyak, 2011; Kondratenko, 2022). Central to didactic teaching is the use of lecture-based instruction, which allows financial accounting educators to systematically cover extensive material. Through lectures, teachers convey detailed information about financial statements, auditing processes, and accounting regulations, ensuring comprehensive coverage and efficient learning (Dockter, 2012).

The Didactic Teaching Theory underscores the importance of accuracy and precision in financial accounting education. Teachers demonstrate precise techniques for tasks such as balancing accounts and preparing financial reports, facilitating students' understanding and replication of these processes with accuracy (Silalahi, 2023; Palavecinos, 2010). In alignment with the principles of didactic teaching, teacher-led assessments play a crucial role in evaluating student understanding and progress in financial accounting. Through tests and quizzes designed by teachers, students' knowledge of accounting concepts and their ability to apply these concepts in practical situations are assessed. Regular assessments enable teachers to identify areas where students may require additional instruction or support, fostering continuous improvement (Wolf, 2007). Finally, a teacher-centered approach rooted in didactic principles ensures that students have clear expectations and objectives in their financial accounting studies. By outlining specific learning

goals for each lesson, teachers provide students with a roadmap of what they need to learn and accomplish. This clarity enhances student focus and motivation, contributing to effective learning outcomes (Shum, 2010)

The Didactic Teaching Theory provides a solid foundation for understanding and implementing teacher-centered teaching strategies in financial accounting. This approach ensures that students receive a consistent and thorough education in financial accounting principles and practices by emphasizing structured content delivery, lecture-based instruction, accuracy, teacher-led assessments, and clear objectives. The emerging picture is that both the social constructivism theory and didactic teaching theory underscore the importance of both social interaction and structured teaching methods in enhancing student learning outcomes. This also implies that various factors influence students' behavior in terms of learning and academic achievements or outcomes.

2.3 Conceptual Framework

The conceptual framework for this study integrates teacher-centered and student-centered instructional strategies as key variables influencing the academic performance of senior high school students in financial accounting in Wa. Teacher-centered strategies encompass traditional approaches like lectures and structured content delivery, aiming to provide consistent and thorough education. Student-centered strategies focus on engaging students through interactive and collaborative methods, promoting deeper understanding and critical thinking skills. The framework posits that both strategies have distinct impacts on students' academic performance and they

can be effectively integrated into the process of teaching which can be measured through grades, test scores, and comprehension levels. By examining these relationships, the study aims to provide a comprehensive understanding of how different teaching strategies influence educational outcomes in the context of financial accounting.

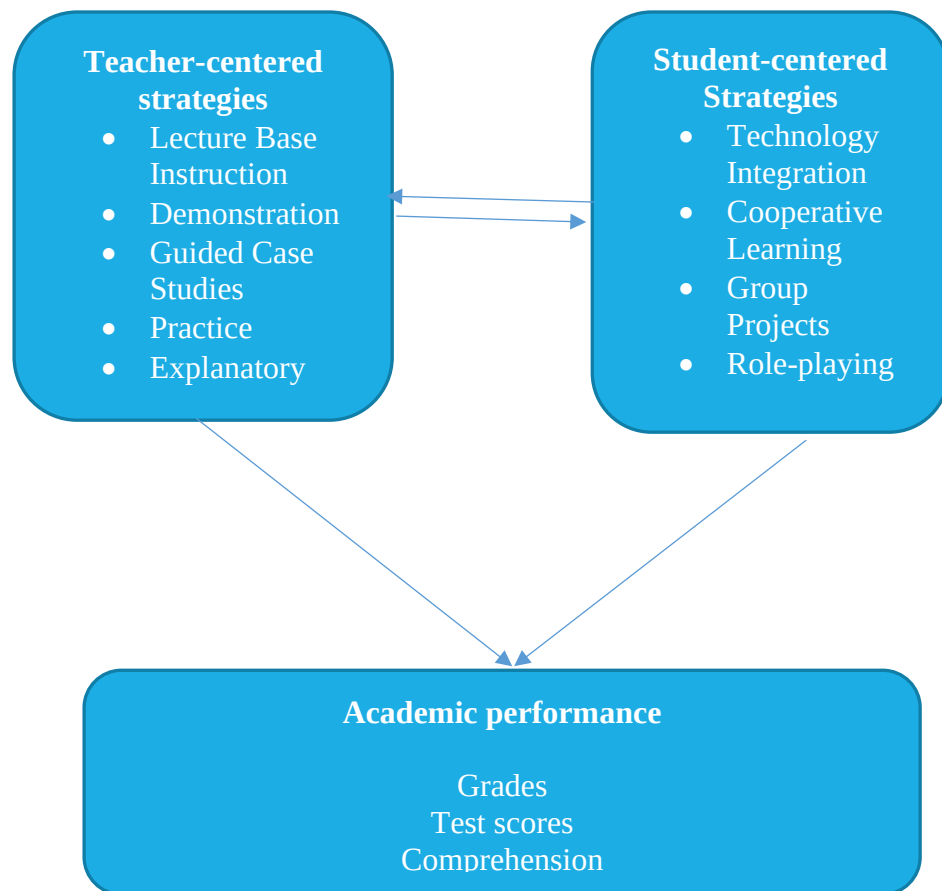


Figure 2 Conceptual framework on teacher and student-centered strategies and academic performance of students

Source: (Author's Construct, 2023)

2.2 Conceptual Explanation

2.2.1 Teaching Strategies

Teaching strategies refer to the methods, techniques, and approaches used by teachers to facilitate learning in their students (Clark & Mayer, 2016). Teaching strategies are the various methods that teachers use to engage students in learning, promote critical thinking, and facilitate the acquisition of knowledge and skills (Seshan et al., 2021). Okolie et al., (2022) also explain teaching strategies as the deliberate actions taken by teachers to facilitate the learning of their students by promoting active participation, critical thinking, and problem-solving. Van Ginkel and Lane (2021) also set their definition of teaching strategies as the techniques and approaches used by teachers to design, plan, and deliver instruction in ways that promote effective learning and academic success.

These definitions highlight the importance of teaching strategies in promoting effective learning and academic performance. Seshan et al. (2021) emphasize the need for teachers to engage students in learning and promote critical thinking, while Okolie et al. (2022) focus on the importance of active participation and problem-solving. Van Ginkel and Lane (2021) underscore the significance of designing, planning, and delivering instruction effectively to enhance learning outcomes. Overall, teaching strategies play a critical role in shaping the learning experiences and outcomes of students. As such, it is essential for teachers to continually update their knowledge of effective teaching strategies and incorporate them into their instructional practices. This

is crucial as effective teaching strategies are critical in enhancing the quality of education and achieving better learning outcomes.

The growth of students' comprehension of accounting concepts and principles is greatly aided by effective teaching techniques. According to Jackson and Meek (2020), applying effective teaching techniques can raise students' motivation and engagement, encourage deep learning, and develop their critical thinking abilities in accounting classes. Sithole and Pereira (2019) stated that case studies, simulations, and group projects are examples of creative teaching strategies that may help students learn more effectively and apply accounting concepts to real-world circumstances. Teaching strategies play a vital role in preparing students for the accounting profession. In a study conducted by van Laar et al. (2019), it was found that essential skills for accounting professionals include critical thinking, clear communication, and effective collaboration. The researchers underscored the significance of nurturing these talents through the implementation of effective teaching methods. Moreover, the use of technology in accounting education has also become increasingly important in recent years (van Laar et al., 2019). The integration of technology into accounting education can enhance students' understanding of complex accounting concepts, provide opportunities for real-time feedback, and prepare students for the use of technology in the workplace (Khaldoon et al., 2018).

While the authors' arguments for these effective teaching strategies and technology in accounting education are compelling, it is important to also consider the potential problems and restrictions of these approaches. For

example, Woyo (2020) discovered that successful technology deployment in education necessitates considerable investment in infrastructure, technical assistance, and teacher training. They also discovered that instructors who are not appropriately taught or supported in the use of technology may suffer irritation and anxiety, which can negatively affect the learning experience of their students. Overall, Woyo (202) stresses the need to give enough resources and support to teachers for technology to be properly integrated into education. A balanced strategy that integrates a range of teaching techniques and technology while establishing a firm foundation in accounting concepts may be the most effective way to train students for the accounting profession.

According to Lee and Lai (2016), the increasing complexity of accounting practices and the changing regulatory environment require accounting teachers to adopt innovative teaching strategies that can effectively prepare students for the challenges of the profession. Effective teaching strategies can also help to address the diversity of learning needs among students. As stated by Chen and Wang (2021), accounting teachers must recognize that students come from diverse backgrounds and have different learning styles, and they must adopt teaching strategies that can accommodate these differences. Teaching strategies can likewise contribute to the development of students' ethical awareness and judgment, which are essential attributes for accounting professionals. As highlighted by Taplin et al. (2018), the incorporation of ethical concerns into accounting education can improve students' awareness of ethical issues as well as their capacity to recognize and address moral challenges at work. The students' ability to remember and retain accounting

concepts and principles may also be improved with the use of effective teaching strategies. According to Alali and Foote (2019), the application of active learning techniques, such as problem-based learning, can improve students' comprehension of accounting topics and encourage knowledge retention over time. Incorporating case studies and real-world accounting situations into teaching strategies can assist close the knowledge gap between the classroom and the workplace. As stated by Sweeney and Webb (2019), students may get the chance to put their knowledge to use in real-world circumstances and gain a deeper grasp of the complexity of accounting practice via the utilization of case studies and real-world situations.

Effective teaching strategies can certainly enhance accounting education. Helpful as they may be, they may not be sufficient to prepare students for the complexities of the profession (Riley, 2013; Bullen, 2018;). To fully prepare accounting students for the challenging issues in the industry, teachers are expected to take a more holistic approach that considers the unique needs of diverse learners, fosters adaptability and lifelong learning, and equips students with the critical thinking skills necessary to navigate ethical challenges. Accounting education should prioritize the development of a range of competencies including critical thinking, adaptability, ethical decision-making, and interpersonal skills to better prepare students for the overall needs of society.

According to Akbari et al. (2021), the result component of teaching methods refers to the intended outcomes or objectives that teachers want to attain

through various instructional techniques and approaches. In other words, it refers to the precise learning outcomes or successes that student is expected to display because of the teacher's efforts. A teacher, for example, may utilize a specific teaching technique, such as collaborative learning, to assist students build cooperation and communication skills. The objective result of this technique would be for pupils to exhibit an enhanced capacity to work successfully in groups and interact with others. Another example might be the use of differentiated instruction to support students with diverse learning needs. The desired outcome, in this case, would be for all students to achieve the learning outcomes, regardless of their learning styles or abilities.

Effective teaching strategies are designed to achieve specific learning outcomes, whether they are cognitive, affective, or psychomotor (Utomo et al., 2020). The outcomes may be short-term, such as mastering a specific skill or understanding a concept, or long-term, such as developing a positive attitude towards learning or pursuing a particular career path. While it is important for teachers to have desired learning outcomes in mind when designing their instructional strategies, it is also important to acknowledge the complexity of the teaching and learning process and the potential limitations of outcome-based approaches. Teachers should strive to create learning experiences that are engaging, meaningful, and holistic, rather than focusing solely on achieving specific goals or outcomes. As noted by Russell et al., (2022), learning outcomes are crucial. however, Russell et al., (2022) contend that they are neither the only nor even the most crucial component of higher education. They propose that higher education institutions should concentrate

on encouraging students to develop self-regulated learning abilities such as goal planning, self-monitoring, and reflection. With the help of this strategy, the expectation is that students would be given the tools they need to excel both academically and professionally as well as take charge of their education. The research emphasizes the value of an educational strategy that extends beyond merely accomplishing learning goals.

2.2.2 Students' Academic Performance.

In this study, students' academic performance is measured using two key metrics: grades and test scores. These metrics provide a comprehensive assessment of students' understanding and mastery of financial accounting concepts. By examining the influence of both teacher-centered and student-centered strategies on these specific aspects of academic performance, the study aims to offer a nuanced understanding of how different instructional approaches affect educational outcomes in financial.

This concept is effectively operationalized by the level of students' achievements in financial accounting, as indicated by their exam performance. According to Zuluaga (2017), a student's academic performance is an observable or measurable behavior in a specific situation, often an experimental one. Similarly, Amien and Hidayatullah (2023) stated that it is an assessment strategy where evidence of students' learning is gathered through their work on tasks. Therefore, students' academic performance is crucial as it serves as a significant indicator of the effectiveness and success of any educational institution. Burke (2002) suggested that performance, in general, depends on six components: context, level of knowledge, skills, identity, personal factors, and fixed factors. It involves accomplishing an

action under specific conditions. For example, a student's performance in school can determine their future career. The purpose of assessing students' academic performance is to achieve clearly defined results, helping individuals understand whether they have met their goals and objectives.

Academic performance, often seen as a measure of general mental abilities, is essentially a reaction to various kinds of tests (Zaboski, 2018). According to Sattar (2022), academic performance signifies the extent to which an individual has achieved specific goals within instructional settings, particularly in schools. Ampofo and Osei-Owusu (2021) describe it as the result of students' efforts in examinations. In this context, Al-Tameemi et al., (2023) characterize poor academic performance as any performance that does not meet a desired standard, which in this study refers to test scores and grades.

Within the context of schools, Al-Said (2017) explains academic performance as the ability of students to meet the expected learning outcomes of their educational program, as measured by assessments of knowledge, skills, and competencies. According to Credé and Phillips (2017), academic performance denotes the degree to which a student can apply and integrate his/her knowledge, skills, and abilities in a range of academic contexts, including coursework, exams, research, and other academic activities.

Pipere and Mieriņa (2017) wrote that academic performance is a multidimensional construct that encompasses not only grades, but also cognitive and non-cognitive factors such as motivation, engagement, and persistence. It is in this light that Gallagher et al. (2017) look at academic performance as the level of achievement or success attained by a student in

his/her academic pursuits, as measured by grades, test scores, and other forms of academic evaluation. Performance is often equated with accomplishment or attainment when it is employed in educational contexts, and students are perceived as demonstrating their aptitude for pursuing tasks through their academic accomplishments.

However, judging academic performance solely based on grades, test scores, and other forms of evaluation, may not accurately reflect a student's true abilities, potential, and skills. Additionally, some students may face barriers to academic success due to socioeconomic disadvantages, learning disabilities, or systemic inequalities. A narrow definition of academic performance can overlook the complexity and diversity of students' experiences and achievements and perpetuate a biased understanding of success in education. This collaborates with a study conducted by Duckworth and Eskreis-Winkler (2019) who found that non-cognitive traits like grit, self-control, and persistence affect academic achievement.

Performance, however, is crucial for both an organization in its entirety as well as the people that make up the organization. According to scholars, it is essential to distinguish between an activity (i.e., behavioral) element and a result aspect of performance while displaying academic performance (Armstrong & Taylor, 2014; Latham & Pinder 2017; Cascio & Aguinis, 2019). The behavioral component of performance is what a learner does while completing a task. According to Scanlan (2018), it includes teacher-taught fundamental reading abilities as well as student behaviors including going to class, completing class assignments, submitting homework on time, and

participating in other school activities. The performance idea only encompasses student actions that are crucial to the aims and objectives of the school, not all their actions (Braddock, 2019). As a result, performance is determined by judgmental and evaluative processes rather than the activity itself (Tiang et al., 2019). Actions that can be quantified are viewed by Cooper (2017) to be representative of performance.

The student's behavior's impact is described in the performance's outcome element, which includes the quantity of completed classwork and assignments, as well as their mathematical aptitude. However, other elements can influence the performance result features (Henderson et al., 2022). The most important details are that it is difficult to assess performance without considering the action or consequence, and that emphasizing performance as an action does not provide a solution to all the issues. Additionally, while it is generally agreed that the behavioral and result components of performance must be distinguished, it is not clear which of these two components should be referred to as performance. Because performance matters to both the person and the schools they attend, educational institutions require strong performers to attain their objectives and gain a competitive edge over other institutions. In addition to emotions of accomplishment and pride, completing tasks and performing well may be satisfying. Someone may feel unsatisfied or even like a failure when they perform poorly and do not meet their goals. Consequently, success in a competitive environment and future professional advancement depends in large part but not exclusively on performance. High achievers at a school often have better employment options than low performers, however, there may be

exceptions. High performers also tend to get promoted more frequently (Sapele & Idoniboye-Obu, 2019).

As found in extant literature, academic performance among students is influenced by various elements, including individual factors, institutional factors, and environmental factors (Dhillon & Sharma, 2020). Individual factors such as intelligence, motivation, self-esteem, and study habits, play a major role in determining academic performance (Rostami & Abedi, 2019). Research has shown that students with high self-esteem tend to perform better academically, while those with poor study habits may struggle to achieve good grades (Bhatt & Bahadur, 2018; Pitan, 2013). However, individual factors do not exist in isolation and can be influenced by other factors such as institutional and environmental factors.

Institutional elements include the policies and procedures of the educational setting, such as the design of the curriculum, the caliber of the teaching, and the evaluation procedures. These elements have a substantial impact on students' academic success (Makewa & Nasongo, 2020). For example, Students' academic performance can be improved by a well-designed curriculum that is in line with their requirements and interests, but learning and achievement can be hampered by ineffective teaching. Students may be inspired and made to like studying with high-quality instruction. Effective evaluation techniques may also give students helpful feedback and aid them in identifying their areas of improvement (Fluckiger, 2010; Walker, 2012; Böttcher, 2015; Husain, 2016)

A major determining factor of academic performance has been the environmental forces. Environmental factors refer to the social and cultural context in which students live and learn. These factors can include family background, peer influence, and community support (Malambo et al., 2021). Research has that students from supportive families and communities tend to perform better, while those from disadvantaged backgrounds may face challenges that hinder their academic success, such as a lack of access to educational resources or poor health conditions. The presence of positive peer influence is also seen as a factor that contributes to better academic performance, while negative peer influence can lead to poor academic outcomes (Sáenz et al., 2018).

The emerging picture is that these factors can all interact with and influence each other. For example, students' study habits (an individual factor) may be influenced by the quality of teaching they receive (an institutional factor), while their motivation (another individual factor) may be influenced by the level of support they receive from their family and community (an environmental factor). While the elements indicated above certainly have an impact on academic achievement, the caution is that other factors can also have an impact on a student's academic success. External variables like economic conditions and political stability, for example, might influence a student's capacity to study and perform well in school as observed by Jenkins (2019). Furthermore, cultural aspects like language obstacles and various learning styles might have an impact on academic success (Coleman, 2020). As a result, it is critical to have a holistic view while attempting to

comprehend the nuanced link between a student's academic performance and the different circumstances that affect it.

2.4 Senior High School

In Ghana, for instance, Senior High School (SHS) is an educational institution before college or university education. Depending on the nation or school system, it is often a three to four-year study. SHS is seen as a vital academic level for preparing for postsecondary education or employment in many nations. It prepares students for future education and the workforce by offering a more specialized curriculum and developing crucial skills like critical thinking, problem-solving, and communication (Roxas, 2022; Savitri, 2021)

In the United States, the idea of SHS is frequently referred to as "high school." The US National Center for Educational Statistics reported the country has over 15 million pupils enrolled in over 24,000 public high schools as of 2021 (Browne, 2012). In the Philippines, the literature indicates that significant modifications have recently been made to the SHS curriculum. The country's basic educational system now includes four years of SHS because of the K-12 program, which was adopted in 2013 (Fontanos et al.,2021). Students who complete the program are equipped with the information and abilities needed for further study or job prospects. The SHS curriculum is divided into four tracks: academic, technical-vocational-livelihood, sports, and arts and design (Fontanos et al., 2021).

In many countries, SHS education has been reformed to align with the demands of the 21st century. For example, the SHS program in Ghana was

introduced in 2010 as part of the country's educational reform agenda. The program aimed to provide students with the necessary knowledge and skills to excel in tertiary education and the world of work. The SHS curriculum in Ghana is structured around four core subjects (mathematics, science, English language, and social studies) and various elective subjects such as business, agriculture, visual arts, and technical and vocational education (TVET). The curriculum is intended to help students acquire critical life skills including time management, teamwork, leadership, and decision-making. These abilities are necessary for success in college, other higher educational institutions, and the workforce. It is envisaged that through elective courses, clubs, and organizations, SHS students are provided with the opportunity to explore their interests and passions.

In some countries, SHS education is mandatory. For example, in South Korea, all students are required to attend three years of SHS and pass the national college entrance exam as a crucial factor in determining one's future educational and career opportunities (Lee, 2020). The situation is not different in Ghana. The implementation of the Free Senior High School (FSHS) policy by the government in 2017 was envisioned to ensure access to SHS education for all Ghanaian students. The FSHS policy provides free tuition, textbooks, and other learning materials, as well as free meals and accommodation for boarding students. The mandatory nature of SHS education in Ghana reflects the government's commitment to providing access to quality education for all citizens. However, challenges such as inadequate infrastructure, shortage of qualified teachers, and unequal distribution of resources and facilities still

exist, which may hinder the effectiveness of policy in the long run (UNESCO, 2021)

While senior high school education provides opportunities for personal growth and exploration, it is also important to note that academic performance in SHS is a critical factor in determining future educational and career opportunities. Therefore, the focus should be on teaching strategies that enhance academic performance. The current teaching strategies used in SHSs may not be effective in promoting academic success. According to a study by Cochrane and Smith (2020), traditional teaching methods such as lecturing, and note-taking are generally not effective in promoting deep learning and critical thinking skills. The study advocates that active learning strategies, such as problem-based learning, group work, and project-based learning, may be more effective in enhancing academic performance.

Furthermore, SHS education should focus more on vocational and technical education, rather than just academic subjects. According to a report by the Organization for Economic Co-operation and Development (OECD), vocational and technical education can provide students with the necessary skills and knowledge to enter the workforce directly after SHS (Ramos, 2021; Putra, 2021; Widayana, 2023). This can be especially beneficial for students who may not have the opportunity or desire to pursue higher education. According to a study by Jackson and Johnson (2018), students from disadvantaged backgrounds are less likely to attend and graduate from SHS than their more advantaged peers. This can lead to perpetuating social

inequalities, as students from disadvantaged backgrounds may not have the same opportunities for further education and career advancement. The current focus on academic performance in SHS education may not adequately prepare students for the rapidly changing workforce. A report by the World Economic Forum (WEF), indicated that many of the skills required for the workforce of the future, such as creativity, critical thinking, and emotional intelligence, may not be emphasized enough in traditional academic settings (Savitri, 2021; Ehlers, 2020).

2.7 Empirical Review

2.7.1 Teacher-Centered Strategies Adopted in Teaching Financial Accounting

Across the globe, teachers have adopted various strategies in teaching financial accounting, such as lecture-based teaching, demonstration, question and answer, discussion, guided practice, explanatory examples, and drill and practice (Olaewaju & Adeoye, 2017). Adeyemo and Oyeibisi (2018) conducted a study to investigate the teaching methods employed by financial accounting teachers in Nigeria and their effectiveness in enhancing students' learning outcomes. The authors collected data from 120 financial accounting teachers in SHS using a self-administered questionnaire. The study revealed that lecture-based teaching was the most frequently used teaching strategy, and it was perceived to be effective in improving students' knowledge and comprehension of financial accounting concepts. However, the study's reliance on self-reported data and the use of a convenience sampling method may restrict the generalizability of the findings. Also, the study did not investigate the perceptions of students regarding teaching effectiveness or the

factors influencing teachers' choice of teaching strategies. The authors recommended that financial accounting teachers use various teaching strategies to cater to the diverse learning needs of their students.

Similarly, Hussain et al., (2019) study looked at the teacher-centered methods used in Pakistan to teach financial accounting. With a sample size of 560, the study used a survey questionnaire to gather information from financial accounting tutors at different SHSs in Pakistan. Lecturing was found to be the most popular method of instruction among financial accounting instructors. However, demonstrations and question-and-answer sessions were also becoming more popular. The study also showed that instructors believed case-based and problem-based learning approaches were more successful than lecture-based teaching at fostering students' capacity for critical thought and problem-solving. Large sample size was the study's strong point; self-reported data was its weak point. To improve critical thinking and problem-solving abilities among their students with different learning requirements, financial accounting teachers were expected to consider a variety of teaching methodologies.

Correspondingly, Al-Rahahleh et al. (2020) conducted a study to examine the teaching strategies used by financial accounting teachers in Jordan using a survey research design. The study involved 325 participants. The results indicated that lecture-based teaching was the most used strategy, followed by case-based learning and group discussions. The study also found that incorporating real-life examples and interactive teaching methods, such as case-based learning and group discussions, was perceived to enhance students' comprehension and application of financial accounting concepts. Despite the

study's large sample size and use of a survey questionnaire, it did not employ any qualitative data collection methods, and the validity and reliability of the survey questionnaire were not reported. In conclusion, the study suggests that financial accounting teachers in Jordan should use a combination of lecture-based teaching and interactive teaching strategies to cater to the learning needs and styles of the various students.

Sipahioglu and Soyer (2019) carried out a study to look at the techniques of instruction used in Turkish financial accounting schools. 415 accounting teachers from different SHSs completed a self-administered online survey form, which the authors used to gather data. The results showed that lectures were the second most popular teaching technique and that their usefulness varied based on the learning objectives. A large sample size and a thorough survey questionnaire were among the studies' plus points; nevertheless, potential response bias and a lack of data triangulation with other sources were some of its minus points. It was advised that accounting instructors employ a variety of pedagogical techniques to meet the various learning preferences and demands of their pupils. The study clarified, in its conclusion, the significance of employing a range of instructional strategies to improve learning results in financial accounting.

Equally, Sithole et al., (2021) and Arni (2024) conducted a study in Palembang and the purpose was to assess the influence of visual learning techniques on accounting students in the region. The researchers introduced visual learning methods as an intervention during the study to evaluate their effectiveness. These methods likely included the integration of visual aids, multimedia presentations, and other visual materials to complement traditional

teaching practices. The finding indicated a positive impact of visual learning on accounting students in Palembang. The implementation of visual learning techniques appeared to enhance students' understanding, increase engagement, and contribute to an improved overall learning experience compared to conventional teaching methods. The study's power was the use of a quantitative approach, allowing for generalizations and statistical analysis of the gathered data. However, a potential weakness was the lack of comprehensive details on the specific visual learning techniques used, potentially hindering the replication of the study. The current study seeks to build upon the previous research by further investigating the impact of visual learning methods on accounting students in Wa Township.

In a separate research by Kahar and Ahmar (2020), the authors looked at the teaching strategies used in Indonesian financial accounting instruction. 126 accounting teachers from various SHSs participated in the study, which used a questionnaire survey to gather data. Following lectures and discussions, the authors discovered that demonstrations were the most often employed teaching strategy in Indonesian financial accounting classes. The study also showed that the availability of teaching resources, the amount of education and experience of the teachers, and their choice of teaching techniques all had an influence.

The study offers insightful information about Indonesia's financial accounting education instructional strategies. However, the use of accounting teachers' self-reported data raises the likelihood of response bias and mistakes. To offer a more thorough knowledge of the teaching methodologies employed in the

teaching of financial accounting in Indonesia, future studies should take into consideration employing a variety of data sources. The study's result highlights the demand for a more thorough investigation into the instructional techniques employed in Indonesian financial accounting instruction.

Halabi et al, (2005) earlier conducted a study intended to compare the effectiveness of two instructional techniques, "worked examples" and "problem-solving exercises," in teaching Accounting Principles. They employed a controlled experimental design using a sample of students from an accounting class. The "worked examples" approach involved presenting completed accounting problems with step-by-step solutions, while the "problem-solving exercises" required students to independently solve accounting problems. The results revealed that students exposed to the "worked examples" approach performed significantly better in subsequent accounting exercises compared to those taught using the "problem-solving exercises" method. However, the study did not investigate the reasons behind the performance differences or explore the long-term retention and application of concepts learned using each method. Despite its controlled design, the study's generalizability to other educational settings might be limited.

2.7.2 Student-Centered Strategies Adopted in Teaching Financial Accounting

Teachers have implemented multiple strategies to instruct financial accounting, including but not limited to teaching through Problem-based learning and case-based learning; cooperative learning, inquiry-based learning, and Flipped classroom. The suggestion is that these approaches effectively

fostered active participation, critical thinking, problem-solving, and collaborative learning among students pursuing accounting. Chang and Tsai (2005) conducted a study in Taiwan to compare the use of differentiated instruction and cooperative learning in teaching SHS students. The study aimed to identify which of the two strategies was more commonly adopted by financial accounting teachers in Taiwan. The study had a sample size of 90 students and used a quasi-experimental design with pretest and posttest measures. It was established that both strategies were used, but cooperative learning was more effective than differentiated instruction in promoting students' communication skills and positive attitudes toward learning. The study, however, did not control for potential confounding variables, and the sample size was relatively small. In conclusion, the study suggests that cooperative learning is more commonly used and more effective than differentiated instruction in promoting students' communication skills and positive attitudes toward learning in financial accounting subjects taught in Taiwanese senior high schools.

Similarly, a comparative analysis was conducted by Fallah et al., (2022) to assess the effectiveness of two teaching approaches, namely flipped classroom instruction and cooperative learning, in teaching SHS students. The study encompassed a sample of 48 students, and the findings revealed that both instructional methods resulted in improved academic performance. However, when considering factors such as engagement, satisfaction, and teamwork skills, cooperative learning exhibited greater advantages. The research was worthy of employing diverse evaluation methods and focusing on a practical subject area. However, it had limitations due to a small sample size and

potential bias. In conclusion, the authors concluded that while both teaching strategies can be employed, cooperative learning holds promise for fostering student engagement and enhancing teamwork skills.

Christensen et al. (2019) conducted a study to explore an innovative method for group work known as team-based learning (TBL). The researchers implemented this approach in introductory accounting subjects. The authors formed permanent strategic teams for the students and assigned multiple team activities. The results of the study indicated that the TBL approach had a positive impact on specific attitudes, particularly among students with a quantitative inclination. After participating in TBL, students displayed increased confidence in their teamwork abilities, especially in handling cultural diversity. Additionally, they reported notable improvements in their skills as task leaders, socio-emotional leaders, and information providers, expressing a preference for taking on these leadership roles.

Another study was conducted by Saptono et al. (2020), envisioned to examine the effectiveness of the role-playing model in improving students' accounting learning motivation and achievements. They employed a quantitative approach and implemented the role-playing model in the classroom to actively engage students in simulated accounting scenarios. The results revealed significant improvements in both students' accounting learning motivation and achievements. The strengths of the study include its innovative teaching method, objective data collection, and positive results. However, flaws, such as the lack of a control group and limited generalizability, were acknowledged. The study did not cover the long-term effects of the role-

playing model on students' motivation and learning achievements or consider differences based on students' prior knowledge. Overall, the role-playing model was found to be effective. Similar findings were found by Ramon-Dangla et al. (2021). Their study was meant to evaluate the effectiveness of role-play in financial accounting education using a quantitative research approach. The technique used involved assigning participants specific roles to enact financial accounting scenarios, simulating real-life situations for observation. The study found that role-play positively influenced participants' understanding and application of accounting principles, enhancing their problem-solving abilities and decision-making skills. Strengths of the work included its objective data analysis and relevance to financial accounting. However, restrictions included a potential lack of generalizability and consideration of individual differences among participants. Overall, the research concludes that role-play is an effective tool for enhancing financial accounting education.

A study led by Phipps (2019) on how to increase student engagement in SHS financial accounting subjects, particularly in classes with a high population. The study implemented small-group team activities as a teaching strategy and established that the classes with team learning scored higher on exams and students reported that the team activities were their favorite and most beneficial aspect of the class. However, the study did not cover the long-term effects of the teaching strategy or potential weaknesses in the sample size. Overall, the study suggests that small-group team activities are an effective teaching strategy to increase student engagement and participation in senior high school accounting.

A study carried out by Pertiwi (2020) aimed to determine the use of a case study learning strategy in financial accounting using a true experimental design with a pre-test and post-test control group, involving accounting students in the business program in Indonesia. The results indicated that the case study learning strategy was effective in enhancing students' learning, and most students perceived the strategy as enhancing their understanding of the teaching of financial accounting. The study used an independent sample t-test as a data analysis technique. However, the study's generalizability may be limited due to the convenience sampling method used to obtain the sample.

A study conducted by Olulowo et al. (2020) aimed to investigate the usefulness of the peer tutoring instructional strategy in improving students' academic achievement in financial accounting concepts. The study involved 137 purposively selected students from eight intact classes in Southern Nigeria, with the experimental group using peer tutoring, and the control group using the conventional lecture method. A nonrandomized pretest-posttest control group quasi-experimental design with $2 \times 2 \times 3$ factorial matrices was adopted. The study found that the peer tutoring instructional strategy was more effective in improving students' academic achievement than the conventional lecture method. The outcome of this study also shows that the experimental strategy was not sensitive to gender but sensitive to socioeconomic status. The study recommends that post-basic schoolteachers use the peer tutoring instructional strategy to present financial accounting lessons in secondary schools. The study was strong because it used a quasi-

experimental design which allowed for some control over extraneous variables. Nevertheless, the study used a purposive sampling technique which may limit the generalizability of the findings to other populations. Additionally, the study did not provide information on the reliability and validity of the instruments used to collect data, and it did not discuss the potential limitations or threats to internal validity such as history, maturation, or testing effects.

Ugwoke et al. (2020) conducted a quasi-experimental study to determine the use of the guided discovery instructional strategy in improving students' learning outcomes in Financial Accounting. The study involved 147 secondary school students in level 5 from eight schools in the northern part of a Southwestern state, Nigeria. The research instruments used were Teachers' Instructional Guides on Guided Discovery, Students' Attitudes to Financial Accounting Questionnaire, and a 30-item Financial Accounting Retention Test. The study found that the guided discovery instructional strategy effectively improved students' attitudes and retention of accounting concepts. However, the study had some flaws, such as the non-randomized sampling technique, the potential for bias in the administration of research instruments, the small sample size, and the lack of coverage of the long-term effects of the guided discovery instructional strategy on students' learning outcomes. However, the study's strengths included using appropriate research instruments, the effective application of the guided discovery instructional strategy, and the comparison with a conventional lecture. Overall, the study

recommended that teachers should utilize the guided discovery strategy to develop attitudes and knowledge retention of learners in Financial Accounting.

Similarly, Taiwo and Ige (2022) conducted a study on the use of guided discovery and lecture methods and the academic performance of students in Financial Accounting. A non-randomized pre-test, post-test, and control group quasi-experimental design were utilized, with gender and socioeconomic status being varied as intervening variables. The study found that the guided discovery instructional strategy improved students' academic performance in Financial Accounting compared to the lecture method. However, the non-randomization of groups and the failure to control for other factors that may affect academic performance were limitations of the study. The study did not explore whether the effectiveness of guided discovery instructional strategy varied based on academic achievement levels or subject areas. The conclusion drawn was that guided discovery instructional strategy is a promising approach to enhancing students' academic performance in Financial Accounting.

Guizi and Zhongdi's (2021) study aimed to develop an innovative model for accounting teaching in the era of digital intelligence. Utilizing a systematic literature review, the researchers analyzed existing academic sources, educational practices, and pedagogical approaches related to accounting education and the integration of digital intelligence technologies. The outcome of the study was the proposal of a comprehensive model that incorporates emerging technologies, data analytics, and artificial intelligence to enhance

accounting education. The work's strengths lie in its well-informed foundation based on the literature review, providing relevant insights for teachers. However, potential weaknesses include the limited scope of the rapidly evolving digital intelligence landscape. The study also highlights that previous research may not have adequately covered the intersection of digital intelligence and accounting teaching, making it an essential area to explore. The proposed model seeks to bridge this gap and address the limitations of traditional teaching methods, offering practical strategies for teachers to leverage digital technologies effectively.

2.7.3. How teacher-centered Strategies Influence the Academic Performance of Senior High School Financial Accounting.

Teacher-centered strategies, such as lecture-based instruction and rote memorization, have long been a staple in traditional education systems. These methods focus on the teacher as the primary source of knowledge, with students playing a passive role in the learning process. Studies have shown that while teacher-centered approaches can efficiently cover a large amount of content, they often fail to engage students or develop critical thinking skills (Levitt, 2023; Parveen, 2020).

Research has consistently indicated that teacher-centered strategies are less effective in promoting long-term academic success (Blazar, 2015; Blazar, 2017; Andersen & Andersen, 2017). This is particularly true for students with low parental education, where teacher-centered instruction leads to a negative impact on academic performance (Andersen, & Andersen, 2017). Various studies and analyses have underscored the limitations of these methods in

fostering deeper learning and critical thinking skills. Hattie's (2009) comprehensive meta-analysis in "Visible Learning" synthesized findings from over 800 meta-analyses relating to educational achievement. Hattie found that direct instruction, characterized by clear, structured, and teacher-led lessons, can be effective for initial learning phases. This approach is useful for teaching foundational knowledge and basic skills, where the teacher's expertise and clarity can ensure that all students grasp essential concepts. Hattie's research also highlights significant limitations of direct instruction. He found that this approach did not significantly impact students' deeper understanding and problem-solving abilities as effective for direct instruction was 0.59, indicating a moderate impact.

In contrast, strategies that promote student engagement and active learning, such as feedback (effect size 0.73) and meta-cognitive strategies (effect size 0.69), were found to have a more substantial effect on deeper learning outcomes (Hattie, 2009). This suggests that while direct instruction has its place, it should be complemented with methods that foster critical thinking and application skills.

Akyeampong, Pryor, and Ampiah (2006) conducted a study on the educational practices in Ghana which revealed that the prevalence of teacher-centered methods contributes to underperformance in subjects requiring higher-order thinking skills. The study found that students taught primarily through rote memorization and lecture-based methods struggled with tasks that demanded analytical thinking, problem-solving, and application of knowledge. Abonyi (2019) research highlighted students often become passive recipients of

information, leading to disengagement and a lack of motivation to explore topics more deeply. The study further revealed that information learned through rote memorization was often quickly forgotten, as students did not engage with the material in a meaningful way. It was also established that teacher-centered methods did not encourage students to question, analyze, or apply what they learned, which are crucial skills for academic and real-world success. These findings are particularly relevant for subjects like financial accounting, where understanding concepts, applying them to solve problems, and analyzing financial information are essential skills.

Further empirical evidence supports the notion that teacher-centered strategies are less effective in the long run. Minalla (2023) investigated the effects of traditional versus student-centered teaching methods on student achievement in reading and writing. The study concluded that students exposed to student-centered methods demonstrated superior performance in understanding and applying complex literary concepts compared to their peers taught through traditional, teacher-centered approaches. Similarly, a review by Yang (2018) on the effectiveness of cooperative learning found that student-centered strategies significantly improved students' academic achievement, attitudes toward learning, and interpersonal relations. Yang's (2018) research indicates that active participation, discussion, and collaborative problem-solving are more effective than passive reception of information.

In essence, these studies indicate that teacher-centered strategies such as direct instruction are effective for delivering fundamental knowledge. Nonetheless, they fall short in fostering deeper comprehension, critical thinking, and problem-solving abilities. To remedy these shortcomings, educational systems,

including those in Wa Township, should integrate greater use of student-centered approaches that actively involve students in their learning journey.

2.7.4. How student-centered strategies influence the academic performance of senior high school financial accounting.

Student-centered strategies encompass a range of instructional approaches that shift the focus from teacher-led instruction to active student participation. These include methods such as flipped classrooms, problem-based learning, collaborative learning, and peer teaching. Each of these strategies aims to involve students actively in their learning process, encouraging them to take responsibility for their education and engage deeply with the material (Mascolo, 2009; Ahn, 2011; Tang, 2023). By promoting active involvement, these methods contrast sharply with traditional teacher-centered approaches, providing a more dynamic and interactive learning environment.

Empirical research demonstrates that student-centered strategies notably elevate academic performance (Stefaniak, 2015; Goldman, 2017; Wang, 2023). Goldman (2017) identified increased engagement, motivation, and retention of material as outcomes of these approaches. In the realm of financial accounting, which demands both conceptual understanding and practical application, student-centered methods have proven effective in enhancing students' capacity to comprehend intricate principles and apply them adeptly in real-world scenarios (Fauzi, 2021; Dickins, 2022). Murphy (2021) provides a comparative analysis, demonstrating that students exposed to student-centered strategies achieve higher academic outcomes compared to those taught through traditional teacher-centered methods. This comparison

underscores the effectiveness of active learning environments in fostering better comprehension and retention of financial accounting concepts, leading to improved grades and reduced failure rates.

Student-centered strategies have demonstrated the ability to enhance student engagement and motivation. Awang-Hashim, Kaur, and Valdez (2019) emphasize their efficacy in accommodating various learning styles and needs, thereby promoting inclusivity and efficacy in learning. In financial accounting, engagement plays a crucial role in mastering intricate concepts, and student-centered approaches foster active participation, discussions, and practical problem-solving, thereby deepening comprehension and fostering interest in the subject. These strategies not only elevate engagement levels but also sustain student motivation and commitment throughout their educational experience.

Financial accounting demands not just theoretical understanding but also the application of this knowledge in real-world scenarios. Student-centered methodologies like problem-based learning and collaborative projects foster critical thinking and enhance problem-solving abilities. According to Jaijairam (2012) and Winarso (2012), these approaches facilitate students' interaction with actual financial scenarios, thereby enhancing their capacity to analyze and resolve accounting issues. This practical engagement is crucial for equipping students for future academic endeavors and professional roles, ensuring that the learning experience is meaningful and effective.

Research indicates that students in student-centered learning environments tend to achieve higher academic performance compared to those in traditional settings (Wang, 2023; Overby, 2011; Qureshi, 2014). These environments

prioritize active learning, self-paced programs, and collaborative group settings, enabling students to tailor their learning to their own needs and interests (Qureshi, 2014). Moreover, they cultivate intrinsic motivation and intellectual capabilities, which are essential for academic achievement (Wang, 2023). Additionally, students' perceptions of the learning environment and their learning approaches are closely intertwined, with a student-centered approach fostering deeper learning and superior educational outcomes (Qureshi, 2014).

Long-term studies suggest that the benefits of student-centered strategies extend beyond immediate academic performance. Goryacha (2020) observed that students who consistently experience student-centered learning show improved preparedness for further education and professional careers. This is particularly relevant in financial accounting, where practical skills and critical thinking are essential for success in higher education and the job market. The sustained impact of these strategies highlights their importance in shaping well-rounded, capable individuals ready to face future challenges.

Effective implementation of student-centered strategies requires adequate teacher training. Teachers need to be equipped with the skills and knowledge to facilitate active learning environments. Hermawan (2023) highlights the importance of professional development programs that train teachers in student-centered methodologies, ensuring they can effectively guide students through complex financial accounting concepts. Without proper training, teachers may struggle to implement these strategies effectively, limiting their potential benefits.

The impact of student-centered strategies can vary based on student demographics and contextual factors. Studies such as those by Pasira (2022) and Santos (2022) suggest that these strategies are particularly beneficial in diverse classrooms, addressing different learning needs and improving equity in academic outcomes. In financial accounting, where students may have varying levels of prior knowledge and skills, student-centered approaches help create a more inclusive and supportive learning environment. This adaptability makes these strategies valuable in addressing educational disparities and promoting equity.

Reviewing the methodologies used in empirical studies is crucial for evaluating the robustness of findings. Prince (2004) and Taiwo (2022) used a mix of quantitative and qualitative methods to assess the effectiveness of student-centered strategies. The results of Prince's review indicated that active learning strategies, such as collaborative learning and problem-based learning, significantly improve student engagement and academic performance. Specifically, the study found that these methods led to better retention of material, higher motivation levels, and a deeper understanding of the subject matter compared to traditional lecture-based instruction. Taiwo (2022) used a combination of quantitative assessments, such as test scores and grades, and methods, including student and teacher interviews, to gather comprehensive data. The results showed that student-centered approaches, particularly those involving practical applications and interactive learning, led to improved comprehension and retention of accounting principles. Students who were taught using these methods demonstrated higher critical thinking skills and were better able to apply accounting concepts to real-world situations. The

study concluded that student-centered strategies are more effective in fostering a deeper understanding of financial accounting, thereby enhancing overall academic performance.

Adeyemi (2008) and Ludigo (2024) employed longitudinal studies to track the impact over time, providing comprehensive insights into the long-term benefits of these approaches. Adeyemi's (2008) study focused on the influence of class size and teaching methods on the quality of academic output in secondary schools in Ekiti State, Nigeria. Adeyemi found that students who were taught using interactive and participatory approaches showed better understanding and retention of material, leading to higher academic performance. The study highlighted that smaller class sizes facilitated the effective implementation of student-centered strategies, contributing to improved student engagement and success.

Ludigo's (2024) study examined the challenges and effectiveness of implementing innovative teaching practices, including student-centered strategies, in senior high schools in Ghana. Ludigo's (2024) longitudinal study revealed that students in environments where student-centered strategies were consistently applied performed better academically over time compared to those in traditional learning settings. The study showed that interactive learning experiences led to higher student engagement, lower failure rates, and improved overall academic achievement. The study also revealed challenges such as uneven implementation and lack of follow-up support, which could hinder the full realization of these benefits.

Overall, both Adeyemi's (2008) and Ludigo's (2024) studies underscore the positive impact of student-centered strategies on long-term academic

performance, emphasizing the importance of consistent application and adequate support for these approaches to be effective.

Despite the significant benefits of employing student-centered strategies, the literature highlights various implementation challenges. These include resistance from teachers accustomed to traditional methods, resource constraints, and inadequate training (Eroğlu,2021). Overcoming these challenges is crucial for optimizing the effectiveness of student-centered learning in financial accounting. Eroğlu (2021) stresses the importance of continuous support and professional development for educators to surmount these obstacles. The support and preparation of educators is crucial for the successful adoption of these innovative teaching methods. The empirical evidence supports the positive impact of student-centered strategies on the academic performance of senior high school students in financial accounting. These strategies enhance engagement, motivation, critical thinking, and problem-solving skills, leading to better comprehension and application of accounting principles. To optimize educational outcomes, schools need to adopt and promote student-centered approaches, supported by adequate teacher training and resources. By doing so, teachers can create a more effective and inclusive educational environment that prepares students for future success.

2.8 Summary of review of related Literature

This chapter dealt with the review of literature relevant to the study. It was organized into three main sections – the theoretical, conceptual, and empirical framework of the study. Vygotsky (1978) advocated the social constructivist learning Theory which was primarily recognized in the field of education. The

social constructivist learning Theory was crumpled into five major components: engagement, exploration, explanation, elaboration, and evaluation. The theory emphasizes that knowledge is constructed through social interaction and collaboration, and learning is an active and collaborative process.

An empirical review of relevant literature has shown that while other scholars have focused solely on teacher-centered strategies (Fatima, 2022; Mascolo, 2009) with the view to enhance students' understanding and performance some others have focused primarily on student-centered strategies (Din, 2007; Guzman, 2016; Berg, 2023). The complexity of students' behavior in terms of learning and academic performance requires knowledge beyond these two extreme forms of teaching strategies. In this regard, a holistic analysis of the interplay between these two forms of teaching strategies is critical. As argued by Lee and Lai (2016), the increasing intricacy of accounting practices and the altering regulatory environment require accounting teachers to adopt innovative teaching strategies that can effectively prepare students for the challenges of the profession. Examining the synergy of the teacher-centered and student-centered approaches has the potential to suggest the best practices that can transform teaching and learning and improve the academic performance of students in financial accounting. This accentuates the strength of the current study which seeks to examine the otherwise association between teaching strategies and academic performance which has both practical and policy implications in the study locality.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The present chapter encompasses the methods and approaches employed for conducting the study. It captures the profile of the study locality, research philosophy and design, the targeted population, sample selection methods, the tool utilized for data collection, techniques, and methods for gathering data, data analysis, and ethical consideration.

3.2 Profile of the Study Locality

The Upper West Region of Ghana is a culturally diverse and economically dynamic region with its own set of challenges and opportunities. Its unique geography, demographics, and cultural richness make it a distinctive part of the country, offering insights into the diversity of Ghana as a whole. Understanding the region's profile is essential for policymakers, researchers, and anyone interested in the development and well-being of its residents.

3.3 Philosophical Underpinning of the Study

In social science research, three primary research philosophies are frequently employed: positivism, constructivism, and pragmatism (Shah, 2018; Ryan, 2018). Positivism maintains that knowledge originates from empirical observations, advocating for scientific inquiry to be objective, devoid of values, and aimed at discovering universal laws that govern social phenomena. Conversely, constructivism argues that knowledge is socially constructed and subjective, highlighting the significance of individual interpretation, context, and the recognition of multiple realities (Galbin, 2015; Gordon, 2009). Pragmatism integrates aspects of both positivism and constructivism, focusing

on practical outcomes and problem-solving approaches. It emphasizes the importance of context and multiple perspectives in understanding social phenomena (Giacobbi, 2005; Gross, 2018; Dube, 2024). Pragmatism views truth as contingent on practical consequences and supports flexibility in research methods and approaches.

In studying teaching strategies and senior high school students' academic performance in Wa Township, the pragmatic research philosophy served as the guiding framework. Pragmatism enables researchers to adopt a flexible problem-solving approach that incorporates both positivist and constructivist elements (Dube, 2024; Shah, 2018; Giacobbi, 2005). This approach values empirical observations and objective analysis (positivism) while acknowledging the subjective interpretations and contextual factors (constructivism) that impact teaching practices and learning outcomes in financial accounting education. By embracing pragmatism, the researcher took a holistic perspective that considered both theoretical insights and practical implications, leading to a comprehensive understanding of teaching strategies and their influence on senior high school students' academic performance in financial accounting in Wa Township.

3.4 Research Approach

The three most common research methodologies are the quantitative research approach, the qualitative research approach, and the mixed methods research approach, which integrates both quantitative and qualitative approaches (Taherdoost, 2022). The choice of research approach typically depends on the research topic, philosophical underpinning, and the study's objectives. This

investigation employed a mixed-method approach, combining both quantitative and qualitative data collection and analysis. Quantitative data were collected through a survey questionnaire administered to financial accounting students in Wa Township. The questionnaire evaluated both teacher-centered and student-centered strategies implemented in financial accounting instruction and their influence on students' academic performance. Qualitative data were obtained via semi-structured interviews, focusing on the strategies adopted by financial accounting teachers in their instructional practices.

3.5 Research Design

In this study, an explanatory sequential design was employed. An approach that involves collecting and analyzing quantitative data first, followed by qualitative data to help explain or elaborate on the quantitative results (Ivankova et al., 2006; Wipulanusat et al., 2020). This design allows for a comprehensive understanding of research problems by initially providing a broad, generalizable understanding through quantitative methods, and then adding depth and context through qualitative methods.

The explanatory sequential design was chosen for this study because the research aimed to quantify the impact of different teaching strategies such as teacher-centered and student-centered on the academic performance of financial accounting students. Quantitative data collection through surveys provides measurable evidence of this impact, allowing for statistical analysis and generalization across a larger population (Hasan, 2024). While quantitative data provide valuable insights, it often lacks the depth needed to

fully understand the underlying reasons behind observed patterns. By following up with qualitative data collection through semi-structured interviews, the study can delve deeper into the experiences and perceptions of financial accounting teachers. This justifies the choice of the mixed-method approach which ensured that the findings were not only statistically significant but also contextually rich, capturing the nuances of teaching strategies in real-world settings (Onwuegbuzie & Leech, 2004). Thus, the approach addresses the research questions more thoroughly and more so, enhances the validity and reliability of the findings (Plano Clark, 2016).

3.6 Target Population

According to Mohsin (2021), a target population is any individual who satisfies the requirements for a research study. Haas (2022) noted that the study population can include not only individuals but also organizations, institutions, events, and other entities relevant to the research. Similarly, Creswell and Creswell (2018) indicate that the population involves the whole set of people, things, or events that are important to the study and match the researcher's conditions. This thesis focused on students and teachers in the Upper West Region who were involved in financial accounting education. The selected schools have a total accounting student population of 324 of which 35 students were from Jamiate Islamic Girls' Senior School. Wa Senior High School has 145 financial accounting students while 144 financial accounting students came from Wa Islamic Senior High School. These schools were selected due to their consistently low performance in financial accounting, as reflected in end-of-term results and WASSCE records, highlighting the need for targeted interventions. Additionally, the schools represent diverse socio-

economic and demographic contexts, ensuring that the findings are transferable to similar educational settings. This selection supports the study's goal of testing innovative teaching strategies where they are most needed, providing practical insights that can inform both practice and policy. For this thesis, only the second and third years were targeted as they had at least tested two years of teaching and learning in financial accounting in their respective schools and had much to offer concerning the research objectives. Their consideration enabled the researcher to concretely address the research questions.

3.7 Sample and Sample Size Determination

Two sampling techniques were utilized in the study. All nine (9) financial accounting teachers from the selected schools were selected using the census technique. Besides, all 179 respondents out of the aggregated 324 financial accounting students from the three designated schools were selected randomly. In this study, the Yamane (1967) formula for the determination of sample size was utilized to ensure an appropriate number of respondents. The application of this formula helped the researcher to mitigate any potential sample bias. The Yamane (1967) formula is presented below:

$$n = \frac{N}{1 + N(\alpha)^2}$$

Where n represents the sample size,

l = constant,

N = Population under study,

α = level of significance or margin of error.

To ensure a fair and representative sample size, the sample was determined with a 95% confidence level and a 0.05 significance level. After considering

these factors, a total population of 324 financial accounting students was chosen, and the sample size was subsequently calculated as detailed below.

$$n = \frac{324}{1 + 324(0.05)^2}$$

$$n = \frac{324}{1.81}$$

$$n = 179.005$$

$$n \cong 179.$$

Considering that the respondents were selected from various senior high schools, a proportional sample formula was employed to determine the specific number of respondents from each school. This approach considered the total student population (324) in relation to the observed sample size of 179 bearing in mind the gender differences. The results are presented below:

$$n = \frac{N}{324} \times 179$$

n = selected number from a given senior high schools

N= Total number from a given senior high schools

196= Total number of students.

The study therefore used a combined sample population of 179 respondents in this thesis as depicted in Table 2 below.

Table 3.1: Summary of the selected Respondents

Senior High Schools	Number of Students	Sample Size
Jamiat Islamic girls	35	19
Wa SHS	145	80
Wa Islamic SHS	144	80
Total	324	179

Source: fieldwork 2023

The selection process of schools for the study was carried out systematically. A total of 179 students enrolled in Financial Accounting from the selected institution took part in the research, representing both mixed-gender and single-sex schools. The participants consisted of 88 males and 91 females. Among the participants, 33 were from a single-sex school, while the remaining 146 students belonged to mixed-gender schools. These chosen schools had only nine (9) accounting teachers, comprising five males and four females surveyed.

3.8 Data Sources

The study used primary sources of information. Primary data were generated through a self-response structured questionnaire and an interview guide. It was however complemented by secondary data specifically, the terminal examination results of the respondents.

3.8.1 Quantitative Data Collection Instrument

The study employed questionnaire instruments for financial accounting students from the selected schools. The decision to use questionnaires was based on their efficiency in swiftly gathering vital information from respondents. The questionnaires were designed with a focus on maintaining respondent confidentiality and anonymity, ensuring reliable and honest responses through self-reporting. Besides, the questionnaires were deemed economical compared to alternative methods like tests. An opening component of the questionnaire covered the respondents' demographic information (students). It also included a statement guaranteeing the privacy and anonymity of their replies. Five (5) parts make up the students' questionnaire:

Parts 1, 2, 4, and 5. Part 1 gathered data on their background including; their school, gender, age range, class size, number of streams, and school system. The questionnaire used a 5-point Likert. The Likert scale is commonly used to gauge agreement or disagreement on a particular issue (Babbie and Mouton, 2004). Its simplicity and effectiveness in providing advanced responses make it a preferred choice among other measurement scales. Oluoch (2016) emphasizes that closed-ended questions offer benefits in terms of data storage, utilization, and coding within the computer-based analysis. To maintain data consistency, all respondents in the study responded using a predefined set of options. Consequently, the ratings assigned to the items on the instruments were consistently and conclusively determined.

For understanding and compliance with ethical issues, an introductory letter from the researcher's Department (SDD-UBIDS) was issued to all the head teachers at the selected schools. The teachers and the students involved were informed accordingly. A mutually suitable day for data collection was then decided upon. The goals of the study were thoroughly explained to the respondents before data collection. The respondents were requested to read through the instructions to understand the dictates of the questions. The questionnaires were delivered to the students with the option to complete and return them within two weeks. To guarantee optimum accessibility and response rate, the researcher physically delivered the questionnaires. The return rate was 100% as the researcher retrieved all the 179 questionnaires which were administered.

3.8.2 Qualitative Data Collection Instrument

Qualitative data were gathered through in-depth interview with the aid of an interview guide with the nine (9) financial accounting teachers. These interviews aimed to obtain detailed insights into the teacher-centered and student-centered strategies employed in teaching financial accounting. The sessions featured open-ended questions designed to align with the study's objectives and research questions. Aside, it contains the background information of the teachers including; their age, gender, teaching experience in financial accounting, and qualifications. Each interview with the participants was audio-recorded and subsequently transcribed to facilitate data analysis. On average, the interviews lasted approximately 40 minutes.

3.8.2 Pilot Testing of Instruments

Before the questionnaires were administered to the actual respondents, a preliminary evaluation of the instrument was done to ensure reliability and precision. The researcher and his supervisor thoroughly examined the various question items in terms of wording to avoid any ambiguity. This was also done to ensure that all the research questions were adequately covered by the questions. The questionnaires were subsequently pre-tested in Northern Star Senior High School which shared common characteristics with the chosen schools in terms of school type, program provided, teacher experience, and age of students. The pilot test had fifteen (15) students and three (3) teachers. After carefully examining the data, each item's Cronbach's alpha coefficient was calculated. The obtained Cronbach's alpha value of 0.78 for the teachers was deemed commendable, as suggested by the analysis. The student's

Cronbach's alpha value of 0.79 was also found to be good, as indicated by (Haney, 2018). The findings indicated that the instruments used to collect data were reliable and suitable for answering the research questions. Zainol (2021) recommended that having a reliability coefficient of 0.78 or above means that the instrument fulfills its requirement, demonstrating good quality and the capacity to gather valuable data. The questions derived from the items were properly handled, and the instrument's reliability was evaluated using Statistical Product and Service Solutions (SPSS 20.0). These measures were implemented to guarantee the instruments' capability to collect valuable and dependable data for the study.

3.9 Data Analysis

Quantitative information gathered from respondents was analyzed by categorizing the closed-ended questionnaire items. The coding procedure facilitated the study of the data, which was input and evaluated using data analysis software, specifically the Statistical Package for Social Sciences (SPSS). The dependent variable chosen was the academic performance of senior high school accounting students, while the independent variables consisted of various teaching strategies. The academic performance of financial accounting students was measured using two key metrics: their WASSCE grades and terminal examination scores. This approach ensures a comprehensive assessment of students' performance, encompassing both continuous assessment (terminal examination) and summative evaluation (WASSCE grades), thereby enhancing the validity and reliability of the evaluation process. WASSCE grades offer insight into students' performance

over time, while terminal examination scores provide a snapshot of their knowledge and skills at a specific point, meeting the requirements of academic assessment in financial accounting and aligning with standardized educational practices. Additionally, measuring the terminal examination against the teaching strategies employed by financial accounting teachers allows for an evaluation of the effectiveness of instructional methods. This facilitates an analysis of how teaching strategies, such as student-centered and teacher-centered strategies impact students' academic performance in financial accounting.

To validate the end-of-term examination scores, the research followed several crucial processes. Recognizing the usefulness and acceptance of these scores as a measure of academic performance, the researcher addressed potential limitations arising from different question sets across schools. The strategies employed included ensuring content equivalence by verifying that the examination content was consistent across different schools, standardizing scores to account for variations in difficulty levels and grading standards, and implementing moderation processes to review and adjust scores, ensuring fairness and consistency in assessment. Additionally, data triangulation was used to corroborate the examination scores with other data sources, such as classroom observations, teacher interviews, and student feedback, thereby enhancing the validity of the results. By employing these strategies, the research aimed to ensure a more accurate and reliable measure of academic performance.

This researcher used a variety of descriptive and inferential statistical methods to analyze the data collected, including percentages, mean, and standard deviation. The evaluation of teachers' and students' responses to the research was greatly aided by these statistical measurements. Learner Multiple Regression analysis was used to examine the relationship between teacher-centered and student-centered strategies and how they influence students' academic performance in financial accounting, particularly regarding research hypotheses.

The effectiveness and importance of the connection between these strategies and their influence on students' financial accounting performance were both determined using this potent approach. Inductive thematic analysis was employed in analyzing qualitative data. Recorded data were first transcribed, edited, coded and categorized into themes. For the purposes of anonymity, all female accounting teachers were labelled as FAT1-4 while the male accounting teachers were tagged as MAT1-5

3.10 Ethical Consideration

Social science research delves into the intricacies of individuals' private lives to facilitate a comprehensive investigation. Within the realm of social sciences, various aspects of human existence, such as behaviors, attitudes, and opinions are meticulously examined (Biros, 2003). These have raised moral questions that are not present in a well-controlled laboratory setting of the scientific sciences (Spears, 2016; Sutton, 2019). Babbie and Mouton (2004) indicate that in the pursuit of truth and the collection of valuable data through

interviews with individuals, it is crucial to uphold the rights and well-being of all members of society. Recognizing this responsibility, the researcher first obtained informed consent from the respondents. The letter of introduction from the university was made known to the respondents as to the objective of the thesis. The researcher further orally explained to them the intention of the study and their right to voluntary participation, anonymity, and confidentiality. Respecting ethical considerations, the researcher ensured that the exploration of knowledge and data acquisition was conducted with due regard for the rights and dignity of those involved. It was equally based on ethical considerations that the names of the respondents were not disclosed in the study.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.1 Introduction

In this chapter, the study's findings were presented. The chapter is organized into two sections: an examination of the preliminary data and an in-depth discussion of the main data.

4.2 Background Information of Respondents

This section of the study examined the background information of the participants which comprised the age range of teachers and students, class size of students, school system, the highest level of education attained by teachers, job schedule of teachers, teaching experience of teachers, and their specific experience in teaching financial accounting.

4.2.1 Background Information of Teachers

Regarding the age distribution of the teachers, the data revealed that two fell within the age range of 20-29 years accounting for 22.2%, further seven individuals, comprising 77.8% were in the age range of 30-39 years. This suggests that most teachers who participated in the study were between 30 and 39 years old, a common age range for instructors in senior high schools in Ghana. The information also indicated that the teachers are young and can serve the respective schools for a longer period given the 60-year pension benchmark set by the constitution of Ghana (1992). Equipping them with the skills in teaching may be seen as a laudable idea to help promote the learning and performance of students.

According to Table 4.1, all the teachers at least had a tertiary education. Specifically, eight respondents (88.9%) possessed bachelor's degrees with another one (11.1%) holding a master's degree. These findings indicated that all the teachers in the surveyed schools have a substantial number of academically qualified individuals capable of teaching Financial Accounting.

Table 4.1 revealed that two teachers (22.2%), had at least five years of teaching experience, further, three teachers, representing 33.3%, had taught for a period ranging from five to ten years (5-10 years) with another four teachers (44.4%) having teaching experience spanning over eleven years (11 years +). These findings imply that in aggregate, about 77.7% of the teachers had over five years of teaching experience. It could be inferred that these teachers have substantial expertise in the field of teaching, which is likely to enhance the quality of instruction and learning outcomes in Financial Accounting as a subject at the SHS level.

Table 4.1: Demographic Information of Teachers

Variables	Sub-group	No	Percentages
Age	20-29	2	22.2
	30-39	7	77.8
Highest Level of Education	Bachelor's Degree	8	88.9
	Master's degree	1	11.1
Teaching Experience in Financial Accounting	Less than 5 years	2	22.2
	5-10 years	3	33.3
	11years +	4	44.4

Source: Field Survey, 2023

4.2.2 Background information of students

A total of 179 student respondents were gathered. Table 4.2 showed that 15.6% (28) students came from Jamiat Islamic Girls Senior High School, 42.5% (76) were from Wa Senior High School, and another 41.9% (75) were from Islamic Senior High School. Jamiat Islamic Girls SHS had the lowest number of students compared to Wa Senior High School and Islamic Senior High School respectively. However, a proportionate sampling technique was applied in the selection of the respondents, the implication was that all the selected schools had equal representation of their overall student population. The views of students from the three schools were thus equitably cared for.

The analysis revealed that 84 students, accounting for 46.9% were males while 95 students comprising 53.1% were females. These findings suggest a slight numerical advantage of females over males in the sample. Although the percentage difference is not statistically significant, the proportion of females (53.1%) is slightly higher compared to males (46.9%). It is worth noting that Jamiat Islamic SHS, being a single-sex school for females, contributed to the higher representation of females, resulting in a 6.2% difference in their favor. In contrast, Table 4.1 showed that male teachers outnumbered female teachers, with a percentage difference of 11.2%. These statistics may suggest that Financial Accounting is primarily pursued by males, as evidenced by the relatively low percentage of female teachers.

Table 4.2 provides data on the age distribution of the students. It showed that 41.3% (74) of the students were under the age of 18 years, further 54.2% (97)

were 18 years and above but below 21 years. Additionally, 4.5% (8 students) fell within the age bracket of 21-30 years. Given that they make up a sizable fraction of the student body, these findings highlight the importance of students under the age of 18. Consequently, in the learning environment, teachers should pay extra attention to this specific population as they are by law construed as children (Constitution of Ghana, 1992; Children's Act 1998, Act 560) and require much care, protection, and guidance. As the social constructivist theory emphasizes the importance of the learning environment in promoting students' active engagement in the learning process. In an alternate realm, this corresponds to the conceptual framework that suggests that the school's atmosphere or environment can influence teaching methods and academic performance. Additionally, it was found that most of the student participants were between the ages of 18 and 20, which is in line with the normal age range for second and third-year senior high students in Ghana. The Labour Act of Ghana Act 2003 (Act 651) refers to such people as young persons who equally need much guidance and should not be exposed to any hazardous activities.

In examining the data presented in Table 4.2, it was revealed different class sizes exist in the selected schools. A total of 55 students (approximately 30.7%) expressed that the schools had class sizes ranging from 21 to 30 students, further, 42.5% (76) said the class sizes ranged from 31 to 40 students, with an additional 48 students (26.8%) stating that class sizes ranging from 41 to 50 students. These findings suggest that the class sizes for Financial Accounting classes in this context are larger than the average normal recommended class size of 25 students. It could be presumed that classes with

large student populations may pose a potential negative impact on individual attention, exacerbate behavior management issues, limit interaction and collaboration, and create disparities in learning outcomes.

Information gathered showed that all the 3 schools considered in the study were classified as single-track schools. This finding suggests potential implications for teacher workload. In single-track schools, educators frequently face the challenge of handling multiple grade levels or subjects concurrently, resulting in heightened workloads (Fitzpatrick & Burns, 2019). Consequently, this situation can adversely affect the quality of instruction and restrict the level of individual attention that teachers can offer to their students.

Table 4.2: Demographic information of students

Variables	Sub-group	No	Percentages
School	Jamiat Islamic Senior High	28	15.6
	Wa Senior High	76	42.5
	Wa Islamic Senior High	75	41.9
Gender	Male	84	46.9
	Female	95	53.1
	Below 18	74	41.3
Age	18-20	97	54.2
	21-30	63	35.2
Class Size	31-40	76	42.5
	41-50	48	26.8
	Single Track	179	100.0
School System	Double Track	0	0.0

Source: Fieldwork 2023

4.3 Main Results and Discussions

The focus of this chapter was to examine the various responses to the research questions set to be achieved in chapter one namely:

1. What teacher-centered strategies are adopted in teaching senior high school financial accounting in Wa?

2. What student-centered strategies are adopted in teaching senior high school financial accounting in Wa?
3. How do teacher-centered strategies influence the academic performance of senior high school financial accounting in Wa?
4. How do the student-centered strategies influence the academic performance of senior high school financial accounting in Wa?

4.3.1 Objective One: Teacher-centered strategies adopted in teaching financial accounting.

The researcher sought the perspectives of financial accounting students concerning the teacher-centered teaching strategies adopted in teaching financial accounting. The findings are presented in Table 4.3. As indicated in Table 4.3, the mean score for "lecture base instruction" is 4.35, with a standard deviation of .81. This indicates that the financial accounting teachers in the Wa township always employ lecture base instruction in teaching financial accounting students. The standard deviation suggests that students' responses are moderately dispersion around the mean of 4.35. The mean score for "Demonstration" is 2.30, with a standard deviation of 1.33. This suggests that the financial accounting teachers in Wa Township do not employ demonstration methods in the instruction of financial accounting. The standard deviation suggests that students' responses are moderate to high dispersion around the mean of 2.30. indicating a significant spread from the mean. The mean score for "Guided Practice" is 1.68, with a standard deviation of .93. This indicates that financial accounting teachers in Wa Township are undecided about their use of the Guided Practice method in teaching financial

accounting in Wa Township. The standard deviation implied that students' responses were moderately dispersed around the mean of 1.68.

The mean score for “Explanatory examples” was found to be 4.13, with a standard deviation of 1.07. This suggests that financial accounting teachers in Wa township sometimes employ explanatory examples methods in the teaching of financial accounting students. The standard deviation suggests that students' responses are moderate to high dispersed around the mean of 4.13. indicating a significant spread around the mean. The mean score for “Visual Aids” is 1.45, with a standard deviation of .94. This indicates that the financial accounting teachers in Wa Township are undecided about the adoption of visual aids in teaching financial accounting. The standard deviation suggested that students' responses were moderately dispersed around the mean of 1.45.

Table 4.3: Teacher-centered teaching strategies adopted in teaching financial accounting.

Variables	N	Minimum	Maximum	Mean	Std deviation
Lecture Base Instruction	179	1	5	4.35	.81
Demonstration	179	1	5	2.30	1.33
Guided Practice	179	1	5	1.68	.93
Explanatory Examples	179	1	5	4.13	1.07
Visual Aids	179	1	5	1.45	.94

Fieldwork 2023

The mean response ranges were reported as 1 "Undecided" 2 "Not at all," 3 "scarcely," 4 "Sometimes," 5 "Always. The responses were analyzed using means and standard deviations with cut-off point values as (1.00 – 1.80 = Undecided, 1.81 – 2.60 = Not at all, 2.61 – 3.40 = Scarcely, 3.41 – 4.20 = Sometimes, 4.21 – 5.00 = Always).

The results suggest that the financial accounting teachers in the Wa Township always employ lecture-based instruction and sometimes uses explanatory examples methods in teaching financial accounting. This was validated by the responses of financial accounting teachers who took part in the interviews. Some of them elucidate to the researcher as follows:

I often employ traditional lecturing methods because they allow me to systematically present complex accounting principles and standards. This approach ensures that my students grasp the foundational knowledge before moving on to more advanced topics. For instance, when I'm explaining the intricacies of double-entry bookkeeping or the preparation of financial statements, it's crucial to follow a step-by-step process. This method provides me with a clear framework and reduces the chances of my students misinterpreting key concepts (MAT1, Remark, 2023).

I adopt lecture-based instruction in teaching my students primarily because it provides a consistent framework within which students can learn. However, I strive to balance this with engaging and interactive elements to maintain student interest and involvement. I also include question-and-answer sessions, case studies, and practical exercises to encourage active participation (FATF1 Interview, 2023).

I often use real-world examples and detailed step-by-step explanations to illustrate complex ideas in my financial accounting class, such as how to prepare balance sheets and income statements. I allocate significant class time to discussing the rationale behind accounting standards and practices, ensuring that students develop a strong conceptual understanding (MAT5 Interview, 2023).

These statements provided by financial accounting teachers underscore the effectiveness of a structured, lecture-based teaching strategy that is enriched with interactive elements and real-world examples. This comprehensive approach not only ensures that students acquire a solid foundation of knowledge but also keeps them consistently engaged and motivated throughout the learning process.

The emerging picture is that financial Accounting teachers in the Wa Township employed teacher-centered teaching strategies in teaching financial Accounting. The reference to the traditional lecture methods balances this with engaging and interactive elements to maintain student interest and involvement, question-and-answer sessions, case studies, and practical exercises to encourage active participation and also use real-world examples and detailed step-by-step explanations to illustrate complex ideas in financial accounting class. In essence, the statements provided by financial Accounting teachers in the Wa Township suggest the adoption of teacher-centered teaching strategies like lecture-based instruction and the use of real-world examples and detailed step-by-step explanations in teaching financial accounting.

4.3.2 Objective Two: Student-centered strategies adopted in teaching financial accounting.

As indicated in Table 4.4 below, the mean score for "case studies" is 4.58, with a standard deviation of 1.24. This suggests that financial accounting teachers in Wa township consistently use case studies in their teaching of financial accounting. The standard deviation indicates a moderate to high dispersion of students' responses around the mean of 4.58, reflecting a significant spread from the average score.

The mean score for "Group project" is 4.37, with a standard deviation of 0.65. This indicates that financial accounting teachers in the Wa township consistently employ group projects in their teaching of financial accounting. The standard deviation suggests that students' responses are moderately dispersed around the mean of 4.37.

The mean score for "Role-playing" is 2.14, with a standard deviation of 1.15. This suggests that financial accounting teachers in the Wa township do not employ role-playing as a teaching strategy. The standard deviation indicates a moderate to high variability in the students' responses, reflecting a significant spread around the mean score of 2.14.

The mean score for "technology integration" is 2.76, with a standard deviation of 1.23. This suggests that financial accounting teachers in the Wa township scarcely incorporate technology into their teaching of financial accounting. The standard deviation indicates that there is moderate to high variability in students' responses around the mean score of 2.76.

The mean score for "cooperative learning" is 4.00, with a standard deviation of 0.96. This indicates that financial accounting teachers in Wa township

sometimes employ cooperative learning when teaching their financial accounting students. The standard deviation suggests a moderate level of variation in the teachers' use of cooperative learning, indicating that while it is commonly used, the extent to which it is applied varies among teachers.

Table 4.4: Student-centered strategies adopted in teaching financial accounting

Variables	N	Minimum	Maximum	Mean	Std deviation
Case Studies	179	1	5	4.58	1.24
Group Projects	179	1	5	4.37	.65
Role Playing	179	1	5	2.14	1.15
Technology Integration	179	1	5	2.76	1.23
Cooperative Learning	179	1	5	4.00	.96

Fieldwork, 2023

The mean response ranges were reported as 1 "Undecided" 2 "Not at all," 3 "scarcely," 4 "Sometimes," 5 "Always. The responses were analyzed using means and standard deviations with cut-off point values as (1.00 – 1.80 = Undecided, 1.81 – 2.60 = Not at all, 2.61 –3.40 = Scarcely, 3.41 – 4.20 = Sometimes, 4.21 – 5.00= Always).

This finding was corroborated by the participants who took part in the interview. When asked about the student-centered strategies adopted in teaching financial accounting in the Wa township, they indicated a variety of strategies. These included case studies, group work, cooperative learning, and technology integration. Some of the participants explained to the researcher as this:

I frequently use case studies in my financial accounting classes because it allows students to apply theoretical concepts to real-world scenarios. This method encourages critical thinking and problem-solving skills. For instance, I present cases involving financial statement analysis from actual companies, prompting students to identify issues and suggest solutions. This approach not only enhances their understanding of the subject matter but also prepares them for practical challenges they may face in their careers (MAT3 Interview, 2023).

I find that group work is an effective strategy for teaching financial accounting. By working in groups, students can collaborate, share diverse perspectives, and learn from each other. I often assign group projects where students analyze financial data, prepare reports, and present their findings to the class. This collaborative approach fosters teamwork and communication skills, which are essential in the accounting profession. Additionally, it helps students to build a deeper understanding through peer learning (FAT2 Interview, 2023).

Cooperative learning is a key strategy in my teaching. I organize students into small groups where they work together to solve accounting problems and complete tasks. Each member of the group has a specific role, ensuring that everyone participates and contributes. This method promotes a sense of responsibility and accountability among students. It also allows them to develop critical thinking and analytical skills as they discuss and debate various accounting concepts and solutions (FAT4 Remark, 2023)

Integrating technology into my teaching has significantly enhanced the learning experience for my students. I use accounting software and online platforms to provide hands-on experience with real accounting tools. For example, students use software to practice bookkeeping, financial analysis, and reporting. This not only makes the learning process more interactive and engaging but also ensures that students are proficient in the technologies they will encounter in the workplace. Additionally, I use online discussion boards and virtual collaboration tools to facilitate continuous learning outside the classroom (MAT3 Interview, 2023).

These statements collectively underscore a proactive and adaptable approach among financial accounting teachers, emphasizing the implementation of case studies, group projects, technology integration, and cooperative learning to enrich students' comprehension of financial accounting concepts. The integration of case studies, cooperative learning, and group projects highlight a range of student-centered strategies that enhance engagement, understanding, and practical skills in financial accounting, tailored to meet the diverse needs of students in the Wa township.

4.3.3 Objective Three: To examine how teacher-centered strategies influence the academic performance of senior high school financial accounting in Wa.

The objective of the third research question was to gather insights from students regarding the influence of teacher-centered strategies on their academic performance of SHS financial accounting students in Wa. This question was necessitated by the poor WAEC cumulative results (2018-2022)

for the selected schools, a standardized assessment criterion (an embodiment of both formative and summative assessments) for measuring senior high school student's academic performance and placement in tertiary institutions in Ghana and other West African countries. The report showed that the three schools (Wa SHS, Jamiat Islamic Girs SHS, and Wa Islamic SHS) had an average pass rate of 32% in financial accounting for the five years (2018-2022) as against the 62% pass rate for the study Region. This justified why the researcher requested the students to rate the following teacher-centered strategies based on how effective they perceive them in influencing their academic performance in financial accounting.

Table 4.5: Analysis of Responses to Research Question Three (3)

Variables	Very Little Extent (%)	Little Extent (%)	Neutral (%)	Great Extent (%)	Very Great Extent (%)
Lecture-base instruction	75(41.9)	46(25.7)	17(9.5)	39(21.8)	2(1.1)
Demonstration	4(2.2)	20(11.2)	9(5.0)	57(31.8)	89(49.7)
Guided practice	2(1.1)	3(1.7)	8(4.5)	39(21.8)	127(70.9)
Explanatory Examples	4(2.2)	14(7.8)	6(3.4)	35(19.6)	120(67)
Visual Aids	40(23.3)	46(25.7)	61(34.1)	23(12.8)	9(5)

Source: fieldwork 2023

Table 4.5 shows that 75 students (41.9%) expressed that lecture-based instruction has very little impact on their academic performance. Meanwhile, 46 students (25.7%) think it has little impact, and 17 students (9.5%) are

undecided. A smaller group, 39 students (21.8%), opine that lecture-based instruction influences their academic performance. Only two (2) students (1.1%) indicated it has a very great influence.

Table 4.5 reveals that four (4) of respondents (2.2%) believe the demonstration method has very little influence on students' academic performance. Meanwhile, 20 students (11.2%) think the influence is little, and nine (9) students (5%) remain undecided. On the other hand, 57 respondents (31.8%) admitted that the influence is great, and the majority, 89 students (49.7%), asserted that the influence is very great.

Further two (2) respondents (1.1%) believe the guided practice method has very little impact on students' academic performance. Additionally, three (3) students (1.7%) consider the influence to be little, and eight (8) students (4.5%) are undecided. Conversely, 39 respondents (21.8%) acknowledged that the influence is great, and the majority, 127 students (70.9%), emphasized that the influence is very great.

Table 4.5 reveals the respondents' opinions on the impact of the explanatory examples teaching method on students' academic performance. Four (4) respondents (2.2%) believe the influence is very little, while 14 students (7.8%) think it is little. Six (6) respondents (3.4%) were undecided. A notable 35 students (19.6%) indicated that the method has a great influence, and the majority, 120 students (67%), asserted that the influence is very great.

Respondents' perspectives on the influence of the visual aids teaching method on students' academic performance was examined as captured in Table 4.5. Forty respondents (23.3%) perceived the impact as very little, while 46 respondents (25.7%) regarded it as little. Sixty-one respondents (34.1%)

remained undecided. A notable portion, 23 respondents (12.8%), believed the method had a great influence, whereas 9 respondents (5.0%) stated that the influence was very great.

4.3.4 objective four (4): To examine how student-centered strategies, influence the academic performance of senior high school financial accounting in Wa.

Objective four of the research question was to gather insights from students regarding the influence of student-centered strategies on the academic performance of SHS financial accounting students in Wa. To examine this, students were asked to rate the following student-centered strategies based on how effective they perceive them in influencing their academic performance in financial accounting.

Table 4.6: Analysis of Responses to Research Question Four (4)

Variables	Very Little Extent (%)	Little Extent (%)	Neutral (%)	Great Extent (%)	Very Great Extent (%)
Case studies	3(1.7)	24(13.4)	17(9.5)	71(39.7)	64(35.8)
Group project	92(51.4)	64(35.8)	13(7.7)	8(4.5)	2(1.1)
Role-playing	4(2.2)	7(3.9)	17(9.5)	73(40.8)	78(43.6)
Technology integration	9(5)	26(14.5)	15(8.4)	64(35.8)	65(36.3)
Cooperative learning	5(2.8)	7(3.9)	13(7.3)	50(27.9)	104(58.1)

Source: fieldwork 2023.

Table 4.6 shows that three (3) students (1.7%) believe the case studies teaching method has very little impact on their academic performance. Meanwhile, 24 students (13.4%) think it has little impact, and 17 students (9.5%) were undecided. The majority, 71 students (39.7%), opine that the case

studies influence their academic performance. Another 64 students (35.8%) believe it has a very great influence.

In respect of the respondents' perspectives on the impact of the group project teaching method on students' academic performance, the majority, 92 respondents (51.4%), believe it has very little influence. Meanwhile, 64 students (35.8%) think it has a slight influence, and 13 respondents (7.3%) were undecided. Only a small number of students expressed it has a greater impact, with eight (8) other students (4.5%) believing it influences academic performance. Further two (2) students (1.1%) asserted that its influence is very significant.

Examining how role-playing affects students' academic performance, four (4) respondents (2.2%) believe it has very little influence on students' academic performance. Additionally, 7 students (3.9%) think the influence is slight, while 17 students (9.5%) were undecided. In contrast, 73 students (40.8%) feel the method has a significant influence, and 78 students (43.6%) emphasize that its influence is very significant.

Another 9 respondents (5.0%) perceive that technology integration has very little impact on students' academic performance. Further 26 students (14.5%) view the impact as little, and 15 students (8.4%) remain uncertain. Conversely, 64 students (35.8%) declare a great influence, while 65 students (36.3%) stress that it has a very great influence.

Table 4.6 illustrates that 5 (2.8%) of the student respondents believe that the influence of the cooperative learning method on students' academic performance is very minimal. Some 7 students (3.9%) indicated a slight extent

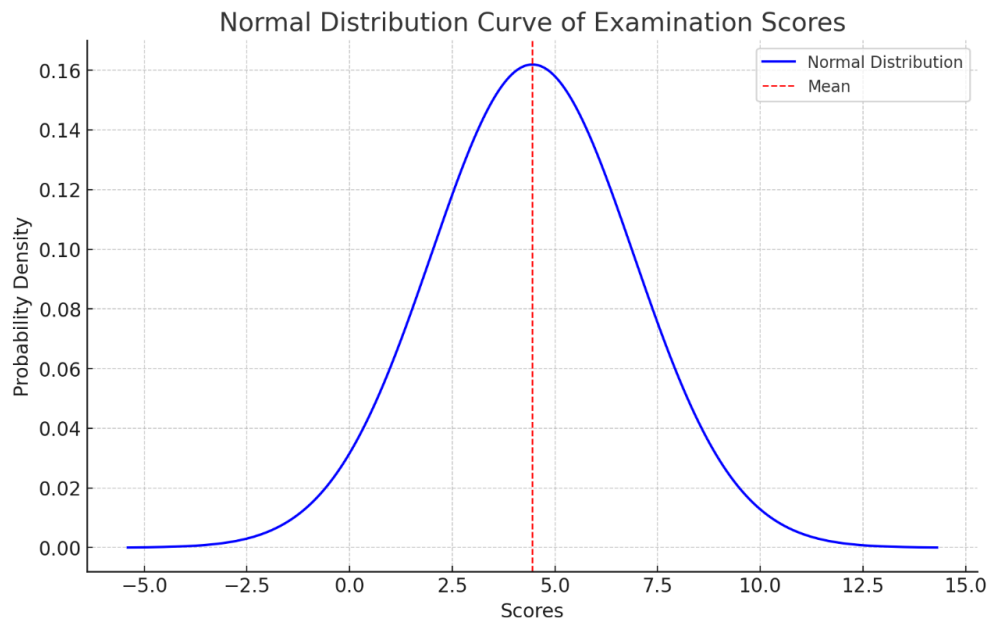
of influence, while 13 (7.3%) were undecided. A significant portion, 50 students (27.9%), perceive the influence to be great. The majority, comprising 104 students (58.1%), assert that the cooperative learning method has a highly significant impact on their academic performance.

In furtherance, the terminal examination scores obtained by students were descriptively analyzed as presented in Table 4.7. This was necessary because it implies the testing of the hypotheses guiding the study.

Table 4.7: Descriptive statistics of terminal examination scores obtained by students

Marks	Frequency	Percentages (%)
80-100	37	20.7
70-79	14	7.8
65-69	10	5.6
60-64	25	14.0
55-59	26	14.5
50-54	26	14.5
45-49	20	11.2
40-44	13	7.3
0-39	8	4.5
N	Valid	179
Missing		0
Mean		4.4525
Median		5.000
Standard deviation		2.46361
Skewness		.000
Standard error of skewness		.182

Source: Fieldwork, 2023



The above is the normal distribution curve based on the given statistics for the terminal examination scores in Table 4.7. The mean score is marked with a dashed red line. The curve represents the probability density function of the scores, showing how the scores are distributed around the mean.

4.3.5 Hypothesis one

Null Hypothesis (H_0): There is no significant difference in the academic performance of students in Financial Accounting when exposed to lecture-based instruction, demonstration, guided practice, explanatory examples, and visual aids. To assess this hypothesis, a linear multiple regression analysis was conducted to investigate the relationship between students' academic performance (measured by terminal examination scores) and various teaching strategies (lecture-based instruction, demonstration, guided practice, explanatory examples, and visual aids). The choice of linear multiple regression was guided by the need to model a linear relationship between the dependent variable (academic performance) and multiple independent

variables (teaching strategies). Key assumptions were verified, including linearity, independence of observations, normality of residuals, and absence of multicollinearity among predictors. This method was justified due to its ability to provide interpretable coefficients, indicating how different teaching strategies impact student performance and its efficiency in handling the study's data structure.

Table 4.8: Results of linear multiple regression on teacher-centered strategies' influence on students' financial accounting academic performance, measured by terminal examination scores.

Model	R	R Square	Adjusted R square	Std. Error of Estimate
1	.49	.240	0.218	8.47915

ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	359.458	5	71.892	.339	.888
Residual	36644.6716	173	211.819		
Total	37004.134	178			

Coefficients

Model	B	SE	B	T	P
1 (Constant)	51.417	3.982		12.913	.000
Lecture-based instruction	1.051	.990	.081	1.062	.290
Demonstration	.641	1.029	.048	.623	.001
Guided Practice	.679	1.549	.035	.438	.662
Explanatory Examples	-.448	1.129	-.032	-.397	.692
Visual Aids	-.133	.911	-.011	-.146	.884

Source: fieldwork 2023.

The results of the study indicate that when considering five predictors, they collectively explain 24% of the variability in the academic performance of financial accounting students ($f(71.892) = 0.339, p > 0.05$). Upon analyzing the individual effects of each predictor, it was evident that lecture-based instruction ($\beta = 0.081, t = 1.062, p = 0.290$), guided practice ($\beta = 0.035, t = 0.438, p = 0.662$), explanatory examples ($\beta = -0.032, t = -0.397, p = 0.692$), and visual aids ($\beta = -0.011, t = -0.146, p = 0.884$) have no significant impact on students' academic performance in financial accounting. However, the demonstration method ($\beta = 0.048, t = 0.623, p = 0.001$) is the only teaching strategy that significantly influences students' academic performance in financial accounting. The findings indicate a noteworthy positive relationship ($p = 0.001$), suggesting that the demonstration method outperforms other teaching strategies.

Based on the results of the study, the researcher accepted the null hypothesis for lecture-based instruction ($p = 0.290$), guided practice ($p = 0.662$), explanatory examples ($p = 0.692$), and visual aids ($p = 0.884$) since their p-values are greater than the significance level (0.05). This indicates that these teaching strategies do not significantly impact students' academic performance in financial accounting. However, the researcher rejects the null hypothesis for the demonstration method ($p = 0.001$) since its p-value is less than the significance level (0.05). This indicates that the demonstration method significantly influences students' academic performance in financial accounting.

4.3.7 Hypothesis Two

Null Hypothesis (H_0): There is no significant difference in the academic performance of students in Financial Accounting when exposed to case studies, group projects, role-playing, technology integration, and cooperative learning. To assess this hypothesis, a linear multiple regression analysis was conducted to investigate the relationship between students' academic performance (measured by terminal examination scores) and various teaching strategies (case studies, group projects, role-playing, technology integration, and cooperative learning). The choice of linear multiple regression was guided by the need to model a linear relationship between the dependent variable (academic performance) and multiple independent variables (teaching strategies). Key assumptions were confirmed, including linearity, independence of observations, normality of residuals, and absence of multicollinearity among predictors. This method was justified due to its ability to provide interpretable coefficients, indicating how different teaching strategies impact student performance and its efficiency in handling the study's data structure.

Table 4.9: Results of linear multiple regression analysis depicting the influence of student-centered strategies on students' academic performance in financial accounting, as measured by terminal examination scores.

Model summary

Model	R	R Square	Adjusted R square	Std. Error of Estimate
1	.575	.330	.30	3.229

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	1131.108	5	226.222	1.091	.004
Residual	35873.026	173	207.359		
Total	37004.134	178			

Coefficient

Model	β	SE	β	T	P
1 (Constant)	52.494	3.661		14.338	.000
Case Studies	.599	.941	.049	.637	.525
Group Project	2.289	1.350	.139	1.696	.002
Role-playing	.229	.040	.255	4.048	.004
Technology Integration	-.083	1.028	-.006	-.080	.936
Cooperative Learning	2.232	1.289	.143	1.731	.003

Source: fieldwork 2023

The findings indicated that these five predictors collectively account for a modest 33% of the variance observed in the academic performance of financial accounting students ($f(226.222) = 1.091, p < 0.05$).

Examining the effects of each predictor, it was found that case studies ($\beta = 0.049$, $t = 0.637$, $p = 0.525$) and technology integration ($\beta = -0.006$, $t = -0.080$, $p = 0.936$) have no influence student's academic performance in financial accounting. Contrarily, group projects ($\beta = 0.139$, $t = 1.696$, $p = 0.002$), role-playing ($\beta = 0.255$, $t = 4.048$, $p = 0.004$), and cooperative learning methods ($\beta = 0.143$, $t = 1.731$, $p = 0.003$) demonstrate significant influences on students' academic performance in financial accounting. The findings highlight a noteworthy positive relationship ($p = 0.002$), ($p = 0.004$), ($p = 0.003$), indicating that group projects, role-playing, and cooperative learning methods outperform other instructional strategies.

Based on the findings: the researcher rejected the null hypothesis for group projects, role-playing, and cooperative learning methods since they demonstrate significant influences on students' academic performance in financial accounting ($p < 0.05$). however, the researcher accepts the null hypothesis for case studies and technology integration as they do not show a significant influence on student's academic performance in financial accounting ($p > 0.05$).

4.4 Discussion of Findings

4.4.1 Teacher-centered strategies adopted in teaching senior high school financial accounting in Wa

The findings indicate that financial accounting teachers in Wa use lecture-based instruction, explanatory example methods, real-world examples, and detailed step-by-step explanations in teaching financial accounting to enhance students' understanding of accounting concepts. This resonates with both existing literature on effective teaching practices and the Didactic Teaching Theory (Hussain et al., 2019; Halabi et al., 2005; Myers, 2016). The reliance on lecture-based instruction aligns with traditional didactic teaching theory, which emphasizes teacher-centered knowledge transmission and structured content delivery (Dietrich 2022). While this method can efficiently cover extensive material, it often results in passive learning, which may contribute to the observed low student performance (Lubis, 2023; Amushigamo, Hidengwa, & Herman, 2018; Amin, 2016). Students are typically less engaged and may struggle to retain information delivered through lectures alone, as this approach does not cater to diverse learning styles or encourage active participation (Ko, 2018). The use of explanatory example methods reflects an effort to make abstract financial accounting concepts more accessible. For instance, Bublitz, (2015) indicated that work examples can reduce the cognitive load on students by providing clear, step-by-step demonstrations of problem-solving processes. However, while this method helps clarify complex concepts, it still often adheres to a didactic framework where the teacher is the primary source of knowledge.

Incorporating real-world examples into teaching strategies aligns with the principles of contextualized learning and situated cognition. This approach helps students understand the practical applications of accounting concepts, making learning more relevant and engaging (Banerjee, Tarazi, & Ahli, 2019). By linking theoretical knowledge to real-life contexts, students can better grasp the importance and utility of what they are learning, potentially improving motivation and retention (Ching (2014). Detailed step-by-step explanations are crucial in disciplines like financial accounting, where precision and clarity are essential. This method supports students in understanding procedural knowledge and developing the ability to perform specific tasks accurately (Mayer, 2004). However, this approach remains largely didactic, focusing on knowledge transmission rather than fostering critical thinking or problem-solving skills.

While the observed teaching strategies in Wa reflect strong elements of didactic teaching, they also show an awareness of the benefits of contextualized learning, which aligns with social constructivist theories. Social constructivism, as proposed by Vygotsky (1978), emphasizes the importance of social interaction and collaboration in learning. It suggests that students learn more effectively through active engagement and dialogue with peers and teachers, constructing knowledge through shared experiences. Despite this, the current strategies seem to lack opportunities for collaborative learning and peer interaction, which are critical components of social constructivism. Encouraging group work, discussions, and problem-based learning could

enhance student engagement and performance by allowing learners to construct knowledge socially and contextually (Bruyn, 2011).

4.4.2 Student-centered strategies adopted in teaching senior high school financial accounting in Wa

The findings indicate that financial accounting teachers in Wa adopted student-centered strategies, such as case studies, group projects, technology integration, and cooperative learning in teaching financial accounting. These instructional methods are grounded in both social constructivist learning theory and didactic teaching theory, suggesting a blend of student engagement and structured content delivery. These findings are consistent with previous research highlighting the effectiveness of student-centered approaches in accounting education. For instance, Apostolou et al. (2013) found that active learning techniques, including case studies and group projects, significantly improve student engagement and understanding of accounting principles. Similarly, Ibrahim (2018) emphasized the role of technology and cooperative learning in developing critical thinking and problem-solving skills among accounting students. However, some studies suggest that traditional didactic teaching methods may be equally effective or even preferable in certain contexts. For example, Frick (2020), Ndovela (2023), and Brickner (2008) argue that direct instruction and structured lectures can provide clear and concise explanations of complex accounting concepts, which might be particularly beneficial for students who struggle with self-directed learning or lack prior knowledge in the subject.

The findings align well with social constructivist learning theory, which posits that knowledge is constructed through social interaction and collaboration (Vygotsky, 1978). This theory supports the use of group projects and cooperative learning, as they facilitate peer-to-peer learning and collective problem-solving. Additionally, technology integration can provide interactive and personalized learning experiences, further enhancing student engagement. On the other hand, didactic teaching theory emphasizes the importance of structured content delivery and teacher-guided instruction Sandhu (2012). This theory supports the use of case studies and technology as tools for providing clear, context-rich examples that can make abstract accounting concepts more concrete and understandable.

While these strategies have potential benefits, their implementation may not be sufficient on its own to address all the learning needs of accounting students. Factors such as the quality of implementation, students' prior knowledge, and individual learning styles could influence the effectiveness of these approaches and that might have accounted for the low performance.

4.4.3 How Teacher-centered Strategies Influence the Academic Performance of Senior High School Financial Accounting in Wa

Concerning how teacher-centered strategies influence the academic performance of the senior high school in Wa, the findings show that the influence of lecture-based instruction on students' academic performance is minimal to a very great extent. This implies that traditional teacher-centered strategies may not be sufficiently effective in enhancing students' understanding and retention of financial accounting concepts. This suggests a

potential need for incorporating more interactive and student-centered teaching methods to improve academic outcomes. The low performance of students highlights the limitations of relying primarily on lecture-based instruction and points to the importance of exploring alternative instructional approaches. The findings collaborate with Aji and Khan (2019) who found that active learning strategies significantly improve student performance in STEM disciplines compared to traditional lectures. Their meta-analysis demonstrated that students in active learning environments had higher exam scores and lower failure rates.

Huerta (2007) reviewed the effectiveness of active learning and concluded that interactive engagement techniques, such as collaborative learning and problem-based learning, lead to better student outcomes than conventional lecture methods. Korff (2016) similarly, conducted a large-scale study on interactive engagement methods in introductory physics courses. The study found that students taught with these methods achieved higher gains in conceptual understanding than those taught with traditional lectures. However, the findings contradict the study of Mason (2021), who argues that direct instruction and structured lectures provide clear and concise explanations of complex concepts which can be particularly beneficial for students who struggle with self-directed learning or lack prior knowledge of the subject. Gregory (2013) suggests that traditional lectures are effective when the content is well-organized and delivered by engaging and knowledgeable instructors. Mason (2021) and Gregory studies suggest that lectures can efficiently convey a large amount of information in a short time. Alkilany,

(2017) found that in some mathematics courses, traditional lectures were equally effective as active learning approaches, particularly when combined with opportunities for student practice and feedback.

Further investigation into the influence of teacher-centered strategies on students' academic performance in financial accounting, revealed that the demonstration method has a very great influence. This underscores the importance of direct instruction and the role of the teacher in facilitating learning. For instance, Mariyanto (2023) found that the demonstration method is particularly effective in subjects requiring procedural knowledge, such as accounting, because it allows students to observe the step-by-step process involved in problem-solving. Similarly, Mazzolini (2012) reported that direct instruction, including demonstrations, improves comprehension and retention of complex concepts in technical subjects. Their research highlights how structured guidance from teachers can help students grasp intricate accounting principles. Furthermore, Güneş (2010) emphasized the benefits of explicit instruction, which includes demonstration and modeling, in improving academic achievement. His principles of instruction suggest that clear, direct teaching methods are particularly effective in subjects that require precise and accurate knowledge transfer.

However, some studies argue that teacher-centered strategies might not always be the most effective approach, especially in the context of low student performance. Dogani, (2023) meta-analysis showed that active learning strategies which are more student-centered, result in higher student

performance compared to traditional lecture-based instruction. This research suggests that methods involving active participation and engagement may better support student learning. Overby (2011) reviewed the literature on active learning and concluded that student-centered methods, such as cooperative learning and problem-based learning, are generally more effective in promoting deeper understanding and long-term retention of knowledge than teacher-centered approaches. Additionally, Dai (2019) argued that interactive teaching methods are superior to traditional lectures in promoting critical thinking and problem-solving skills which are essential for mastering financial accounting.

Regarding the impact of the guided practice method on students' academic performance in financial accounting, the study revealed that the influence was very great. This finding collaborates with an investigation conducted by Ugwoke (2020) which found that guided practice methods, such as problem-solving exercises and practice quizzes significantly improved student performance in financial accounting. His study highlighted that regular practice opportunities under teacher guidance enhanced students' understanding and retention of accounting concepts. Correspondingly, Radhakrishnan (2009) study found that guided practice activities, such as structured homework assignments and in-class problem-solving sessions, positively influenced students' academic performance in financial accounting. The findings suggested that students who engaged in regular practice with teacher guidance achieved higher academic outcomes. The finding also took a different tangent from an investigation by Hosai-Akman (2010) which

reported that guided practice methods had a minimal impact on students' academic performance in financial accounting. Contrary to expectations, the study found that students did not significantly improve their performance despite engaging in guided practice activities. This suggests that other factors beyond guided practice may influence student outcomes. Additionally, Peladeau (2003) study contradicted the notion that guided practice significantly influences students' academic performance in financial accounting. The study found that while guided practice activities were beneficial for some students, they did not universally lead to improved performance. This suggests that the effectiveness of guided practice may vary depending on individual student characteristics and instructional context.

In examining the influence of the explanatory example method on students' academic performance in financial accounting, most respondents reported a very great influence on their academic performance. This finding aligns with previous studies in the field. For instance, Bublitz (2015) found that the use of explanatory examples significantly improved student learning outcomes in accounting education. Their research demonstrated that students exposed to explanatory examples exhibited higher academic performance compared to those who received traditional instruction alone. Likewise, Ballester (2012) investigated the impact of explanatory examples on student performance in financial accounting and found that this method positively influenced academic achievement. Students exposed to explanatory examples showed significant improvement in understanding complex accounting concepts and achieving higher grades. However, opposing findings exist in the literature.

Phan (2010) conducted a study examining the effectiveness of explanatory examples in financial accounting education. Contrary to the aforementioned studies, their research did not find a significant positive influence of explanatory examples on student academic performance. They suggested that while explanatory examples may have some benefits, other factors such as teaching style and student engagement could play a more significant role in determining student outcomes.

In examining the influence of the visual aid method on students' academic performance in financial accounting, few respondents reported a very great influence on their academic performance. The results were in line with a study conducted by Hosal-Akman (2010), which found no significant improvements in academic performance despite the widespread use of visual aids in accounting classrooms. Likewise, Ngonyani (2018) reported that while visual aids were perceived positively by students, they did not lead to significant enhancements in academic performance. The findings deviate from an investigation by Wynder (2018) which demonstrated that students exposed to visual aids, including charts and multimedia presentations, exhibited higher comprehension and retention of accounting concepts. Merchant's (2014) meta-analysis affirmed the benefits of visual aids in enhancing student engagement and learning outcomes in accounting courses.

4.4.4 How Student-centered Strategies Influence the Academic Performance of Senior High School Financial Accounting in Wa

Regarding the impact of student-centered strategies on the academic performance of senior high school students in Wa, the majority of the

respondents expressed that case studies influence their academic performance to a greater extent. This view aligns with several studies that highlight the effectiveness of case studies as a pedagogical approach in enhancing learning outcomes. According to Yadav (2014), case-based teaching compels students to apply theoretical concepts to real-world scenarios, thereby deepening their understanding and retention of the material. Additionally, case studies are effective in developing critical thinking and problem-solving skills. A study by Baeten et al. (2013) found that students exposed to case-based learning, exhibited better analytical skills compared to those who were taught through traditional lecture methods. Furthermore, Cannings (2003) study highlighted that case studies bridge the gap between theory and practice by providing students with opportunities to apply classroom knowledge to real-world situations. This experiential learning approach can enhance comprehension and practical skills. However, some studies and observations question the universal effectiveness of case studies, particularly in certain contexts or subjects. Some research suggests that the effectiveness of case studies can vary based on how they are implemented and the subject matter. For instance, a study by Huckvale (2019) found that while case studies are beneficial for some students, others may struggle without adequate support and guidance. Moreover, the success of case-based learning heavily depends on the instructor's ability to facilitate discussions and guide students. Poor implementation can lead to confusion and lack of clarity among students (Watson, 2017).

Despite the widespread use of case studies in financial accounting classes, the observation of low performance raises important questions. Financial accounting involves complex and abstract concepts that may not be easily understood through case studies alone. Students might require more foundational instruction and practice before they can effectively engage with case studies (Starr-Glass, 2021). Furthermore, not all students may thrive in a case-based learning environment. Some might prefer more structured and direct instruction, especially in subjects that are highly technical and procedural like financial accounting (Aisyaturrahmi, 2016). Additionally, if assessments do not align well with the case study method, students might struggle to perform well. Case studies often focus on qualitative analysis and discussion, while traditional exams may emphasize quantitative problem-solving skills (Harling, 2012).

In examining group projects, it was evident that only a small number of students feel it has a greater impact on their academic performance. The findings are not different from Hall's (2013) study which suggested that the primary issue in group projects is the unequal participation of group members. Some students may not contribute equally, leading to frustration and a perception of unfairness, which can negatively affect the overall learning experience and perceived value of group work. Additionally, some students prefer individual work and feel that they learn better on their own. Correspondingly, Amua-Sekyi (2016) highlights that not all students benefit equally from group activities, as individual learning preferences and styles play a crucial role in educational outcomes. Some studies have also found no

significant difference in academic performance between students who engage in group projects and those who do not. The findings also align with a study by Sweeney (2008) suggests that while group projects can enhance engagement and interest, they do not always translate to higher academic achievement. The findings also took a different tangent, for example, according to Kagwesage (2014), group work fosters a deeper understanding of the material through peer-to-peer interaction and discussion. Additionally, group projects often mimic real-world situations, preparing students for future professional environments where teamwork is essential. Deep (2019) argues that group-based learning helps students develop essential soft skills such as communication, leadership, and conflict resolution.

The implementation of group projects in financial accounting classes, where only a few students feel the method is beneficial, highlights a gap between instructional strategy and student perception. Financial accounting, which often requires individual analytical skills and precision, may not always align well with group project formats. Accounting education typically involves precise calculations and individual accountability. Group projects might dilute the focus on individual understanding and mastery of complex accounting principles (Teviotdale, 2017).

Probing the role-playing method, the study found that the majority of students perceived it to have a significant influence on their academic performance. The current findings are consistent with previous research (Berry, 2022) suggesting that role-playing holds promise as an effective pedagogical tool in

financial accounting education. This depicts the notion that active learning methods, such as role-playing, can enhance student engagement and understanding of complex topics (Berry, 2022).

However, there are mixed evidence regarding the actual impact of role-playing on academic performance. While students may feel that role-playing contributes to their learning experience, studies such as Barrera (2020) indicate that the direct correlation between role-playing and improved academic performance is not always clear. Moreover, Stevens (2015) found that some students did not perceive significant benefits from role-playing, suggesting that its effectiveness may vary among individuals. In light of these findings, educators must consider the diverse perspectives of students and the potential limitations of role-playing as a teaching method. While many students may find it beneficial, some may not experience the same level of improvement in academic performance. Therefore, educators should supplement role-playing activities with other instructional methods such as the demonstration method to ensure a comprehensive learning experience for all students.

Investigating the incorporation of technology in the teaching of financial accounting, it was revealed that the majority of the students believed it had a substantial impact on their academic performance. The current study is in line with prior research, suggesting that most students believe the incorporation of technology in financial accounting instruction positively impacts their academic performance. The findings are consistent with Herrador-Alcaide

(2016) who observed a similar trend among students. Other studies, however, have demonstrated contrary results (Davies and West; 2014; Berrett, 2012; Jaiswal, 2020). These studies suggest that while technology integration may benefit some students, it may not necessarily lead to improved academic performance for all. While the majority of students in the current study perceive technology integration to have a significant influence on their academic performance, it is essential to recognize the diverse range of student experiences and perspectives.

The present study examined the influence of cooperative learning methods on students' academic performance in financial accounting. The findings reveal that the majority of students perceived cooperative learning to have a significant positive influence on their academic performance. This result is consistent with several studies in educational psychology and accounting education, which have highlighted the effectiveness of cooperative learning strategies in improving students' learning outcomes (Tsay 2010; Gull, 2015; Mendo-Lázaro, 2022). Johnson and Tsay (2010) emphasized the positive impact of cooperative learning on academic achievement, suggesting that students working in groups tend to outperform those who learn individually. Similarly, Gull (2015) demonstrated that cooperative learning fosters active engagement, critical thinking, and a deeper understanding of the subject matter. Furthermore, Mendo-Lázaro (2022) found that cooperative learning enhances students' problem-solving skills and promotes a supportive learning environment, which is essential in the field of financial accounting.

Despite the predominantly positive perception of cooperative learning, some studies have reported opposing findings. For instance, Al-Mubireek (2022) conducted a study in a similar educational context and found no significant difference in the academic performance of students who were exposed to cooperative learning compared to those taught through traditional methods. Additionally, Ballantine and Larres (2009) reported that while cooperative learning positively affected some aspects of learning, such as interpersonal skills and teamwork, its impact on academic achievement in accounting education was inconclusive. These opposing findings suggest that the effectiveness of cooperative learning may vary depending on various factors, such as the teaching context, student demographics, and implementation strategies. Moreover, the nature of the subject matter, such as financial accounting, might influence the outcomes of cooperative learning approaches.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a concise overview of the main findings that emerged from the study. Alongside these findings, the study presents the conclusions and recommendations based on the results. Additionally, the study highlights potential areas for future research.

5.2 Summary of Findings

The study explored teaching strategies and senior high school student's academic performance in financial accounting within Wa Township. The specific objectives included determining the teacher-centered strategies adopted in teaching senior high school financial accounting, student-centered strategies adopted in teaching senior high school financial accounting, how teacher-centered strategies influence the academic performance of senior high school financial accounting, and how student-centered strategies influence the academic performance of senior high school financial accounting. This research focus arose from the recognition that the connection between teaching strategies and senior high school academic performance in financial accounting has been underexplored despite the plethora of research on teaching strategies. The study adopted a mixed method approach, integrating relevant theories such as the social constructivist learning theory and didactic teaching theory. The quantitative data were collected and analyzed using appropriate analytical tools such as SPSS V 22. The subsequent analysis revealed that financial accounting teachers in Wa use lecture-based

instruction, explanatory example methods, real-world examples, and detailed step-by-step explanations in teaching financial accounting to enhance students' understanding of accounting concepts and principles. This suggests that financial accounting teachers in Wa employ a comprehensive and multifaceted approach to instruction, combining traditional lecture-based methods with explanatory examples, real-world applications, and detailed step-by-step explanations. Such a diverse teaching strategy is designed to cater for different learning styles, ensuring that students gain a thorough understanding of accounting concepts and principles. By integrating practical examples and detailed explanations, instructors aim to bridge the gap between theory and practice, thereby enhancing students' ability to apply their knowledge in real-world accounting situations.

The study found that financial accounting teachers in Wa adopted student-centered strategies, such as case studies, group projects, technology integration, and cooperative learning in teaching financial accounting to improve students' grasp of financial accounting concepts, and principles. This suggests that financial accounting teachers in Wa are proactively employing innovative and interactive teaching methods to enhance student engagement and understanding. By using student-centered strategies like case studies, group projects, technology integration, and cooperative learning, these educators aim to make financial accounting concepts and principles more accessible and comprehensible, ultimately improving students' learning outcomes and practical application skills. Additionally, these methods align with social constructivist learning theory, which posits that learning occurs

through social interaction and collaboration, enabling students to construct knowledge actively and contextually. Thus, by integrating these theories, teachers aim to enhance students' grasp of financial accounting concepts and principles effectively.

The study explores the impact of teacher-centered strategies on the academic performance of senior high school financial accounting students in Wa. The findings indicate that lecture-based instruction has minimal influence on performance. In contrast, the demonstration method, guided practice method, and explanatory example method all have a very great influence. Additionally, the use of visual aids was found to have minimal influence on students' behaviour. (learning outcomes). Statistically, it revealed that lecture-based instruction, guided practice, explanatory examples, and visuals do not have a significant influence on student's academic performance in financial accounting. However, the demonstration method significantly influences students' academic performance in financial accounting. These findings suggest that among the various teacher-centered strategies examined, only the demonstration method significantly improves students' academic performance in financial accounting. Lecture-based instruction, guided practice, explanatory examples, and visual aids, despite being commonly used, do not have a statistically significant impact on student performance. This highlights the unique effectiveness of the demonstration method in enhancing students' understanding and success in financial accounting.

The study examines the influence of student-centered strategies on the academic performance of senior high school financial accounting students in Wa. The findings reveal that case studies, role-playing, technology integration, and cooperative learning greatly influence academic performance, while group projects have minimal influence. Statistically, it was found that group projects, role-playing, and cooperative learning methods significantly influence students' academic performance in financial accounting, while case studies and technology integration do not show a statistically significant influence. These findings suggest that among the various student-centered strategies examined, group projects, role-playing, and cooperative learning significantly improve students' academic performance in financial accounting. Case studies, and cooperative learning, despite being commonly used, do not have a statistically significant impact on student academic performance. This highlights the unique effectiveness of group projects, role-playing, and cooperative learning in enhancing students' understanding and success in financial accounting.

5.3 Conclusions

This study investigates teaching strategies and academic performance among financial accounting students in Ghana, specifically in Wa. The study draws inspiration from the social constructivist learning theory which emphasizes interaction, collaboration, and cultural context in the learning process, and didactic teaching theory which stresses structured, direct instruction and clear communication of knowledge to students. The study identifies lecture-based instruction, explanatory example methods, real-world examples, detailed step-by-step explanations, case studies, group projects, technology integration, and

cooperative learning as the teacher-centered and student-centered strategies employed in financial accounting instruction. The study reveals that demonstration methods, group projects, role-playing, and cooperative learning methods significantly influence students' academic performance in financial accounting.

These findings carry significant policy implications. From a managerial standpoint, teachers are encouraged to prioritize the integration of effective teacher-centered and student-centered strategies, such as demonstration methods, group projects, role-playing, and cooperative learning methods, to enhance student learning outcomes in financial accounting. Socially, promoting these strategies can cultivate collaborative learning environments, fostering peer interaction and knowledge sharing among students. Economically, improving academic performance in financial accounting through effective teaching strategies can contribute to the development of a skilled workforce, benefiting the economy in the long term.

Theoretical contributions of this research underscore the effectiveness of specific teacher-centered and student-centered strategies in financial accounting education. These findings enrich the existing literature by providing empirical evidence of the impact of various teaching strategies on student academic performance in this field.

5.4 Recommendations

While this study presented mixed findings regarding the impact of both teacher and student-centered strategies on academic performance, there are areas for improvement within the study locality. To elevate the standard of

financial accounting education in the Wa Township, the following recommendations are proposed:

1. The study found that there is a significant association between demonstrational method and students' academic performance. It is recommended that the Ministry of Education should provide additional training and professional development opportunities for financial accounting teachers in Wa Township to further deepen their demonstrational teaching technique to help improve students' academic performance in financial accounting.
2. The study revealed that students' academic performance in financial accounting is influenced by multiple factors. To achieve this, the Ministry of Education through periodic in-service training should encourage financial accounting teachers to use diverse range of both teacher-centered and student-centered strategies to cater to different learning styles and needs of students.
3. The study found that demonstration methods, group projects, role-playing, and cooperative learning methods significantly influence students' academic performance in financial accounting. To this end, management of various school heads should foster an environment that promotes inclusivity and supportive learning approaches among students, to enhance engagement, comprehension, and better achievement outcomes.

5.5. Suggestions for Further Research

Given the objective of the current study, it is suggested that further studies be conducted to:

1. Examine the relationship between teaching strategies, student engagement, and motivation in financial accounting classes.
2. Investigating the influence of cultural and contextual factors on the effectiveness of various teaching strategies in the Wa Township.
3. Examine how factors such as class size, classroom layout, and teacher-student interactions influence the effectiveness of different teaching strategies in financial accounting.

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APPENDIX ‘A’

Interview Guide for Financial Accounting Teachers

Dear Respondent,

I am researching teaching strategies employed in financial accounting and their effects on students’ academic performance as part of my MPhil thesis with the Department of Business Education, School of Education and Life-long Learning, SD Dombo University of Business and Integrated Development Studies (UBIDS). Your participation is appreciated, and your responses will remain confidential and solely utilized for research purposes. Kindly spare a few moments to answer the following questions.

Part 1: Demographic Information.

1. Which school do you teach at?
2. What is your gender?
3. What is your age?
4. What is your highest level of education?
5. What is your job schedule?
6. How long have you been in teaching?
7. How long have you been teaching financial accounting at the senior high school level?

Part 2: Teacher-Centered Strategies Adopted in Teaching Financial Accounting.

1. What teacher-centered strategies do you commonly use in your financial accounting classes (e.g., lectures, direct instruction)?
2. How do you structure your lessons to ensure that key concepts are communicated to students?

Part 3: Student-Centered Strategies Adopted in Teaching Financial Accounting.

1. What student-centered strategies do you employ in your financial accounting classes (e.g., group work, problem-based learning, discussions)?

APPENDIX ‘B’

Questionnaire for Financial Accounting Students

Dear respondent,

I am researching teaching strategies employed in financial accounting and their effects on students’ academic performance as part of my MPhil thesis with the Department of Business Education, School of Education and Life-long Learning, SD Dombo University of Business and Integrated Development Studies (UBIDS). Your participation is appreciated, and your responses will remain confidential and solely utilized for research purposes. Kindly spare a few moments to answer the following questions.

Part: 1 Demographic Information

Kindly mark the suitable box with a tick [✓]; or if necessary, fill in the provided blank spaces.

1. School.....
2. Gender Male ☐ Female ☐
3. Age range: below 18 ☐ 18-21 ☐ 22-25 ☐ 26-29 ☐
4. Class size 21 – 30 ☐ 31 – 40 ☐ 41 – 50 ☐ Other, specify.....
5. Number of streams 1 ☐ 2 ☐ 3 ☐ Other, specify.....
6. School System: Single Track ☐ Double Track ☐

Part 2: Teacher-Centered Strategies Adopted in Teaching Financial Accounting.

Kindly tick the option that closely reflects teacher-centered strategies adopted in teaching financial accounting, using a scale of 1 to 5. 1 signifies "Undecided", 2 represents "Not at all", 3 indicates "scarcely", 4 means

"Sometimes", and 5 means" Always". Ensure that you select only one option for each statement.

Table 1: Teacher-Centered Strategies Adopted in Teaching Financial Accounting

No	Teaching Strategies	Always (5)	Sometimes (4)	Scarcely (3)	Not at all (2)	Undecided (1)
1	Lecture-Based Instruction					
2	Demonstration					
3	Guided Practice					
4	Explanatory Examples					
5	Visual Aids					

Part 3: Student-Centered Strategies Adopted in Teaching Financial Accounting.

Indicate your response about student-centered strategies used in teaching financial accounting. please tick the appropriate box. Make sure you select only one option per each teaching strategy.

Table 2: Student-Centered Strategies Used in Teaching Financial Accounting.

No	Teaching Strategies	Always (5)	Sometimes (4)	Scarcely (3)	Not at all (2)	Undecided (1)
1	Case Studies					
2	Group Projects					
3	Role-Playing					
4	Technology Integration					
5	Cooperative learning					

Part 4: How Teacher-Centered Strategies Influence the Academic Performance of Senior High School Financial Accounting.

Please rate the following teacher-centered strategies based on how effective you perceive them in improving your academic performance in financial accounting. Please indicate your level of agreement with each teaching strategy by selecting the appropriate response on the scale provided. Kindly select only one option for each of the teaching strategies.

Table 3: How Teacher-Centered Strategies Influence the Academic Performance of Senior High School Financial Accounting.

NO	Teaching strategies	Very Little Extent	Little Extent	Neutral	Great Extent	Very Great Extent
1	Lecture-Based Instruction					
2	Demonstration					
3	Guided Practice					
4	Explanatory Examples					
5	Visual Aids					

Part 5: How Student-Centered Strategies Influence the Academic Performance of Senior High School Financial Accounting.

Please rate the following student-centered strategies based on how effective you perceive them to improve your academic performance in financial accounting. Please indicate your level of agreement with each teaching strategy by selecting the appropriate response on the scale provided. Kindly select only one option for each of the teaching strategies.

Table 4: How Student-Centered Strategies Influence the Academic Performance of Senior High School Financial Accounting.

NO	Teaching strategies	Very Little Extent	Little Extent	Neutral	Great Extent	Very Great Extent
1	Case Studies					
2	Group Projects					
3	Role-Playing					
4	Technology Integration					
5	Cooperative learning					