

UNIVERSITY FOR DEVELOPMENT STUDIES

COMPARATIVE STUDY OF PERFORMANCE IN BECE OF PUPILS IN PUBLIC AND
PRIVATE SCHOOLS IN THE TAMALE METROPOLIS

MAWAH CATHERINE NSUBAAN

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AND PRIVATE SCHOOLS IN THE TAMALE METROPOLIS**

BY

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THE REQUIREMENTS FOR THE AWARD OF MASTER OF PHILOSOPHY IN
EDUCATIONAL MANAGEMENT AND PLANNING**

MARCH 2024



DECLARATION

Declaration

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

Signature:  Date: 20/02/2025

Name: Mawah Catherine Nsubaan

Supervisor's Declaration

I hereby declare that the preparation and presentation of the thesis was supervised following the guidelines on supervision of thesis laid down by the University for Development Studies.

Signature:  Date: 20/02/2025

Name: Prof. Anthony K. Donkor



ABSTRACT

This study assesses the disparities in academic performance at the Basic Education Certificate Examination (BECE) between public and private junior high schools (JHS) in the Tamale Metropolis. A descriptive research design was adopted, utilizing both quantitative and qualitative approaches. Data were collected through questionnaires administered to 72 respondents, comprising headteachers, core subject teachers, and students from selected public and private schools. The study analyzed the data using frequencies, percentages, non-parametric tests, and Analysis of Variance (ANOVA). The findings revealed that over the past three years, public schools recorded pass rates below 60%, while private schools consistently achieved pass rates ranging from 80% to 100%. Key factors contributing to this disparity include lower teacher-student ratios in private schools, inadequate teaching and learning materials (TLMs) in public schools, lack of parental involvement in public schools, and insufficient teacher motivation. The ANOVA results confirmed statistically significant differences in BECE performance between public and private schools ($F = 7.361, p < 0.001$). The study recommends that educational stakeholders address disparities by ensuring adequate provision of TLMs and infrastructure for public schools. The Ghana Education Service (GES) should prioritize teacher motivation and rebrand the teaching profession to enhance societal respect for educators. Furthermore, future educational policies should emphasize active parental involvement to foster collaboration between schools and families. This study contributes to the body of knowledge on improving academic performance in public schools by drawing lessons from private schools, offering practical strategies for bridging the performance gap in Ghana's basic education system.



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DEDICATION

This study is specially dedicated to my wonderful parents, husband and lovely children.



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CHAPTER ONE

INTRODUCTION

1.0. Introduction

The success and development of every nation are heavily reliant on the caliber of its citizens' education. This explains why Sustainable Development Goal four (SDG4) emphasizes quality, inclusive, equitable education, and the promotion of lifelong learning for everyone (Sunthonkanokpong & Murphy, 2019)

Quality education is essential for the progression of an individual's social advancement and the development of significant analytical and social competences which enables one to make good choices and peruse responsible lifestyle acceptable in every society (Hinduja & Patchin, 2024) Saini et al., (2023) assert that the provision of relevant and high-quality education is essential for the development of any nation. This explains why all stakeholders are currently so interested and concerned about the quality of education.

The growing student population in Sub-Saharan African countries is evident from recent statistics. For example, (Bennell, 2023) reports that primary school enrolment in Sub-Saharan Africa increased by over 50% between 2000 and 2020 due to efforts to achieve universal primary education. However, this growth has outpaced the expansion of educational infrastructure and resources, leaving many schools overcrowded and under-resourced. Consequently, much remains to be desired in terms of public educational facilities and the anticipated school supplies needed to accommodate this rapid increase in student numbers across the region.

Much remains to be desired in terms of public educational facilities and the anticipated school supplies needed to accommodate the growing student population in the majority of Sub-





Saharan African countries. The majority of African nations that are adamant about ending poverty through education have made commitments to a number of declarations, including the Jomtien Conference and the Dakar Framework for Action (Ampiah, 2005) and the Millennium Development Goals (Tewe et al., 2024). These declarations emphasize that public financing should be given priority to basic education, although it should be noted that public funding alone is insufficient to meet the growing number of children attending school and the need for educational infrastructure to guarantee the delivery of high-quality education (Clemens et al., 2007)

There have been various educational policies in Ghana such as school infrastructure expansion, the introduction of capitation grants, school feeding programme, eradication of schools under trees, free uniforms, and free exercise books at the basic school level leading to improved enrolment (Ackah-Jnr, 2022). Although both the current and previous administrations have implemented several policy changes that have enhanced Ghanaian children's access to education, improving the caliber of instruction and students' academic achievement in public schools continues to be a difficulty. According to Etsey's theory, a high-quality education determines a child's capacity to learn, how much they learn, and how much of their abilities are evident in their test scores or employment prospects (Lebbihiat et al., 2021) According to (Levinson et al., 2022), having access to subpar education is the same as not having any education at all. This implies that if the education being offered is of poor quality, parents do not need to enrol their children in school.

Parents' perceptions of a school's performance, which are frequently based on the proportion of students who pass standardized tests, may have an impact on their decision to send their child there, according to (Potterton, 2020) Evidence from developing nations for instance, in Kenya, a study by (Kamau et al., 2021) found that private schools achieved an average pass

rate of 87% in national examinations compared to 54% for public schools over five years. Similarly, in Nigeria, research by (Azimi et al., 2023) highlighted those students from private schools scored significantly higher on standardized literacy and numeracy tests than their counterparts in public schools. is adequate to conclude that students attending private schools outperform students attending public schools in terms of academic performance on external assessments.

1.1. Background to the Study

The quality of life of a nation's citizens is largely dependent on the quality of education they receive; therefore, it has become obligatory for all nations to provide the highest quality of education to their citizens to adapt to the ever-changing society in which we live (Charles et al., 2024) This is evident as the increasing significance of education around the globe cannot be minimized. Mills and Mereku (2016), referencing Budyn et al., 2004) highlighted the growing recognition of education's role in development, social inclusion, and civic participation in the 21st century. Education is increasingly seen as a fundamental human right and essential for national progress and achieving higher levels of civilization. In such a context, the quality of basic education is of utmost importance due to the rising global demand for skilled labour.

Several empirical investigations for example, (Psacharopoulos & Patrinos, 2018) demonstrated that each additional year of schooling in low-income countries increases individual earnings by an average of 10%, underscoring education's role in poverty alleviation and economic growth. In Ghana, a study by (Glewwe & Kremer, 2006) found that increased access to quality education significantly reduced poverty rates by improving employability and income levels. Similarly, a (“MALAWI: World Bank Report,” 2022) indicated that nations with higher literacy rates experienced faster economic growth, with Sub-Saharan African countries





achieving up to a 2% annual GDP growth increase when primary education enrolment rose by 20% have evinced the importance of education as a wellspring of human capital for the advancement of a nation. The sixth Ghana Living Standard Survey (GLSS6), which was carried out between 2005 and 2013, revealed that the prevalence of poverty in households declined with an increase in the head's educational attainment according to the (Rodriguez & Smith, 1994), the poverty rate among households with heads who had completed secondary education or higher was significantly lower (7.4%) compared to those with heads who had no formal education (39.6%). This suggests that obtaining an education can help one escape poverty. Opportunities to participate in high-return endeavours are made possible by education. Not only is human development—the process of giving each person the knowledge and abilities needed to decide their own fate and design a fitting lifestyle for themselves as contributing members of society—required by basic education. The "spirit of the one hundred sacks of rice" tale aims to demonstrate the importance of developing human resources for nation-building, which is also critical for the growth of underdeveloped nations. Additionally, the foundation of international collaboration and the promotion of tolerance and acceptance of diverse cultures and peoples depend on basic education (www.mofa.go.jp). (Wortham et al., 2020) cites the following as instances of the value of foundational education.

- Education stimulates domestic and global economic expansion.
- Education fosters democracy and peace.
- Education saves lives and enhances the well-being of families.

A study of public-private partnership schools in Punjab on if there is a learning premium that can be explained by management practices carried out by (Bicego et al., 2003) in Pakistan argues that public schools in developing nations, such as Pakistan, do not necessarily favour the elite, and that a variety of fee-charging private schools serve the rural impoverished. In his



findings it was revealed that private schools are more appealing to most parents than public schools due to a number of factors, including higher test scores, the use of English as a medium of instruction, a good physical infrastructure, availability of teaching resources and lower teacher absenteeism rates. Awen further suggest that additional factors influencing school choice by parents are Teacher Quality: Private schools have lower teacher absenteeism and higher teacher accountability than public schools. The research also established that in private schools, teacher compensation is tied to student outcomes more closely than in the public sector. Teachers in private schools are less likely to be absent than those in public schools. Therefore, teachers at low-cost private institutions would be under pressure to perform and achieve certain outcome-focused goals. On the other hand, there is higher job security in the public schools as compared to private schools. Thus, the difference in incentive packages between the private and public schools may help explain why private schools outperform public schools. The quality of the class teacher's instruction encompasses three dimensions: (i) parents' awareness of the teacher's educational credentials; (ii) parents' assessment of the teacher's regularity; and (iii) parents' evaluation of the teacher's teaching abilities. This suggest that parents who enrol their children in private basic schools are fully involved in the education of their children as compared to parents who have their children in public basic schools.

According to Mawasi, Quansah, Ankomah, (Smeeding, 2006), posits that basic education is the foundation of development and progress in contemporary societies. It is the level of education that develops a person's ability to read, write, and perform mathematical calculations. In simple terms, quality basic education aids in eradicating illiteracy, which is one of the strongest predictors of poverty; therefore, it is judicious to assert that quality basic education is the only form of education that is globally accessible to all.

In the last few decades, international cooperation in the field of education has taken on a new form. (BIRDSALL et al., 2005) revealed that nations have committed to universal education programmes such as Education for All, Universal Primary Education, and Universal Secondary Education. Others have called for a more national and regional approach to resolving educational challenges, especially in Africa, (Barakat et al., 2016). However, (Cuban, 1984) argued that if these policies are not properly implemented and managed, they could cause significant supervisory issues in many educational systems.

According to Dolph, 2017) the key actors in student academic performance are principals, teachers, other supporting staff, and stakeholders who actively contribute to school improvement. Among these actors, the school principal is crucial, as he or she plays a fundamental role in maintaining and enhancing the quality of education. Furthermore, as a manager, the school principal is responsible for ensuring teacher effectiveness by being committed to his or her managerial role. It is prudent to mention that the improvement in students' academic performance will result from the head teacher's management effectiveness and efficiency.

(Cansoy et al., 2024) argues that the lack of effective supervision by principals in public schools is a significant contributing factor to the low educational standards. (Hsu et al., 2024) asserts, in support of this notion, is of the view that effective monitoring and evaluation of teachers plays a crucial role in maintaining high quality education and academic success among students. In the meantime, (effective supervision and monitoring are lacking for some teachers in numerous nations around the world (Teddlie et al., 2006). Numerous studies indicate that instructional oversight of teachers by head teachers to improve student performance has struggled to operate effectively due to ineffective supervision (Timperley, 2005). It was also discovered that although head teachers in public schools' review lesson plans, they hardly go



to class to monitor the execution of lessons. These issues exemplify to a significant degree the persistent decline in the academic performance of students in African classrooms.

In Ghana, having access to education is seen as both a basic human right and an essential component of the country's development plan, which aims to ensure and foster growth so that people can lead fulfilling lives. The goal of any developing country including Ghana to become a fully developed nation, according to (Le et al., 2023) depends on its capacity to expand educational access to the point where a highly educated populace provides the human resource base for faster development. The Ghanaian Ministry of Education states that literacy, numeracy, and problem-solving abilities are often prioritised in basic education (Sabates et al., 2021). Access to high-quality primary education provides the groundwork for inquisitiveness, creativity, and innovation. Similar to this, Ghana's Junior High School programme aims to equip students with scientific knowledge as well as pre-technical and pre-vocational skills. Senior High School, which is now a part of basic education, is the next educational level after JHS and serves to reinforce the knowledge and skills learned there. It also gives students the chance to develop new talents as they grow older (Agormedah et al., 2022)

The 2007 educational reform brought about a number of changes to the Ghanaian educational system. Eleven (11) years make up universal basic education, according to (Quainoo et al., 2016) three years for junior high school (JHS), six years for primary school, and two years for kindergarten. Ghanaian graduates of basic education must pass the West African Examination Council (WEAC)-administered Basic Education Certificate Examination in order to go to senior high school, which is the level before higher education. The Basic Education Certificate Examination Certificate is granted to students who successfully complete eleven (11) years of basic education and pass the exam (BECE). Candidates are evaluated on their performance in the external examination (BECE), which accounts for 70% of the marks. The remaining 30%



of the marks are awarded by the School-Based Assessment (SBA), also referred to as the continuous assessment (internal). A nine-point rating system is used to rate candidates, with grade one (1) denoting the best performance and grade nine (9) denoting the lowest. Students must receive an aggregate score between "6 and 30" (the required national pass aggregate) in order to be placed in senior high school.

According to (Kenea et al., 2024) a nation's educational quality can be inferred from its students' exam scores. (Daniels & Shumow, 2003) states that educators' main focus is on the child's learning growth. According to (Su et al., 2023) academic performance refers to "what a student is capable of accomplishing when tested or examined on what he or she has been instructed". Academic performance in Ghana's education system has been declining over time, according to the Basic Education Certificate Examination (BECE) report from the West African Examination Council (WAEC), which (Agbofa, 2023a) quoted. This problem still lacks a sustainable solution, according to politicians and policy leaders.

In Ghana, the government owns and operates public schools, while individuals, organizations, and religious groups own and operate private schools. Since both public and private schools use the same curriculum mandated by the Ghana Education Service, it is puzzling why there are such disparities in the academic performance of students in public and private schools during external examinations (BECE).

Contrary to most private school teachers, public school teachers receive professional training. During the teaching and learning process, teachers of both stripes must apply the curriculum. Private school students outperform public school students in the BECE, even though the latter group's teachers are all professionally qualified to support student learning. Furthermore, the bulk of private school instructors are not professionals. Ghana's government has over the years released policy initiatives aimed at improving and enhancing the standard of instruction in



public schools. These initiatives include school uniforms, the School Feeding Programme (SFP), the provision of teaching and learning resources to students, and capitation grants for each child enrolled in public basic school. In order to encourage educators to guarantee that students in public basic schools receive high-quality instruction, the government also established the Ghana Best Teacher Award and other initiatives to support teacher career development (Das et al., 2022). But the issue of most children failing in public schools still exists, negating the goal of the policy approaches. According to (Agbofa, 2023b) students at private basic schools outperform students in public schools in terms of academic achievement as determined by the Basic Education Certificate Examination (BECE). Stakeholders in Ghanaian public schools wonder if their investment in education is paying off when the BECE results are released annually. It is commonly noted that when compared to pupils receiving private basic education, the quality standards and academic achievement of public basic education students have decreased. The concerning tendency is that private schools are outperforming public basic schools, where the great majority of Ghanaian students attend school.

Once more, according to UNESCO (2020), the implementation of government policies in the field of education has resulted in an annual increase in the number of students enrolled in public basic schools. Nevertheless, learning standards are low among Ghanaian children, with a significant majority (roughly 80%) not having attained the fundamental competency in reading and numeracy by the time they graduate from primary school.

1.2. Statement of the Problem

The ineffectiveness of teachers and the lack of supervision by school administrators have significantly contributed to the downward trend in education worldwide (Ubogu, 2024). According to (Nakano et al., 2023), the Free Compulsory Universal Basic Education (FCUBE) in some African countries, such as Ghana, has resulted in a decline in basic education standards specifically in literacy and numeracy proficiency among students at the primary and junior high school levels. This decline is attributed to increased enrolments without a corresponding expansion in resources, such as qualified teachers, teaching and learning materials, and infrastructure. Sofroniou et al., (2024) argue that the failure of pupils in academic performance is a global concern. Therefore, international, national, and municipal investigation is required (Lu et al., 2024). It has been revealed in western literature that the implementation of teaching and learning supervision of teachers failed due to the supervisors' behaviour, attitude, and perception of the teachers (Aldaihani, 2017).

Many studies for instance, a study by Ankomah et al., (2020) in Ho revealed that inadequate teaching and learning materials were a major factor contributing to poor performance in public schools. In Berekum, research by (Twi-Brempong et al., 2020) identified teacher absenteeism and lack of parental involvement as significant challenges affecting student outcomes. Similarly, a study by (Nyarko et al., (2022) in Winneba Municipality found that private schools performed better than public schools due to better teacher motivation and availability of resources. In Sagnarigu Municipality, (Sulemana & Dramani, 2022) reported that overcrowded classrooms and insufficient supervision of teachers contributed to the low pass rates in public schools. on the academic performance of students in Ghana's basic schools in Ho, Berekum, Winneba Municipality, and Sugnarigu Municipality have been carried out. The findings indicate that inadequate head teacher supervision of teachers' instruction has resulted in teachers' incapacity to perform, which in turn has led to students' academic failure (Webster-



Stratton et al., 2008). Nevertheless, no research has been discovered comparing the BECE performance of students in Tamale Metropolis public and private schools. In the Tamale Metropolis, public junior high schools (JHS) have performed poorly on the Basic Education Certificate, while their private counterparts have received high marks. What is more concerning is the public's and education stakeholders' frequent outcry through the media about Ghana's students' declining performance on the exam, which includes Tamale Metro. The information obtained from the Tamale Metro Education Office of the Ghana Education Service makes this clear. The Tamale Metro registered 5,821 candidates in total in 2021, of whom 4,978 were public and 843 were private. Of these, 1,115, or 18.21% of the candidates running for public schools, passed, while 687, or 81.5% of the candidates running for private JHS, passed. In 2022, 6,002 candidates were registered, comprising 5,100 public and 902 private candidates. Public schools recorded a pass rate of 20.5%, while private schools achieved 83.7%. In 2023, 5,850 candidates were registered, with 4,950 from public schools and 900 from private schools. Public schools achieved a pass rate of 22.4%, whereas private schools maintained a high pass rate of 85.2%. Because of the worrying disparity in accomplishment, it is necessary to compare the academic performance of students in Tamale Metropolitan area's public and private basic schools (JHS) on the Basic Education Certificate Examination and look into the factors that may be causing the discrepancy. Accordingly, the current study attempted to fill this vacuum in the literature by investigating the factors contributing to disparities in academic performance between public and private junior high schools in the Tamale Metropolitan Area, specifically focusing on the Basic Education Certificate Examination (BECE).

1.3 purpose of the Study

Given the achievement discrepancy between public and private basic school students in the Tamale Metropolis in Ghana, the researcher sought to identify the primary factors underlying



the disparity in academic performance between public and private schools in the Basic Education Certificate Examination in the Tamale Metropolitan Area.

1.4 Research Objectives

1. To analyze how headteachers' obligations for instructional supervision contribute to the differences in academic performance between public and private basic (JHS) schools in Tamale Metro.
2. To assess how the experience of instructors impacts the differences in pupils' academic performance between public and private basic schools in Tamale Metropolis.
3. To identify how the differences in teaching methodologies used by instructors influence academic performance in public and private basic schools in the Tamale Metropolitan Area.
4. To evaluate how the educational resources available for instruction and learning in public and private institutions in the Tamale Metropolitan Area influence the differences in academic performance.

1.5 Research Questions

1. How do headteachers' obligations for instructional supervision contribute to the differences in academic performance between public and private basic (JHS) schools in Tamale Metro?
2. How does the experience of teachers impact the differences in pupils' academic performance between public and private basic schools in Tamale Metropolis?



3. How does teaching methodologies used by teachers influence academic performance in public and private basic schools in the Tamale Metropolitan Area?
4. How do the educational resources available for instruction and learning in public and private institutions in the Tamale Metropolitan Area influence the differences in academic performance?

1.6. The Significance of the Study

This study is crucial for informing policy and practice by providing insights into the disparities in academic performance between public and private basic schools in the Tamale Metropolis. By identifying the factors that contribute to the superior performance of private schools, the study offers valuable lessons that can be adopted to enhance the academic outcomes of public schools. These findings will be instrumental for policymakers, such as the Ghana Education Service (GES) and the National Inspectorate Authority (NaSIA), in designing targeted interventions aimed at improving teacher supervision, instructional methods, resource allocation, and parental involvement in public schools.

In practice, the study's conclusions can guide the development of strategies to replicate effective practices from private schools in public schools, thereby addressing the performance gap. Additionally, the findings will serve as a valuable resource for education administrators, school heads, and teachers in refining their approaches to teaching, supervision, and collaboration with stakeholders.

Moreover, the study contributes to the existing body of knowledge by offering empirical evidence on the factors influencing academic performance in basic schools, particularly in the context of Ghana. It highlights practical solutions to address disparities and promotes a framework for achieving equitable education outcomes. Specifically, the study provides



actionable recommendations to improve the performance of junior high school students in Tamale Metropolis on the Basic Education Certificate Examination (BECE).

1.7. Limitation of the Study

The study was limited by several factors beyond the researcher's control, which may have influenced the results and conclusions. First, the limited sample size of schools (nine public and five private schools) was due to logistical constraints, such as time and resource availability, which may not fully represent the performance of all schools in the Tamale Metropolis. Second, challenges in obtaining up-to-date data, particularly for performance trends in the years prior to 2021, restricted the scope of longitudinal analysis.

Additionally, some respondents, particularly students and teachers, may have provided socially desirable answers rather than accurate reflections of their experiences, introducing potential bias into the findings. External factors such as sudden disruptions in school activities due to national or local events, like unforeseen policy changes or economic challenges, may also have affected the study environment and outcomes.

Despite these limitations, the findings offer valuable insights into the factors influencing academic performance and provide a basis for further research and policy recommendations.

1.8. Delimitation

This study focused on nine public and five private junior high schools in the Tamale Metropolis, selected based on their accessibility and convenience for data collection. While the study could have covered a larger geographical area or included more schools, resource constraints, and time limitations necessitated a narrower scope.



The study specifically examined factors such as headteacher supervision, teacher experience, teaching methodologies, availability of teaching and learning resources, and their impact on student performance in the Basic Education Certificate Examination (BECE). These variables were chosen because they are directly linked to the disparities in academic performance between public and private schools. Other potential factors, such as socioeconomic status and external policy influences, were not within the scope of this study but could be explored in future research.

By concentrating on these variables within the Tamale Metropolis, the study provides localized insights while laying a foundation for broader investigations across other regions.

1.9. Structure of the Study

The study is organized into five chapters. Chapter One covers the study's background, statement of the problem, research questions, purpose, significance, limitations, and delimitations of the study. Chapter Two provides a review of relevant literature, including conceptual, theoretical, and empirical frameworks. Chapter Three outlines the research design and methodology, detailing the study area, population, sampling techniques, data collection methods, and analysis strategies. Chapter Four presents the analysis and interpretation of the data collected, while Chapter Five summarizes the key findings, offers recommendations for policymakers, and draws conclusions based on the study.



CHAPTER TWO

REVIEW OF LITERATURE

2.0. Introduction

To ascertain the differences in academic achievement between students in public and private schools in the Tamale Metropolis on the Basic Education Certificate Examination, the researcher reviewed the literature in this chapter under the three main themes of conceptual, theoretical, and empirical framework. This study looked at parents' and instructors' supervision of student learning and teaching in junior high schools (JHS) in the Tamale Metropolitan Area. The study looked at JHS teachers' experiences in both public and private settings. Once more, the study looked at the instructional strategies used in junior high (JHS) institutions that are both public and private.

2.1. Conceptual Review

Supervision

Educational supervision is essential for the professional and career development of educators. It is believed that supervision is an integral element of administration (O'Donoghue et al., 2018). Fry, (2003) defines supervision as the act of creating human relations, motivation, inspiring, directing, and developing a group in the hopes of winning their cooperation. Consequently, a conversation involving two or more individuals to improve an activity is called supervision. According to Ubogu, (2024), supervision is the process of administering or supervising the function of teachers in order to assist them in addressing school instructional problems so that students can derive the most benefit from classroom practices and achieve greater academic success. Instructional monitoring consists of a series of duties performed by a school principal in collaboration with a teacher to improve the teaching and learning process





Huong (2020), states that any actions taken expressly to create, preserve, and improve the teaching and learning process in schools are included in instructional supervision. Several factors, including the amount of teaching load, educational attainment, administrative background, and principal in-service training, may influence these tasks (Chen & Tseng, 2012). It is well acknowledged that supervision plays a major role in helping teachers deliver high-quality basic education in an effective and efficient manner. Because of this, good supervision is essential to guaranteeing a top-notch education by improving the skill, professionalism, and academic achievement of both teachers and pupils. Meanwhile, this kind of efficient supervision is absent from some teachers in a large number of schools across the globe (Ubogu, 2024).

There are two categories of supervision, according to (Hussain et al., 2019): internal and external supervision. External supervision refers to supervision from the local, district, regional, or national offices (Tabita et al., 2022). Internal supervision refers to supervision within the various institutions by the institutional leaders (Mustaufiq et al., 2024). In modern school administration, the head teacher is the principal school administrator in charge of the day-to-day operations and supervision of the school under internal supervision.

In the complex process of teaching, instructional supervision is viewed as a means of assisting teachers who are struggling with instructional matters and guiding them to better serve their students (Marshall, 2005). Research carried out in Malaysia by (Bélisle & Bauer, 2020) revealed that effective instructional supervision by school principals has the potential to enable teachers to examine their own classroom practices with the assistance of their supervisors in an effort to promote growth, development, and fearless interaction aimed at problem-solving and capacity development.

Gharibi et al., 2019), posit that the success of instructional supervision process is highly dependent on how teachers perceive the practice and their level of participation in achieving the function's objective. According to scholars, instructional supervision will not yield the desired results unless teachers perceive it as a process of promoting teacher professional growth that is tailored to their learning needs (Kennedy, 2016).

According to (Kennedy, 2016) the majority of instructional supervisors lacked expertise in instructional supervision, as evidenced by their lack of technical understanding in their area of specialisation. (A. M. Alkaabi, 2023) posited that in order for instructional supervisors to provide effective training, they must not only possess technical skills knowledge in their respective subject areas, but also have practical experience exercising these many technical skills knowledge. (A. Alkaabi et al., 2023) found that as a result of their inexperience, most instructional supervisors lacked the necessary technical competencies. Consequently, the quality of education was compromised as instructional supervisors were unable to offer teachers specialised information and guidance.

According to (Jennings, 2010) the duties of the principal as school supervisor include, but are not limited to, the following:

Admission of students: He or she admits students and ensures that they are properly registered in the school's admission record.

Receiving teachers: This position is responsible for receiving newly posted teachers and recording their information in the school's record files.

Classification of instructors: He or she assigns teachers to classes and, in the case of junior high school, subjects and teaching periods.

The school administrator is responsible for the distribution of instructional materials.

The principal is responsible for vetting instructional plans and work plans.



Inspecting instructors' continuous assessment entries to ensure they are accurate.

For the purpose of improving teacher performance, he or she provides regular supervision and lesson demonstration.

Organizes teacher in-service training.

Using a class register and staff attendance journal to ensure the punctuality and regular school attendance of both teachers and students (Chiwamba & Sumbizi, 2024)

Conceptual framework will be dependent on the variables to be examined. This will include activities that contribute to academic performance of pupil in BECE. These includes, supervision practice of head teachers, teacher experience, methodology, teaching and learning resource and academic achievement (BECE).

2.2 Conceptual Framework

The conceptual framework for this study illustrates the interplay of key factors—head teachers' supervision, teachers' experience, teaching methodology, teaching and learning resources, and parental involvement—that influence academic performance and students' outcomes in the Basic Education Certificate Examination (BECE). Effective headteacher supervision is essential for improving teaching quality and ensuring adherence to educational standards. Studies show that when head teachers actively engage in monitoring lessons, providing constructive feedback, and supporting teacher development, students tend to perform better academically. However, inadequate supervision often results in inconsistent teaching practices and poor student outcomes (Wanzare, 2012)

Similarly, teachers' experience plays a significant role in shaping students' academic achievements. Experienced teachers possess advanced classroom management skills, deeper subject knowledge, and effective teaching strategies that positively impact student learning. Research by (Kalogiannakis et al., 2023) demonstrates that students under the tutelage of



experienced teachers often achieve higher scores, although structural and motivational factors in public schools sometimes negate these advantages.

Teaching methodologies also directly influence academic performance. Activity-based teaching methods, which engage students in interactive and practical learning, are shown to foster critical thinking and improve academic outcomes (Simonette & Joseph, 2024a). In contrast, reliance on lecture-based methods, especially at the basic education level, often limits engagement and negatively affects students' understanding and retention of content (Miller et al., 2013)

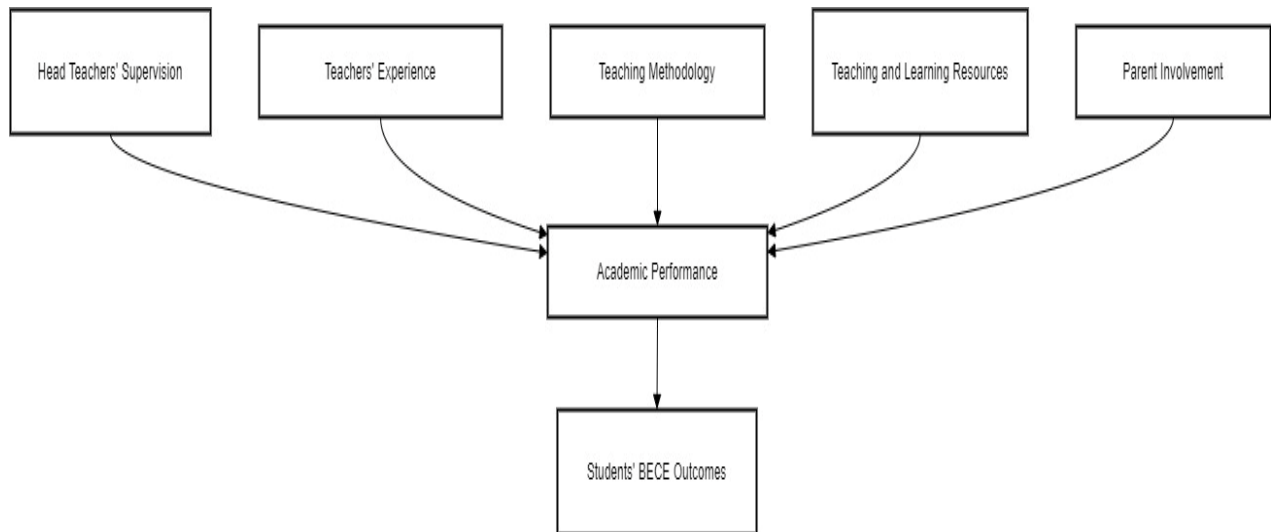
Another critical factor is the availability and effective utilization of teaching and learning resources (TLMs). Private schools, which often have better access to textbooks, libraries, and other educational materials, consistently outperform public schools that lack such resources. Research by (Saleem et al., 2024) and Oluwatosin and Bolanle (2024) highlights that adequate resources enhance comprehension and stimulate student interest in learning, leading to better outcomes.

Parental involvement further amplifies academic success. Parents who actively engage in their children's education, participate in school activities, and provide support at home contribute significantly to improved performance. Studies by (Hossain, 2021) affirm that stronger parent-teacher collaboration, often seen in private schools, is a major determinant of better student outcomes.

These interconnected factors collectively shape academic performance and are reflected in BECE outcomes. Effective supervision, experienced teachers, engaging methodologies, sufficient resources, and active parental involvement contribute to improved results in the BECE, a critical benchmark for educational success in Ghana (Bosson-Amedenu et al., 2023).



This framework underscores the need to address disparities between public and private schools by leveraging these factors to improve performance across all schools.



2.3. Theoretical Framework

Essentially, theories are propositions that guide the imminent issue or situation being investigated (Wacker, 1998). The study is grounded in Martin Ford's **Motivational Systems Theory (MST)**, which provides a comprehensive framework for understanding individual achievement in educational contexts. MST highlights the interaction between personal goals, emotional states, and environmental influences as determinants of performance. This theory emphasizes that achievement is not solely the result of individual capability but also depends on the support systems, resources, and motivational climates within the environment (Williams et al., 1992)

MST is particularly relevant to this study, as it acknowledges the interplay of multiple factors—such as teacher supervision, teaching methodologies, resource availability, and parental involvement—that shape students' academic performance. For instance, the theory suggests that when students are in environments where resources are adequate, teachers are motivated and experienced, and parental support is active, their likelihood of achieving better academic



outcomes increases significantly. Conversely, environments lacking these elements can hinder student motivation and achievement, even among capable learners (Urdan & Schoenfelder, 2006).

This framework aligns with the study's aim to explore the disparities in BECE performance between public and private schools in the Tamale Metropolis. It explains how effective supervision, resource availability, teaching methodologies, and parental engagement contribute to creating a supportive environment for learning. The application of MST provides a theoretical foundation for understanding the observed performance differences and offers insights into strategies that can enhance academic outcomes for students in public and private schools by addressing environmental and motivational gaps.

2.4. Empirical Review

This section presents previous research that supports the position of the current study. It discusses head teachers' instructional supervision, teacher experience, teaching methodology, teaching-learning resources, and student academic achievement.

2.4.1 Supervision of Teaching by Head Teachers

Effective instructional supervision has a significant effect on instructors' responsibilities and, consequently, the academic success of students. (Mohd Sofian, 2024), postulates that managers must work tirelessly to promote supportive work environments, develop effective school policy and procedures, and participate in deep and substantive engagements outside the classroom, which motivates and drives the influential influence of what occurs within and outside classrooms. Teachers should be inspired by the conduct of their supervisors in the school setting.

According to Butler & Yendol-Hoppey, (2024) head teachers' oversight over the previous decades indicates that teachers' passion and dedication to their responsibilities in schools are





no longer distinguishing characteristics of the teaching profession. In addition, instructors have recently demonstrated a distaste for fulfilling their responsibilities, resulting in a pessimistic view of the supervision mechanism. (Hoque et al., 2021) concluded that teachers disagree that supervision enables teachers to use a variety of teaching approaches, boosts teacher confidence, and enables teachers to use a variety of teaching techniques. On the other hand, Gholaminejad et al., (2024) argued that the supervisory process is not beneficial to teachers because supervisors do not view instructional supervision as a forum for teachers to develop a sense of autonomy and professional development and are not in any way empowered by the process.

In contrast to the above (Kilag & Sasan, 2023) found that teachers have a favourable attitude towards head teachers during school instructional supervision because they are dedicated, have a clear understanding of school activities, and view teachers as individuals. In addition, teachers exhibit a positive attitude towards instructional guidance through head teachers who are receptive, kind, accommodating, and keen to capitalize on teachers' exceptional abilities while still allowing them to participate in school decision-making. Moreover, in Ghana, achieving supervisory objectives in schools is hindered by a lack of professional qualifications and ongoing training in supervision skills Koshinski et al., (2023) asserted that the lack of realistic supervision in schools was due to the heavy workload of school supervisors, their administrative duties, and the lessons assigned to them.

2.4.2. Supervision or Leadership Strategies of Principals.

In this study, we seek to ascertain the role that instructional supervision, teaching factors impact the academic performance of public and private school pupils in Tamale metro. Leadership style influences the supervisory process, which is defined as a specific action a leader takes to motivate subordinates to attain the organization's goals (Limsila & Ogunlana, 2008). This study focused on the three primary leadership styles autocratic or totalitarian, egalitarian



(participative), and laissez-faire. A strong leader may employ all three approaches, with one often predominating, whereas a weak leader may rely solely on one (Montesinos et al., 2024)

A study by Tan, Dimmock & Walker (2024), has established a connection between school leadership styles and academic achievement. According to Gholaminejad et al., 2024) report on the methods and complexities of instructional supervision in primary schools in Ethiopia's Asossa Zones, mutual supervision, in which both the instructor and the supervisor engage in effective problem-solving, increases academic productivity. In this method, the capacity of the teacher to collaborate with the manager results in the delivery of high-quality services. According to Barasa et al., 2023), alternate management occurs when the head teacher claims to be practicing participative leadership; the supervisor regards the teacher's approach as an alternative. Thus, the supervisor should not compel the teacher to use a particular form; rather, he or she should encourage the teacher to investigate alternative options.

In addition, Bouschery et al., (2023) asserts that an innovative monitoring technique is founded on creativity and the utilization of numerous supervision approaches. This can be accomplished by employing multiple supervisory approaches, not confining supervisory roles to a single individual (supervisor), and employing strategies proven effective in other fields. According to Barasa et al., (2023) supervision is effective when the instructor and supervisor collaborate on a consistent basis prior to the supervisor's perception that the teacher has attained the desired outcome. This approach aims to overcome the gap between supervisor and instructor.

2.4.3. Teacher Experience and Qualification

Teachers stand out as the imminent keys to the implementation of educational policies for improved academic standards, which are increasingly emphasized across the nation's school systems. ("Mutual Relationships: Saudi Universities and The Private Sector for Economic Development," 2023) define a qualified teacher as an individual who has fulfilled the prerequisites for teaching a specific level of education and who mentors students in gaining

new information and abilities. According to (Abdallah et al., 2023), one of the requirements for excellent teaching and improved learning outcomes is high-quality teacher education and training. Effective teaching must also be observable and communicated, and it is important to use degrees, diplomas, and certificates as a signalling mechanism. Fu et al. (2024) and (Srivastava & Agnihotri, 2022) both suggest that certain conventional teacher education institutes might not be able to provide instructors with superior learning outcomes. In order to accomplish the universal education objectives, degrees, certificates, and diplomas are considered the essential prerequisites for teacher qualification, in addition to an efficient code of conduct (Iyunade, 2011) Therefore, universal lower secondary institutions should hire highly educated educators who have a strong commitment to the achievement of their pupils (Ogunode et al., 2022)

(Amutabi, 2003) Many Kenyan students have been unable to complete primary exams with an average pass rate for a long time, which is seen as a failure of the educational system and a lack of techniques for material delivery and teacher training Teacher readiness, as defined by Howard et al., (2021) is the intricate process by which a teacher develops professional values, is able to apply those values in the classroom, and gains the experience necessary to make wise decisions in educational settings.

Ghana's circumstances are similar to those in Kenya. It is anticipated that government-trained educators working in Ghana's public schools will give their students a high-quality education, which will boost their scores on the Basic Education Certificate Examination (BECE). Unfortunately, this is untrue; students in public schools continue to perform worse academically than those in private schools, where the majority of teachers lack formal training. While most private school teachers lack the teaching and learning methodologies of their public-school colleagues, they are more dedicated to achieving high academic achievements (BECE).



(Sadikin & Siburian, (2024) assert that the teacher is the most crucial element in the delivery of education and that they have a major influence on the standard of instruction. As a result, student performance in educational institutions is greatly influenced by the experience of teachers. Skilled educators greatly enhance the teaching and learning process by drawing on their extensive background knowledge. Teachers with more experience teach students at a higher level because they have learned the material and developed classroom management skills to deal with a variety of behaviour issues and problems in the classroom, according to Karakose et al., 2023). Furthermore, it's thought that more seasoned educators can concentrate on the best way to instruct students with different backgrounds, skill levels, and levels of prior knowledge on a certain subject. For a variety of reasons, evaluating the actual influence of experience on a teacher's efficacy is more challenging than evaluating any other aspect of their performance. However, teachers with five or ten years of experience are more effective than new teachers with less than two years of experience. Gibson et al., 2024) states that the benefits of experience seem to level off after five years and that there are no appreciable differences in a teacher's effectiveness between those with five and ten years of experience.

2.4.4 Teaching Methodology

The guidelines and processes teachers follow when presenting lessons to pupils in order to help them gain the necessary knowledge and abilities in the classroom are known as instructional methodology or teaching methods (Prince & Felder, 2006a). Ideally, all instructional strategies should be created to expand students' knowledge and foster virtues and positive attitudes. Instructional strategies include a strong emphasis on students' general growth, problem solving, critical thinking, and skill acquisition (Abrami et al., 2015). The learner develops concepts for using facts and data with the use of methodology(Prince & Felder, 2006b).

Although there are many different teaching strategies, the researcher only looked at activity-based and lecture-based methods in the literature for this study. There will always be a big

difference between what students want to learn from their teachers and what teachers want to teach them. The lesson's relevance to the students' daily life is what will make the two come together. It has been shown that the best way for teachers to transfer knowledge that students will remember is through engaging activities that encourage active learning, especially when it comes to global learning (Grabinger & Dunlap, 1995). It might be frightening to introduce pupils to a foreign culture, but one of the best ways to promote active learning is to make the lecture more interesting by making it meaningful and relevant (Gay & Howard, 2000)

2.4.5. Activity-Based Teaching Method

The phases of baby cognitive development identified by Jean Piaget are the origin of the activity-based learning approach. (Carpendale & Lewis, 2004) asserts that children behave differently from adults when interacting with items in their surroundings.

The activity method of teaching places the child at the centre of the process, providing them with the necessary tools to learn and grow. Under the teacher's guidance, the child is allowed to explore the tools at their own pace to uncover concepts and facts.

According to Simonette & Joseph, (2024b) the activity method is a strategy used by educators to highlight their approach to instruction through student-involved activities that provide successful learning outcomes. A child-centered approach to teaching and learning, activity-based learning involves the student both mentally and physically in the process. The foundation of the activity-based approach to teaching and learning is "learning by doing". A youngster will retain more information if they actively participate in activity-based teaching and learning, which stimulates the senses.

When teachers use this approach effectively, it allows students to learn through all five senses, which promotes development. Learning will be easy and fun for students if the material is made more interesting and relevant. A teacher can engage students through engaging activities, humour, and flashy presentations, which will appeal to their cognitive drive to make sense of



the world (Zapušek & Rugelj, 2013). Introducing kids to other people's cultures and customs via interactive CDs and highly content periodicals might spark their curiosity about discovering more about different people's lifestyles (Srihadi et al., 2016). Using learning aids promotes active learning, which helps students become more adept at analysing, synthesising, and applying the information. In order to foster students' logical reasoning and creative thinking, teachers are allowing their students to participate more actively in the learning process (Segundo Marcos et al., 2020)

Teachers that can produce interesting content are highly anticipated by their students (Zemba-Saul et al., 2002). Study time is leisure time dedicated to learning. Students get an inspirational and happy experience that they can only have in school when teachers give them a real experience in the classroom. When the majority of pupils are actively participating in an activity, learning is usually joyful. To produce a better result, they are working together and exchanging ideas. For example, they are putting on a collective cultural performance to better illustrate their point. Primary schools can find engaging, real-world, and creative teaching and learning materials in B&C Educational products. The resources can be utilised to give the school curriculum an interesting global component and are intended to bring the cultures and customs of far-off places to life.

2.4.6. Lecture-Based Teaching Method

The global journal of human-social science published an argument by Ademiluyi & Eebo (2024) stating that the term lecture comes from the Latin word *lectus*, which means "To read." The word for teacher-led oral instruction to a class of students did not exist until the 16th century. They argue that the lecture method of instruction consists predominantly of an instructor (teacher) delivering an oral presentation to a group of students. The lecture method of teaching is accompanied by visual aids, such as projecting the presentation with a laptop and projector, a word document, images, or a marker/chalk board to illustrate or emphasize key



points. In this method of instruction, the teacher takes center stage while students observe and take notes. At the basic level, where students are in the early stages of their education, the lecture method is inconvenient. However, it is advantageous at the tertiary level, where hundreds of students can be addressed.

2.4.7 Teaching and Learning Resources

The quality of basic education can be improved, which in turn improves student performance in BECE, through the provision, availability, and efficient use of teaching and learning resources. Resources that support teaching and learning were highly prized in private universities, according to Zimmerman, 1990) They concluded that the outstanding academic achievement of this kind of school might be due to the aforementioned claim.

Every academic institution's main goal is to significantly alter students' behaviour through active engagement and critical thinking in the teaching and learning process. Without easily available and effectively used educational resources, facilities, and other resources, this cannot take place. According to Oluremi & Olubukola, (2013), academic achievement depended on the availability and effective use of learning materials in order to meet the desired goals and objectives. This is the rationale behind the large amount of money that governments allocate on education each year. Wekwe et al. (2024) highlighted that the availability and appropriate use of a comprehensive school facility, where teaching and learning take place, as well as the extent to which teachers are suitably motivated in each state, determine the calibre of education students receive and the outcomes of their exams. Academic performance tends to favour the setting in which these factors are managed more successfully when they are in different contexts.

According to (Ikram et al., 2023) the most economical factor influencing a student's performance is the quality of the instructional materials used in the classroom, which primarily consist of textbooks. A minimum of one textbook for every three children and, at the





elementary school level, enough reading materials for each child to read at least one new book each week are considered acceptable supplies in this context. The success of an educational system is based on how much TLR is sufficient. They contend that the absence or insufficiency of textbooks and other teaching resources leads teachers to approach subjects abstractly, portraying them as dull and uninteresting. Textbooks and resource materials are crucial for successful teaching and learning. Having the right people in place is also crucial for organising sufficient teaching resources and physical spaces to support educational initiatives. It could therefore suggest that the absence of textbooks, libraries, and other physical spaces would make it more difficult for the educational system to adjust to changing needs.

Every academic institution's main goal is to significantly alter students' behaviour through active engagement and critical thinking in the teaching and learning process. Without easily available and effectively used educational resources, facilities, and other resources, this cannot take place. According to Quratul Aini & Adiyono, (2023), academic achievement depended on the availability and effective use of learning materials in order to meet the desired goals and objectives. This is the rationale behind the large amount of money that governments allocate on education each year. (Ikram et al., 2023) highlighted that the availability and appropriate use of a comprehensive school facility, where teaching and learning take place, as well as the extent to which teachers are suitably motivated in each state, determine the calibre of education students receive and the outcomes of their exams. Academic performance tends to favour the setting in which these factors are managed more successfully when they are in different contexts.

Material resources, physical facilities, and human resources are the three main components that make up Teaching Learning Resources (TLR) (Hanaysha et al., 2023). Historical research on TLR availability in education indicates that TLR aren't always found in classrooms. Teachers are quite concerned about TLR's shortcomings. Learning is a complex process that involves



the interaction of students' motivation, physical facilities, instructional resources, teaching talents, and curricular needs, according to (Hanaysha et al., 2023) Schools are more effective when TLR is available because it is one of the primary resources that helps children succeed academically. For the purpose of teaching and learning, there should be physical resources like classrooms, labs, and libraries as well as human resources like instructors and support staff. Because children are less likely to miss school when they are given engaging, relevant, and important experiences, TLR increase access and educational results. The right kind and amount of these resources should be made available by schools in order to facilitate effective teaching and learning thereby improving the performance of learners. Several research works have looked at how educational resources affect learning. Oluwatosin & Bolanle (2024) studied how students' performance on the West Africa School Certificate Examinations (WAEC) was impacted by instructional resources. The instructional materials that were provided had an impact on the WASCE students' performance. He came to the conclusion that since material resources encourage rote memorization while facilitating the acquisition of abstract concepts and ideas, they have a substantial impact on student progress. Education is jeopardized when TLR is insufficient, and this is shown in unmet educational goals, high attrition rates, bad behaviours, low teacher motivation, and low academic progress ("ACNP 60th Annual Meeting: Panels, Mini-Panels and Study Groups," 2021)

2.4.8. Parent Factor

Many parents already know that their children do better academically when their parents are actively involved in their education, and a large body of research has shown this. Studies on students in the United States of America demonstrate that family support, particularly increased family participation in their education, is a crucial component of a high-quality education Gee et al., (2023) Using this valuable resource, policymakers have set parental involvement in their children's education as a high goal in their National Education Goals. It is obvious that when

parents support teachers instead of working against them, their jobs are simpler. Because of this, parental support plays a crucial role in both the working environment for teachers and the academic achievement of their students. The article keeps pointing out that parents who have more education, particularly at a higher level, will help their children more effectively. Accordingly, parental education plays a critical role in determining the level of parental support for the teacher and the kind of contribution made to the child's strong academic achievement (Lemessa et al., 2024)

2.5.0 Conclusion

In the 21st century, Ghanaian parents are increasingly opting for private school education over fee-free public schools due to the superior academic outcomes associated with private schools. Studies show that children in private schools outperform their public-school counterparts, particularly in English language proficiency, and benefit from greater availability and efficient use of resources (Jeevan et al., 2023). Furthermore, active parental involvement in private schools contributes significantly to the higher academic performance of their students (Castro et al., 2015)

Despite these observations, existing literature has not comprehensively explored how these advantages in private schools—such as teacher supervision, resource utilization, teaching methodologies, and parental involvement—can be adapted to address performance challenges in public schools. Additionally, there is limited empirical evidence from the Tamale Metropolis comparing these factors and their impact on students' Basic Education Certificate Examination (BECE) outcomes.

This study seeks to fill these gaps by investigating the specific variables that contribute to the academic performance disparities between public and private basic schools in the Tamale Metropolis. By examining these factors, the study aims to provide actionable recommendations



for improving the performance of public-school students in external examinations, leveraging lessons from the private school system.



CHAPTER THREE

RESEARCH METHODOLOGY

3.0. Introduction

The procedures and approaches used to gather the data for this thesis are covered in this chapter. As a result, it covers the following topics: the population, the design of the study, the validity and reliability of the instruments utilized in the investigation, the sample size and sampling process, and the backdrop of the study region. The data analysis summary wraps up the chapter.

3.1. Philosophical Perspectives

This study adopts a postpositivist paradigm, which is suitable for exploring and analyzing the factors influencing academic performance in public and private schools. The postpositivist approach recognizes that while objective reality exists, it can only be understood imperfectly due to the influence of social, cultural, and contextual factors. This paradigm allows for the integration of quantitative methods to analyze measurable variables, such as teacher supervision, teaching methodologies, and resource availability, while acknowledging that findings are influenced by the researcher's interpretations and the study's context.

The postpositivist paradigm is particularly appropriate for this study, as it combines statistical analysis to identify patterns and relationships with critical inquiry into how these factors operate within the educational systems of public and private schools. This approach facilitates a nuanced understanding of the disparities in BECE performance, offering evidence-based insights to guide policy and practice.

3.2. Study Area

Tamale is the sole Metropolis in the sixteen (16) District and the administrative centre of Ghana's Northern Region. Tamale Metropolis has a total population of three hundred and



seventy-four million, seven hundred and forty-four thousand people (374,744) with the total population of males being 185,051 representing 49.4% and females 189,693 representing 50.6%. The region's geographical borders are shared by Tamale Metro, which is situated in the center, Sagnarigu Municipal to the west, Mion District to the east, East Gonja to the south, and Central Gonja to the south-west, Tamale is located between latitude 9° 34 North and longitude 0° 36 and 0 57 West Siddiq et al., 2023)

The majority of people in the Tamale Metropolis work as farmers, raising foods including sorghum, millet, soybeans, rice, and groundnuts. Some people make their living through petty commerce as well. Muslims make up the majority of the population in the metropolitan region, with Christians and Traditionalists making up the minority. According to Zakariah et al., (2024) the literacy rate in the Metropolis has increased from 32.5% in 2010 census to 41.3% of the population age fifteen (15) years and above being literate, implying that there is a large concentration of illiterates in the Metropolis leading to a high degree of poverty, underdevelopment, disease and ignorance. Asante, Bentil & Azaglo (2023), claims that a high incidence of subpar academic performance results from parents in the Tamale Metropolis being unable to support their children's education, as is expected of all parents, due to their low levels of educational attainment.



3.3. Research Approach

A quantitative research approach was used for this study. (Watson, 2015) describe the quantitative research method as an inquiry into a social problem, it explains the phenomena by gathering numerical data and analyzing using mathematical-based methods Quantitative approach to the study makes the researcher ask specific questions, to collect data from participants, analyze numerical data using statistical procedure and conduct inquiry in an unbiased and objective manner (Mohajan, 2020).

3.4. Research Design

This study aimed to investigate and contrast student performance on the Basic Education Certificate Examination (BECE) between public and private schools in the Tamale Metropolis. To achieve this, the study employed a descriptive survey design, which is well-suited for



examining the relationships between variables such as head teachers' supervisory practices, teachers' experience and instructional methods, availability of teaching and learning resources, and student's academic engagement and outcomes. The descriptive survey design allows for the systematic collection of quantitative data to describe these variables and their influence on BECE performance across the two types of schools.

One of the key advantages of the descriptive survey design is its ability to gather data from a large population in a relatively short time and at a lower cost, making it efficient for exploring trends, opinions, and relationships among variables (Creswell et al., 2014). Additionally, it enables researchers to collect data from diverse participants—head teachers, teachers, and students—providing a comprehensive understanding of the factors influencing academic performance. However, a notable limitation of this design is its reliance on self-reported data, which may be subject to biases such as exaggeration or underreporting (Hsu et al., 2024). Despite this, the design is particularly effective for studies aimed at describing phenomena and identifying relationships without manipulating variables.

The choice of a descriptive survey design is justified by the study's objectives, which sought to compare and analyze existing differences in educational practices and outcomes between public and private schools. This design aligns with the study's goal of identifying key factors that contribute to the observed disparities in BECE performance, providing evidence to inform targeted interventions. By focusing on measurable variables and using standardized instruments for data collection, the descriptive survey design ensures reliability and validity, making it an appropriate choice for this research.



3.5 Population:

According to Widia & Octafia, (2023), a population refers to the totality of instances that satisfy a specified collection of criteria. Mahanta et al., (2021) define a target population as the total number of subjects or the entire area in which the researcher is interested. For this study, the target population comprised head teachers, teachers, and students from junior high schools (JHS) in the Tamale Metropolis.

The Tamale Metropolis has a total of 126 head teachers, with 85 from public schools and 41 from private schools. Additionally, the population of teachers across the JHSs includes 1,056 teachers: 721 from public schools and 335 from private schools. The student population in these schools is 8,912, with 6,430 students enrolled in public schools and 2,482 in private schools.

These groups—head teachers, teachers, and students—formed the core of the population for this study as their experiences, practices, and academic outcomes are critical for investigating the disparities in performance between public and private schools. This diverse population provides a robust basis for analyzing the factors influencing BECE outcomes in the Tamale Metropolis.

3.6. Sampling and Sample Technique

Sample size refers to the overall number of participants in a survey Leyrat et al., (2024) while the sampling method refers to the testing process used to pick a specified number of respondents from a particular population as a representative sample of that population (Mweshi & Sakyi, 2020) The researcher used stratified sampling technique to select participants. There are 126 head teachers available at the city's JHSs. This depends on the total number of JHSs in the city. The researcher employed Yamane's (1967) sampling formula to calculate the sample



size for the study, but in order to do so, an alpha level of 0.05 and a confidence interval of 95% had to be established.

Yamane's formula

$$n = N / (1 + N(e^2))$$

Where:

n = Sample size

N = Population size

e = Desired level of precision (expressed as a proportion)

Total population size of 126 with a desired level of precision of 0.05 (5%). Plugging these values into the formula:

$$n = 126 / (1 + 126(0.05^2))$$

Simplifying the equation:

$$n = 126 / (1 + 126(0.0025))$$

$$n = 126 / (1 + 0.315)$$

$$n = 126 / 1.315$$

$$n \approx 95.77$$

Based on Yamane's formula, a sampling size of approximately 95.77 was appropriate for the study's population size of 126, with a desired level of precision of 5%.

Sample Size: 96; however, in order to account for bias and non-response, two respondents were added. According to Kurnianto & Soewarno, (2024) biases and non-return questionnaires could be accommodated by adding one to half of the sample size. The sample size increased to 98 as a result.

The respondents consisted of fourteen head teachers from public schools (government schools 6, teachers 18, pupils 18, Islamic and Christian schools 3 head teachers each, 2 teachers each



(6), 2 pupils each (6)) that will bring the number of respondents to be selected to (12 head teachers, 30 teachers & 30 students from public school), 5 private schools will be randomly selected (5 head teachers, 11 teachers & 10 pupils) making the total respondents from the selected private schools 26.

The study employed a stratified random sampling technique to ensure a fair and representative selection of participants from the target population. The population was first stratified into public and private junior high schools (JHS) in the Tamale Metropolis. Within each stratum, participants were further categorized into head teachers, teachers, and students.

For the selection of teachers, proportional sampling was applied based on the number of teachers in public and private schools. Teachers were then randomly selected from both strata to ensure diversity and minimize bias. Similarly, for students, a systematic random sampling method was used to select participants from class rosters in each school, ensuring an equal representation of boys and girls from both public and private schools.

This coherent and multi-stage sampling approach ensured that all key stakeholders—head teachers, teachers, and students—were adequately represented, thereby enhancing the reliability and generalizability of the findings.

3.7. Research Instrument

The researcher developed three questionnaires as the primary instruments for data collection: one for students, one for teachers, and one for head teachers. Questionnaires are widely recognized as effective tools for gathering structured and quantifiable data. According to Sukmawati & Zulherman, (2023) they are particularly useful as they can be administered in the absence of the researcher and are straightforward to analyze. Each questionnaire was



tailored to address specific themes relevant to the study's objectives and divided into multiple sections to capture the necessary data.

The student questionnaire consisted of 27 items spread across five sections. Section A collected socio-demographic data such as gender, age, and grade level, while Section B focused on school attendance and facilities, exploring factors like the frequency of attendance and availability of resources such as classrooms and libraries. Section C addressed academic performance, capturing students' self-reported achievements in the BECE. Section D examined the impact of class size, teaching methodologies, and access to teaching and learning resources, while Section E explored parental support, including involvement in homework and provision of school materials. The items combined closed-ended formats like multiple-choice and Likert-scale questions with open-ended responses for more detailed insights.

The teacher questionnaire comprised 30 items divided into five sections. Section A gathered socio-demographic data on gender, age, qualifications, and years of teaching experience. Section B focused on professional qualifications and competence, examining teaching methods and access to professional development opportunities. Section C addressed monitoring and supervision by head teachers, exploring the frequency and effectiveness of their roles in supporting teachers. Section D investigated the availability and use of teaching and learning resources, while Section E examined factors affecting academic performance, including learner challenges, home environments, and school conditions.

The head teacher questionnaire also included 30 items organized into four sections. Section A focused on demographic data, such as age, gender, qualifications, professional rank, and leadership experience. Section B explored leadership styles and supervision practices, highlighting their roles in monitoring and improving teaching quality. Section C examined resource management, assessing the availability and utilization of teaching and learning



materials. Lastly, Section D addressed factors affecting academic performance, such as infrastructure, teacher motivation, and other school-specific challenges.

3.8 Pre-Testing of Instruments

The instruments were pre-tested in five JHSs from the Sagnarigu Municipality. This location was selected due to its similar socio-demographic and educational characteristics to the Tamale Metropolis, ensuring the validity and reliability of the instruments within a comparable context. The pre-testing process helped identify and address issues related to item clarity, structure, and language, leading to improvements in the instruments. Feedback from participants was used to refine the questionnaires, enhancing their effectiveness for capturing relevant data in the main study.

3.9. Reliability Test

The reliability and validity of the instruments were ensured through a qualitative process focusing on content validity, including face and logical validity. Feedback from the pre-testing phase also informed adjustments to enhance clarity, relevance, and alignment with the study objectives.

The supervisors provided detailed feedback on several items in the questionnaires. For instance, in the students' questionnaire, the item *"How do you feel about your school environment?"* was deemed too vague and revised to *"How satisfied are you with the cleanliness and facilities in your school environment?"* In the teachers' questionnaire, the item *"What challenges do you face in teaching?"* was modified to *"What specific challenges do you encounter in delivering lessons (e.g., class size, teaching resources, or student engagement)?"* Similarly, in the head teachers' questionnaire, an item on leadership styles was revised to provide clearer and mutually exclusive response options.



The pre-testing phase further highlighted ambiguous or overlapping items, which were rephrased for clarity. For example, an item asking students to rate their academic performance was modified from “*How would you rate your academic achievement?*” to “*How often do you achieve grades above the class average in your subjects?*” These adjustments ensured that the instruments accurately captured the intended data.

This qualitative approach to validation ensured the instruments were fit for the study, addressing ambiguities and inconsistencies while maintaining their capacity to generate reliable and relevant data for analyzing academic performance disparities between public and private schools in the Tamale Metropolis.

3.10.0 Data collection method

To conduct the survey, the researcher introduced themselves to the respondents and obtained permission to distribute the questionnaires. Additionally, official approval was sought and obtained from the GES Metro Director. A letter from the Tamale Metro GES Director and an introductory note from UDS were attached to the questionnaires to assure the respondents of the research’s purpose.

To distribute the surveys to the selected individuals experiencing depression, the researcher hired a study assistant. Data collection was completed within a span of two weeks.

3.11.0 Ethical Considerations

The consent of the respondents was first sought. In this regard, the purpose of the study and its significance were made clear and known to them. This helped respondents voluntarily to participate in the data collection exercise. In addition, respondents were made aware of the fact that they are at liberty to exit at any period from the study with or without any given reason.



The researcher safeguarded the rights, interests, confidentiality, anonymity of responses, and sensitivities of the respondents.

3.12.0 Data Analysis

The data were gathered and edited to guarantee appropriate responses. The questionnaires were serially numbered and coded for simple identification and analysis.

Also, Analysis of Variance (ANOVA) was used to test the statistical significance of performance in BECE among public and private schools in the Tamale Metropolis.

3.13.0 Conclusions

The research approach, research design, population, sampling, data collecting, and sources of data collection, as well as the data collection instrument, data collection process, data analysis, ethical considerations, reliability, and findings, were all presented and explored in this chapter.



CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION OF RESULTS

4.0 Introduction

The data gathered from the study participants is analysed, interpreted, and discussed in this chapter. There are three (3) major sections in this chapter. The instruments provided to principals of public and private basic schools chosen in the Tamale Metro are examined in the first section, while the second section presents analysis and interpretations of the instruments administered to the four (4) core subject teachers (Mathematics, Integrated Science, Social Studies, and English Language) in the selected schools. The final section contains the analysis and interpretations of the instruments given to students in the public and private schools chosen for the study.

The study specifically selected core subject teachers from both public and private junior high schools because they play a critical role in shaping students' academic outcomes. These teachers instruct in subjects that are core components of the Basic Education Certificate Examination (BECE), significantly influencing students' overall performance. Focusing on these teachers allowed the study to assess how differences in instructional practices, experience, and resources contributed to disparities in BECE results.

With the instruments administered to heads of schools, 14 (93%) out of the 15 were retrieved. Additionally, 37 (62%) out of the 60 instruments given to the four core subject teachers in the selected public and private schools were received. Lastly, there were 30 instruments distributed to learners in the selected schools, of which twenty-one (21, 70%) were retrieved. The actual number of respondents who participated in the study was 72, as opposed to the targeted 96 respondents. This represents 75% of the sampled population. (Clarification: The total sample of 105 comprised 15 heads of schools, 60 subject teachers,



and 30 students; however, 96 was used due to overlaps or exclusions during the data collection process.)

The population for this study included principals, core subject teachers, and students from both public and private junior high schools in the Tamale Metropolis. The sample was drawn using a purposive sampling technique to ensure the inclusion of participants with the most relevance to the study objectives. Finding the main causes of the academic performance gap between public and private schools in the Tamale Metropolitan Area on the Basic Education Certificate Examination was the primary goal of the study. Tables, figures, frequencies, and percentages were used in the analysis of the study's data to meet this goal and address the specified objectives.

4.1.1. Demographic Characteristics of Head of Schools in Public and Private Schools

The study's sample of school heads included information on their age, sex distribution, and length of time in their current position. Table 1 displays the 14 heads of schools that took part in the research.

Table 1: Sex distribution of heads of schools in the selected basic schools

Sex of Heads of schools	Public Basic Schools		Private Basic School		Total	%
	Number	Percentage	Number	Percentage		

Male	8	89%	4	80%	12	86%
Female	1	11%	1	20%	2	14%
Total	9	100%	5	100%	14	100

Source: Field Data, 2023



From the analysis of the sex distribution of heads of schools of the selected basic schools, there were 8 public heads of schools who were males representing 89%, and one female representing 11%. On the other side, private schools' heads of schools who took part in the study and were males were 4 represented 80%. The remaining one (1) head of school was a female making up 20%. This indicates that heads of schools are males in basic schools within Tamale Metropolitan are more than females.

Table 2: Educational level of Public and Private Head of Schools

Level of Education	Public Basic Schools		Private Basic School		Total	%
	Number	Percentage	Number	Percentage		
Teacher Cert "A"	0	0%	0	0%	0	0%
Diploma/HND	0	0%	2	40%	2	14%
First Degree	8	89%	2	40%	10	71%
Postgraduate	1	11%	1	20%	2	14%
Total	9	100%	5	100%	14	100%

Source: Field Data 2023

Table 2 is the analysis of the study's respondents' (heads of schools) educational background. With the public basic schools, 8 of the heads of schools had first degree in education representing 89% with the remaining one (1) holding post graduate. None of the heads of schools in the public basic schools held Diploma, HND or Teacher Cert "A".



Comparatively, there were also an equal of 2 each who were heads of schools in private schools' that had Diploma/HND qualification and First Degree respectively. This represents 40% each with the remaining 20% (i.e. one (1) head of school) holding post graduate qualification. This explains that heads of schools in both public and private schools are trained professionals with most of them holding their first degree in education and few having post graduate qualification in education. This is in sync with Okolie & Ikenga, (2024), who argued that public and private school managers with high educational qualification have fairly good understanding on how their institutions should be managed.

Table 3: Years of Teaching Experience of Public and Private Schools' Head of Schools

Teaching Experience	Public		Private		Total	Percentage
	Number	Percentage	Number	Percentage		
Below 6 years	0	0%	0	0%	0	0%
6-10 years	1	11%	3	60%	4	29%
11-15 years	0	0%	1	20%	1	7%
16-20 years	0	0%	0	0%	0	0%
21-25 years	4	44%	0	0%	4	29%
Above 25 years	4	44%	1	20%	5	36%
Total	9	100%	5	100%	14	100%

Source: Field Data 2023

Heads of schools in both public and private schools do not only have qualifications in education but also have teaching experiences in the field. As analysed in table 3, all heads of schools in both public and private basic schools have teaching experience more than five (5) years. The analysis also indicates that only one (11%) of the heads of schools in the public basic schools selected had 6-10 years teaching experience. Again, 4 (44%) of the head of schools in the public



schools contacted had 21-25 years of teaching experience and another four also had more than 25 years teaching experience representing 44%.

Analysing the years of teaching experience of heads of schools in the private schools selected for the study, three out of the five respondents had 6-10 years teaching experience representing 60%. There was also one (20%) respondent (head of school, private) who had more than 25 years teaching experience. Comparatively, most of the heads of schools in the public schools has more teaching experience than the heads in private schools as a total of 8 out of the 9 head of schools in the public schools contacted had more than 19 years of teaching experiences. The school's leader much experience and higher education, is akin to more teaching experience than teachers in leadership portfolio who worked within a limited period of time (Hussain et al., 2023). The analysis of the demographic characteristics of the public and private's head of schools shows that all heads of schools, both public and private are trained professionals and have good number of years of experience in teaching.

4.2 HEADTEACHERS' OBLIGATIONS FOR INSTRUCTIONAL SUPERVISION AND ITS CONTRIBUTION TO THE DIFFERENCES IN ACADEMIC PERFORMANCE BETWEEN PUBLIC AND PRIVATE BASIC (JHS) SCHOOLS IN TAMALE METRO

4.2.1. Public and Private Basic Schools' Pass Rate at BECE Over the Past Three Years

Heads of schools were asked on their schools pass rate over the past three (3) years and the extent of their satisfaction to their performances. These are presented below

4.2.2.1 Pass Rate (%) of Public and Private Schools at BECE Over the Past Three Years

The study priorly sought public and private schools' performances at the Basic Education Certificate Examination (BECE) over the past three (3) years. This was to help find out the



differences in private basic schools' performances at BECE and public basic schools. Responses obtained from the study's respondents (selected schools) are presented in table 4.

Table 4: Pass Rate (%) of Students at BECE Over the Past Three Years

Table 4: Pass Rate (%) of Students at BECE Over the Past Three Years.

Pass Rate (%) of students at BECE over the past three years	Public Schools			Private Schools		
	2020	2021	2022	2020	2021	2022
Below 60%	3	3	4	0	0	0
60% - 79%	2	2	1	0	0	0
80% - 100%	2	3	3	4	4	4

Source: Field Data 2023

Results on the pass rate of public and private school students at BECE over the past three (3) years show that private schools perform better than public schools at BECE. As presented in table 4, out of the 7 public schools, an average of 3 (43%) public schools over the past three years obtained below 60% at BECE. Again, 22% obtained between 60% - 70% pass rate at BECE over the past three years and the remaining 34% had from 80% - 100% at BECE in 2020, 2021 and 2022. Notwithstanding to this, private schools had a very high pass rate at BECE over the past three (3) years. All the private schools who took part in the study indicated that their school has had from 80% - 100% at BECE over the past three (3) years. This confirms and add up to the earlier studies that there is high gap between private and public schools' academic performances at the basic level education. To collaborate this finding, (Agbofa, 2023a) explored the difference in academic performance determinants between public and

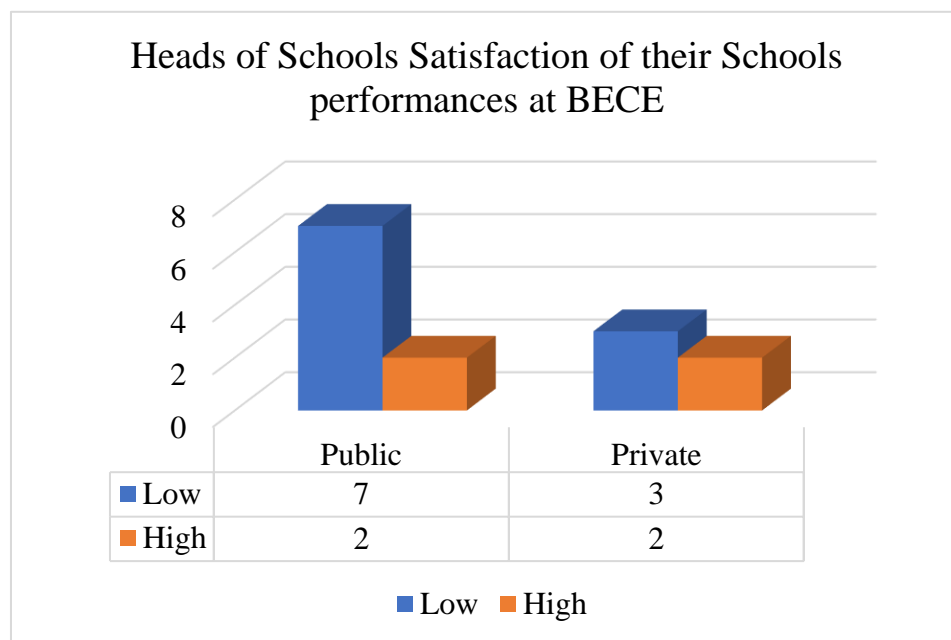


private junior high schools and concluded that private schools typically outperform those from public schools in the BECE over the past several years.

4.2.2.2 Head of School's Satisfaction of their Schools' Performances in BECE

From the previous, heads of schools were further assessed on their satisfaction of their schools' current performances in the Basic Education Certificate Examination (BECE). Responses of respondents are analyzed and presented in figure 1.

Figure 1: Heads of School's Satisfaction of their Schools Performances at BECE



More than half of the heads of schools in public schools expressed low satisfaction of their current performances in the Basic Education Certificate of Examination (BECE). That is, 7 (78%) out of the 9 heads said their performances in BECE are very low but the remaining 2 (22%) expressed otherwise. Likewise, most of the heads contacted in the selected private schools also indicated low satisfaction with their current performances in BECE. Out of the five private schools contacted, three (60%) of the heads stated low satisfaction with their current BECE performances whereas the remaining 2 (40%) were highly satisfied. When the heads of public schools were questioned further about the reasons behind the poor academic



performance at BECE, the majority of them blamed inadequate Teaching Learning Resources (TLRs), a dearth of textbooks, students' disinterest in learning, a lack of parental support and concern, and, last but not least, the teachers' and students' pretending to be teaching and learning, respectively. A study by Msiska et al., (2022) on the Implementation of Collaborative Problem Solving in Schools in Malawi supported these claims. This asserted that inadequate textbooks, parental negligence in attending their wards academic concerns, and teachers lack warm attitudes towards impacting knowledge to students are the bane of pitiable academic performance.

Also, interviews with the heads of schools in the private schools who expressed low satisfaction on their performances in BECE, some have it that, some students lack parental support and those students need extra motivation to help them learn. Nadya & Pustika (2021) affirms this study's report in their study on the importance of family motivation for student to study online during the Covid-19. They asserted that some students do not get motivation from their guardians to study, and has affected morals and weakened performance. Again, some also mentioned that students lack adequate personal studies in their homes and some do not take their lessons serious at all. Heads of public and private schools who indicated low satisfaction of their school's performance in BECE shared these and more as factors that fuel their low performances in BECE.

4.2.3. Heads of Schools Responses on Factors Influencing Their Schools' Performance at BECE

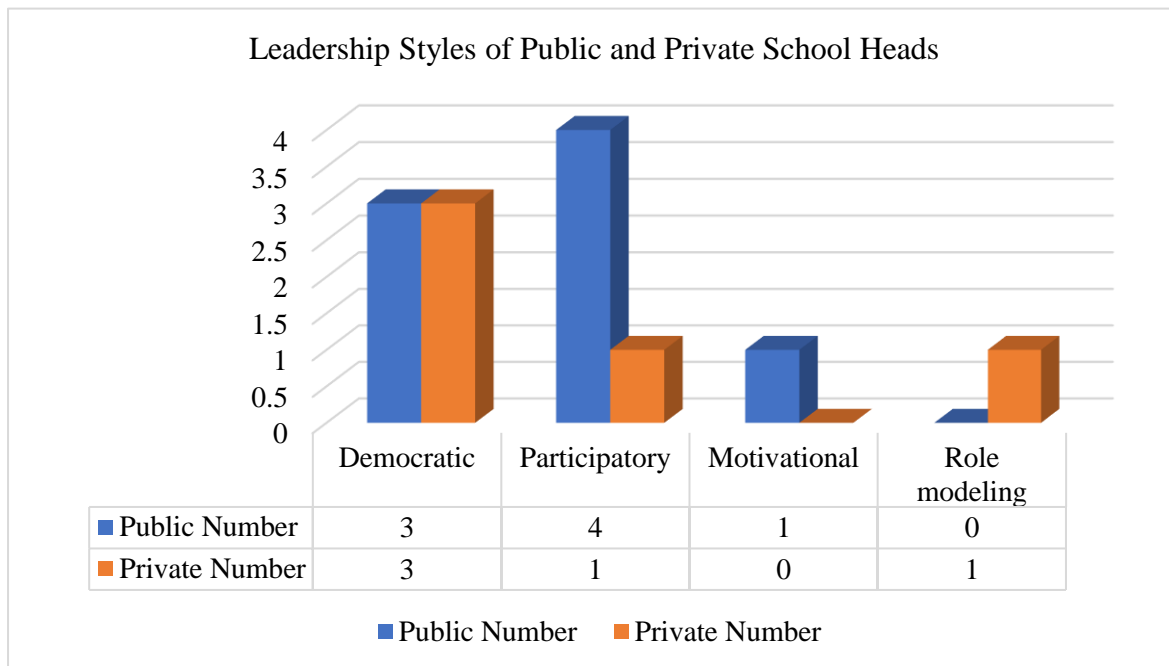
In examining the factors that differentiate public and private schools' performances at the Basic Education Certificate Examination (BECE), heads of schools in both public and private schools were assessed. Areas such as leadership styles of heads of schools, number of teachers in the school, stock of textbooks, supervision per week, competency of teachers, major problems they

have with their teachers as well as learners' parents' support and others. Collected data on these are analysed using tables, figures and percentages, interpreted and discussed below.

4.2.3.1. Leadership styles of Private and Public Heads of Schools.

It's widely held that the kind of leadership style one exhibits is deemed to have either a positive or adverse influence on the expected outcome of the group she or he leads. In the same way, the leadership styles heads of schools in public and private schools exhibits in executing their diverse roles has great impact on overall performances of the school including the academic performances. Thus, the study assessed the kind of leadership styles heads of schools of public and private schools exhibits in their line of duty of which Figure (1) presents the results ascertained from the respondents.

Figure 2: Head of Schools' Leadership Styles



Source: Field Data 2023

Out of the nine public schools contacted, three of the heads of schools indicated that they make use of democratic leadership styles in their line of duty representing 33%. Though democratic leadership style is proper for industrial harmony, Setiawan et al. (2021) however, indicated that



the involvement of the management does not indicate that the subordinate determines what is achieved or not because the final judgment remains the duty of the chief. Also, whereas 4 (44%) of the remaining heads of schools expressed that they employ participatory leadership styles in their line of duty, one (1) head of school representing 11.11% stated motivational leadership style as he his style of leadership. Comparing this to respondents who were heads of schools in private schools, more than half (3, i.e., 60%) of them indicated that they employ democratic leadership style. This depicts that 27% more of heads of schools in private schools employ more democratic leadership style than head of schools in public schools which welcomes all stakeholders' views in addressing concerns which in turn reflects in good performances of private schools.

4.2.3.2. Teacher-Students Ratio in Private and Public Schools

The performance, growth and successes or failures of every institution is deemed to hang on the kind and number of labour force in the institution against the task(s) at hand. This is no different with the educational setting (schools). Teachers are the key stakeholders who directly interact with students every day in the classroom.

Thus, the number and kind of teachers in a school as well as the teacher-students ratio has a major factor in the holistic performance of learners in every given school. Owing to this, the study had heads responses on their schools' enrolments and the number of teachers who work in their schools which are presented in table 4 and figure two respectively.



Table 5: Enrolments in Public and Private Schools in Tamale Metro

Student Enrolment Range	Public Schools Enrolment				Private Schools Enrolment			
	Male	Female	Total	%	Male	Female	Total	%
Below 100	6	8	14	74%	1	1	2	40%
100-199	2	1	3	16%	0	1	1	20%
200 - 299	1	1	2	11%	0	0	0	0%
Above 299	0	0	0	0%	1	1	2	40%
Total	9	10	19	100%	2	3	5	100%

Source: Field Data 2023

When heads of schools were asked to indicate their school's enrolment, with public schools, 74% (14 out of 19) expressed that they have less than 100 students. Also, whereas 3 (16%) of the heads of schools in the public schools contacted indicated they have enrolment from 100 – 199, the remaining two (11%) had enrolments from 200 – 299. None of the public schools contacted indicated to have more than 299 students in their school.

With the private schools contacted, two (2) out of the five (5) private schools had enrolment below 100 representing 40% of the total respondents. Also, 20% (1) of the private schools had enrolment from 100 – 199 and the remaining 2 (40%) private schools expressed that they have beyond 299 students in their school. Comparing both sectors, the private schools contacted had more students' enrolments than the public schools. Majority of the public schools' (74%) enrolments were below 100. None of the public schools had enrolments beyond 299 but 2 (40%) of the private schools had beyond 299 enrolments in their school.



Table 6: Number of Teachers in Public and Private Schools

Number of teachers in the school	Public		Private	
	Number	Percentage	Number	Percentage
Below 10 teachers	1	11%	1	20%
10 - 15 teachers	2	22%	0	0%
16 - 20 teachers	5	56%	1	20%
21 - 25 teachers	1	11%	0	0%
Above 25	0	0%	3	60%
Total	9	100%	5	100%

Source: Field Data 2023

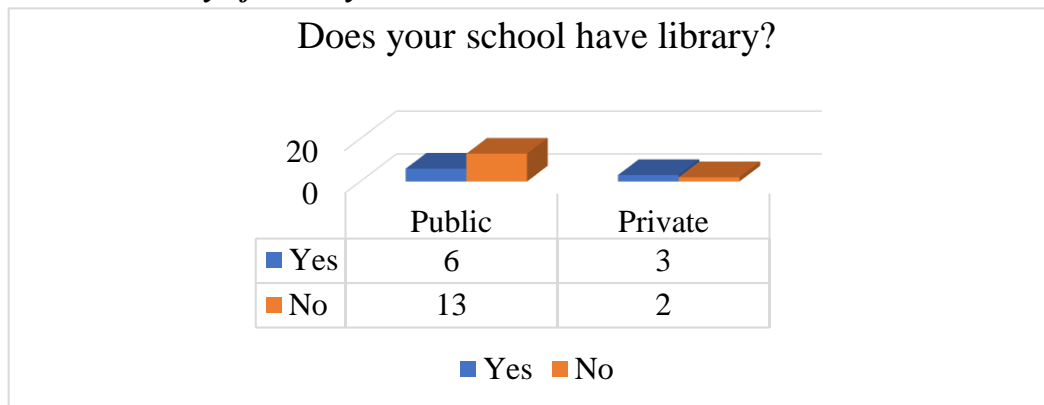
Comparatively, private schools tend to have a greater number of teachers than state owned schools. The enrolments in private schools are greater because of excellent performance as indicated by Crawford et al., (2024) This has it that, 33% of the head of schools who were heads in public schools indicated that, they work with less than 15 teachers whereas with private schools, it's only 20% of the respondents who had less than 15 teachers in their school. Again, no public-school head indicated that she/he had teachers beyond 25 but 60% of heads who were in private schools expressed that they had more than 25 teachers in their schools. Although, table 4 and 5 shows that both sectors have good teacher-students ratio. Averagely, from table 5 and 6, public schools had teacher-students ratio of 1:16 whereas private schools' is 1:10. This explains that private schools' teachers have more and quality time to assist in the academic needs of learners both in the class and outside the class. Khaleel et al., (2021) collaborated this report as they elucidated that parent may have to switch their children to private schools since much attention are offered to the children to learn more from their teachers than those in public schools. This in the end positively reflects in learners' academic performances as compared to public schools.



4.2.3.3. School Library and Stock of Text Books (The Four Core Subject)

As the use of appropriate pedagogy in the teaching and learning process is very vital for the achievement of learning objective(s), so as place for students to do further research or studies (library) and teaching and learning materials like text books are core. Thus, heads of schools were assessed on the availability of school library and stock of text books (the four core subjects) in their school.

Figure 3: Availability of Library in Public and Private Schools



Source: Field Data 2023

When respondents were asked to indicate whether their school has a library facility which learners and teachers use for further research and further studies, some respondents indicated they have whereas others expressed the otherwise as graphically presented in figure 2. With public schools, 6 (32%) out of the 19 expressed “yes,” indicating they have library in the school for teachers and learners’ further studies and research works. Bangani (2023) postulated that academic libraries’ support quality education and enhances performances, it is therefore not surprising to see students in private schools performing better than their counterparts in the state-owned schools. Majority of the public schools (13, 68%) indicated that their schools do not have library facility.

Contrary to this, 3 (60%) which is more than half of the private schools contacted pointed that their schools have library facility for teachers and learners’ further studies and research. In a study to assess the effect of the library environment on the study habits and academic



performance of students, Pagalilauan, Bucu & Daquioag (2023) revealed that the library environment significantly influences students' study and academic performance. The remaining 2 (40%) public schools indicated that they don't have library where students and teacher use for further studies and research.

Table 7: Stock of the Core Subjects Text Books in Public and Private Schools

Stock of Text Books	Public					Private				
	English	Maths	S. Std	Int. Sci.	Average	English	Maths	S. Std	Int. Sci.	Average
No stock	8	7	7	7	7.25	0	0	0	0	0
Below 10	1	2	2	2	1.75	0	0	0	0	0
10 - 15	0	0	0	0	0	0	0	0	0	0
16 - 20	0	0	0	0	0	0	0	0	0	0
Above 20	0	0	0	0	0	1	1	1	1	1

Source: Field Data 2023

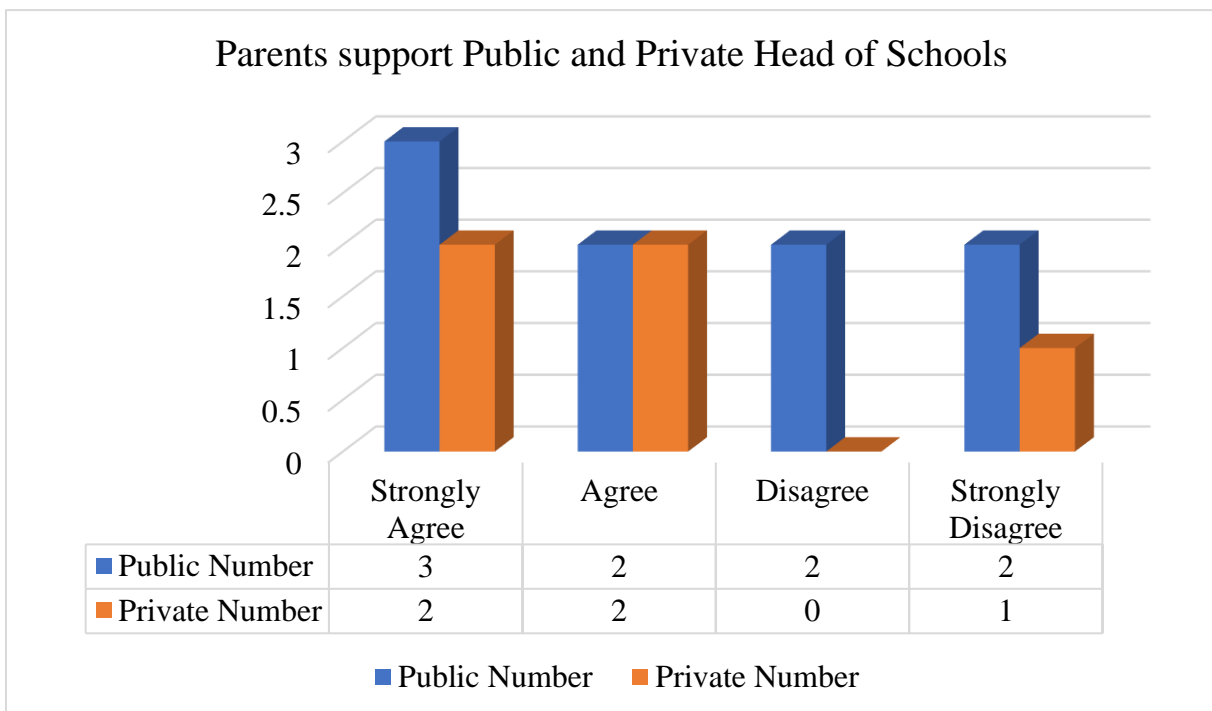
Heads of schools in both public and private schools who were contacted in the Tamale metropolis were asked to indicate the stock of the four core subjects text books in their schools. With this, the total number of heads who answered in public schools were 9. With English Language, out of the 9, 8 (89%) of the heads expressed that they don't have stocks and 1 (11%) indicated that they have less than 10 of the English Language text books in stock. Also, an equal number of 7 (78%) out of the 9 heads said they don't have stock for Mathematics, Integrated Science and Social Studies. In general, averagely, 7.25 of the public schools who answered on the stock of text books do not have stock for the various four core

subjects in their schools. This affirms an earlier study by Ntumi et al., (2023) where it was revealed that getting into four years of the new curriculum reform, schools do not have teaching textbooks related to the core subjects. This study was on teacher preparedness and implementation of the national pre-tertiary education curriculum framework in Ghana. On the side of private schools, only one head of school answered the question on the stock of text book. He indicated that they have more than 20 of each of the core subjects text books in stocks.

4.2.3.4. Parents Support to the Running of Public and Private Schools

Aside the above factors, the study also looked at the support parents give to heads of school in the running of the schools. To arrive at this goal, heads of schools in public and private basic schools that were contacted for the study were given the statement “*parents support us to run the school smoothly.*” The respondents were asked to correctly choose either “strongly agree,” agree, disagree, strongly disagree or neutral indicate their stance to statement. Results of this is analysed in figure 4.

Figure 4: Parents support Public and Private Head of Schools





This however is not in the case of private schools. As depicted in figure 4, out of the 5 private schools who took part in this study, 4 (80%) schools have learners' parent's supports. The heads added that, there are guardians who from time to time come to the school and see how their wards are doing. Some also randomly call their wards' teachers to inquire of their wards progress and the way forward. According to most of the heads, this goes a long way and motivate them knowing that they aren't alone in the development of the learners. This finding collaborates an earlier study, parents' support to private schools is considered as top priorities (Bosson-Amedenu et al., 2024)

Summarizing the responses of heads of schools on the factors that influences public and private schools' performances differences at BECE, the leadership style used by heads of schools, teacher-students ratio, availability of TLMs and learning facilities like library as well as parents support to schools, motivation of learners and among others are major contributing factors accounting for the differences in public and private schools' performances.

Heads of schools also expressed that, to help solve the problem of poor performances at BECE and the differences in performances of public and private schools, parents/guardians are to help their ward's schools to whip up the interest of pupils to take their studies seriously. Some also expressed that more efforts must be directed at improving reading and writing proficiency and others indicated that there should be effective working collaboration between stakeholders in education. By this and other working programs, both sectors shall see good performances at BECE.

4.3. Demographic Characteristics of Teachers Teaching Core Subjects in Public and Private Schools

The reasons explaining the variations in performance between public and private basic schools on the Tamale Metro Basic Education Certificate Examination were also evaluated for the core

subject teachers in the public and private basic schools that were chosen for the study. In doing so, the educators supplied data on their demographic traits, which are examined in this section.

Table 8: Sex of Teachers Teaching Core Subjects in Public and Private Basic Schools

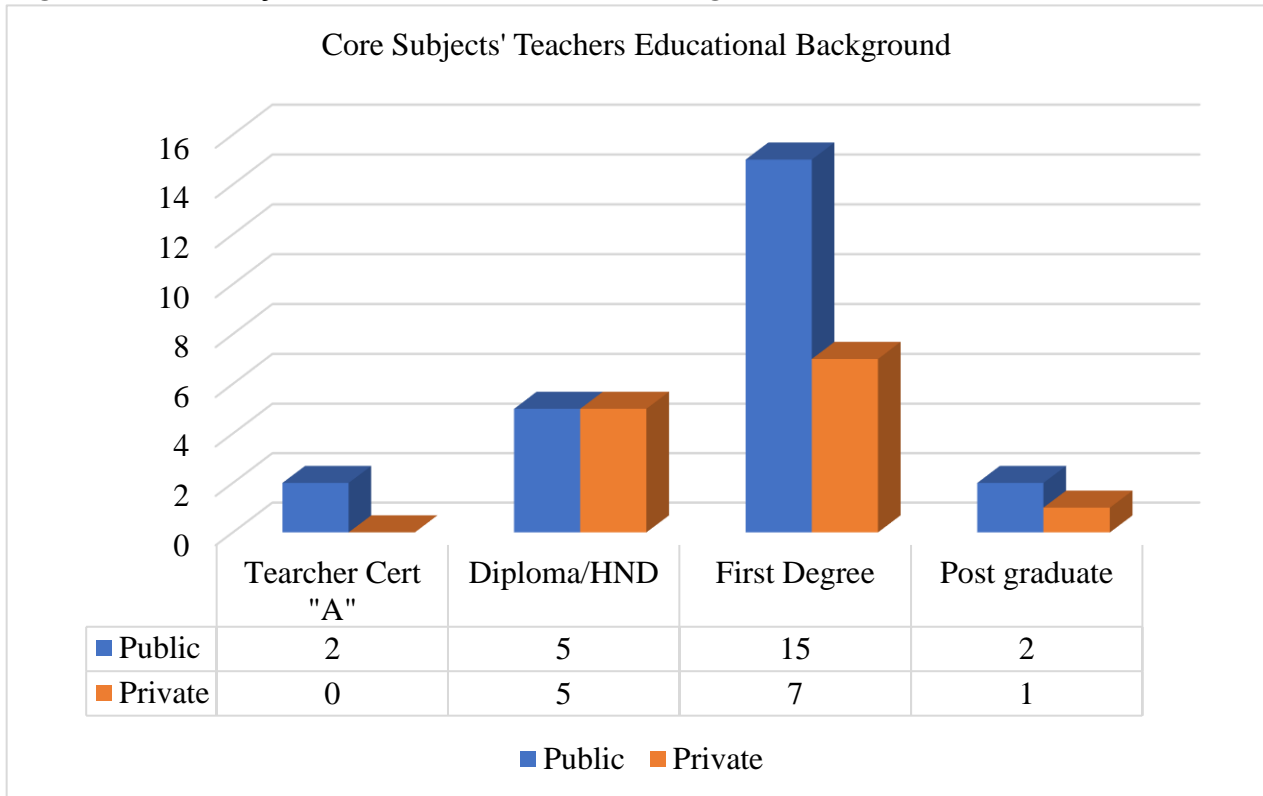
Sex of Teachers Teaching Core Subjects	Public		Private	
	Number	Percentage	Number	Percentage
Male	17	71%	12	92%
Female	7	29%	1	8%
Total	24	100%	13	100%

Source: Field Data, 2023

The study found out that more males teach the core subjects than females. As shown in table 8, with public schools, out of 24 core subject teachers, 17 (71%) were males whereas the remaining 7 (29%) were females. In the same manner, with the private schools that took part in the study, 12 (92%) out of the 13 core subjects' teachers were males and the remaining one was a female. Though both sectors have more male teachers handling the core subjects, private schools have 21% more males teaching core subject than public schools. This was justified by de la Rama et al., (2020) where they conjectured that male teacher would likely to invest much time in teaching core subjects. Also, the educational qualifications of teachers teaching the core subjects were sought for and analysed in figure 5 is respondents' responses.



Figure 5: Core Subjects' Teachers Educational Background



Source: Field Data 2023

There were 2 (8%) core subject teachers in public schools that had Teacher Cert “A”. With Diploma/HND, there were 5 (22%) core subject teachers who also had Diploma/HND. Out of the remaining 17 core subject teachers, 15 (65%) had first degree and the 2 (8%) had their post graduate. This expresses that, majority of teachers teaching core subjects in basic public schools had first degree. In a similar vein, the data showed that first-degree holders of a Bachelor of Arts or Education made up the majority of the teachers ($n = 109$, or 60%). This outcome is representative of the situation in Ghana, where teaching in senior high schools requires a minimum of a Bachelor of Arts in Education (first degree) (Duah et al., 2024)

On the part of the private basic schools, none of the teachers teaching the core subjects had Teacher Cert “A” like as in the case of the public schools that took part in this study. The number of core subject teachers who had Diploma/HND were also 5 representing 38%. Just like the core teachers in the public schools, majority of the teachers were first degree holders.



That is, 7 out of the 13 private school teachers teaching core subjects had first degree in education, representing 54%. The remaining one core subject teacher was a post graduate representing 8%. This finding affirms Schabas (2023) study which revealed that teachers with post graduate degree teaching core subjects are more knowledgeable and teach with dispatch. Both sectors therefore have majority of their core subject teachers holding first degree qualification. Having this information, the core subjects' teachers were further interviewed on their professionalism of which the result is analyzed in table 9.

Table 9: Teachers teaching core subjects and their professionalism

Core Subject Teachers Professionalism	Public		Private	
	Number	Percentage	Number	Percentage
Trained Teacher	27	100%	11	85%
Untrained Teacher	0	0%	2	15%

Source: Field Data, 2023

Table 9 shows that with public schools, all the 27 core subject teachers who took part in the study were trained professional teachers. But with teachers teaching core subject in the basic private schools that took part in this study, 11 out of the 13 were trained professional teachers, representing 85% and the remaining 2 teachers were untrained teachers.

4.3.1. TEACHER EXPERIENCE AND ITS IMPACT ON THE ACADEMIC PERFORMANCE OF PUBLIC AND PRIVATE BASIC SCHOOLS IN TAMALE METROPOLIS.

Responses from core subject teachers at basic public and private schools were requested regarding the elements that distinguish the performance of public and private schools on the Basic Education Certificate Examination (BECE). Teachers' responses are shown in Table 10.



Table 10: Teachers Responses on Factors Influencing Public and Private Schools Performance at BECE

	Public					Private				
	S.A.	A	N	S.D.A	DA	S.A.	A	N	S.D. A	D.A
Head of School observes my lessons and provide feedback	12	12	2	0	0	12	2	0	0	0
Head of school inspects my lesson notes and scheme of work	19	7	0	1	0	10	2	0	2	0
Head supervisory role is very satisfactory	20	7	0	0	0	11	3	0	0	0
Parents approach the school to check on their wards	7	8	0	3	9	6	6	0	0	2
There is cordial relationship with the school and the community	7	17	0	1	2	9	4	0	1	0
Teachers have all TLMs for my subject	4	6	0	3	13	7	6	0	0	0
Full cooperation between parents and teachers	9	9	0	0	9	9	4	0	0	1
Teachers use play-based approaches in teaching	10	11	5	0	0	6	5	1	1	0
Learners are provided the opportunity to ask questions	23	2	1	0	0	14	0	0	0	0

Source: Field Data, 2023

Key: S.A. = Strongly Agree, A = Agree; N = Neutral; S.D.A = Strongly Disagree; D.A. = Disagree

Table 10 presents an analysis of the responses provided by basic public and private school instructors of Mathematics, Social Studies, Integrated Science, and English Language. These teachers were evaluated based on characteristics that explain the variations in BECE performance between public and private schools.



When teachers were asked whether their heads of schools supervise their lessons and provide feedback, an equal of 12 (44%) each out of the 27 teachers in the public schools who took part in the study strongly agreed and agreed respectively that their heads supervise their lesson and provide them feedback. Although, no teacher disagreed, there were 2 (8%) teachers who stood neutral on this. On the part of the private schools, out of the 14 teachers, 12 (86%) strongly agreed that their heads supervise their lessons. The remaining 2 (14%) teachers also agreed that their heads supervise their lessons. Thus, private schools' heads supervise teachers' lessons and provide feedbacks 42% more than heads of schools in the public schools. According to teachers in the private schools, the regular supervision and feedbacks provided by their heads help keep them on track and to be more effective on their next delivery.

Scheme of learning and lesson notes supervision by heads of schools in both public and private schools were also asked. Nineteen (19, 70%) out of the 27 teachers teaching core subjects in the public schools contacted strongly agreed that their scheme of learning and lesson notes were vetted by their schools. According to Ambrose, (2011) head teachers reviewed lesson plans but never oversaw the actual teaching of the material. According to the study, all supervisory techniques—internal and external—should be used since both are essential for efficient supervision. Second, as a crucial component of the teaching and learning process, head teachers are advised to visit the classrooms again to supervise the delivery of the lessons (Ogunode, Olatunde-Aiyedun & Akin-Ibidiran, 2021). Another 7 teachers also agreed to same but the remaining 1 (4%) teacher strongly disagreed that the head vet the scheme of learning and lesson notes.

In the same way, more than half of the core teachers in the private schools who took part in the study agreed that their scheme of learning and lesson notes were vetted by their heads. That's, 10 (71%) out of the 14 teachers strongly agreed and another 2 (14%) also agreed representing

a total of 85% (12 teachers out of 14). Nevertheless, 2 other private school teachers strongly disagreed that their scheme of learning and lesson notes were not vetted by their heads, representing 14% of the total private school teachers who took part in the study.

Again, most of the heads of schools in private schools' vet their teachers' scheme of learning and lesson notes than heads of schools in public schools. Both public and private schools' teachers who took part in this study were also asked of their satisfaction of their heads of schools' supervisory roles. All the 27 (100%) and 14 (100%) teachers who took part in the public and private schools contacted respectively agreed that their heads of schools' supervisory roles were very satisfactory with none indicating contrary.

Teachers were also asked to state their extent of agreement to the statement "*parents approach the school to check on their wards.*" Out of the 27 teachers contacted in the public schools, 7 (26%) teachers strongly agreed that parents/guardians approached the school to check on their wards. Whereas another 8 (30%) agreed to this, the remaining 11 (44%) teachers disagreed that parents/guardians approach the school to check on their wards. Contrary to the above, all the teachers teaching core subjects in the private schools contacted except one agreed that learners' parents/guardians approach the school to check on their wards.

This aligns with heads of schools' responses on the support learners' parents/guardians provide the schools. The rate at which parents/guardians in private schools approach their wards schools are far higher than public schools. This serves as a motivation to teachers in private schools. It also serves as a point of check and balance in the up-bringing of the child where both the school and the parents/guardian are all updated on the child's state and needs. In further interview with the teachers, some teachers expressed that parents/guardian should encourage their wards to read at home. Others also indicated that, parents/guardians should help discipline their wards. In order to implement effective discipline techniques and assist kids



acquire the cognitive skills necessary to fulfil their potential, parents and guardians should support and encourage their students Sciberras et al., (2022)

The availability of teaching and learning materials (TLMs) for teachers teaching the various core subjects in the schools contacted were also assessed. Here, as 10 (38%) of the teachers in public schools agreed that they have TLMs for their subject and a majority of 16 (62%) out of 26 expressed that they do not have TLMs for the teaching of Mathematics, Integrated Science, Social Studies and English Language. This is no different from public schools' heads of schools' responses on TLMs analysed in the previous section. The unavailability of TLMs, according to some core subject teachers renders teaching and learning to be more of talking. To collaborate this, Osei-Boateng (2022) suggest that lack of access to Teaching and Learning Materials (TLMs) limits instruction to oral presentations, which hinders effective and forward-thinking learning. In a further interview, more than half of the teachers expressed that government should provide the necessary TLMs to enhance teachers in their teaching and learning processes.

This is however different in the case of private schools. All the 13 teachers who answered this question agreed that they had TLMs for their various subject areas. Further interview revealed that, the availability of TLMs enhances the teaching and learning process and makes lessons more interactive and visual which promote learners' comprehension of concepts. The use of play-based approaches in teaching and learning were also asked. With this, 10 teachers representing 38% of the public schools contacted strongly agreed that they make use of play-based approaches in teaching. In the same way, 11 (42%) other teachers also agreed and the remaining stood neutral on this. In view of this Boateng & Lee, (2023) suggest that access to Teaching and Learning Materials (TLMs) promote instructional presentations, which enhances effective and forward-thinking learning.



On the side of private schools, 6 (46%) out of the 13 teachers strongly agreed that they employ play-based approaches in teaching, 5 (38%) agreed and 1 (8%) each expressed neutral and strong disagreement that they make use of play-based approaches in teaching. In further interview with the teachers on other challenges pointed out by them, some of the responses of teachers in the public schools were;

- Most learners come to school without reading previous lessons taught,
- Learners' indiscipline makes teaching and learning difficult,
- Government transferring teachers to more remote areas,
- The government not ready to make teaching and learning more practical,
- Teachers are not respected by parents, government and learners,
- Very low level of salary as compared to high standard of living,
- Lack of "New Curriculum Materials,
- Inappropriate government policies and
- Lack of motivation by the employer.

Also, on the side of private schools, among some of the challenges expressed by teachers were;

- Inadequate motivation for teachers,
- Heavy workload,
- Less contact hours,
- Lack of government support,
- Low level of salary,
- Indiscipline attitudes among learners and
- Lack of respect for teachers in the country.

Teachers also stated some measures that can be put in place to help improve the performances of basic schools at BECE. Among the measures are enough TLMs for teachers and learners at all levels, effective monitoring for students, counselling and motivation for learners,

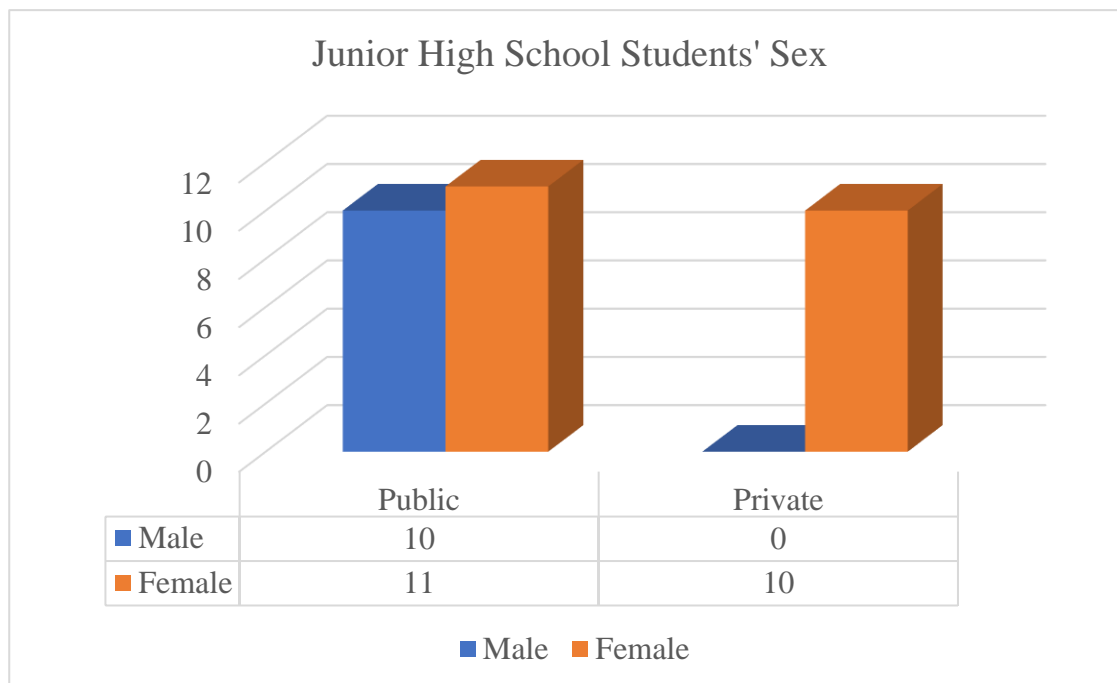


encouraging learners to have personal studies at home and in school, and extra classes for learners who are not performing well in any subject.

4.4. Demographic Characteristics of Students in Public and Private Schools' JHS

Another direct stakeholder that the study considered and assessed was students in the public and private schools who took part in the study. Students' demographic characteristics include sex, kindergarten experience, parents/guardians' level of education, and the occupation of parents/guardians. These are analyzed using tables, percentages, and figures.

Figure 6: Sex of JHS students

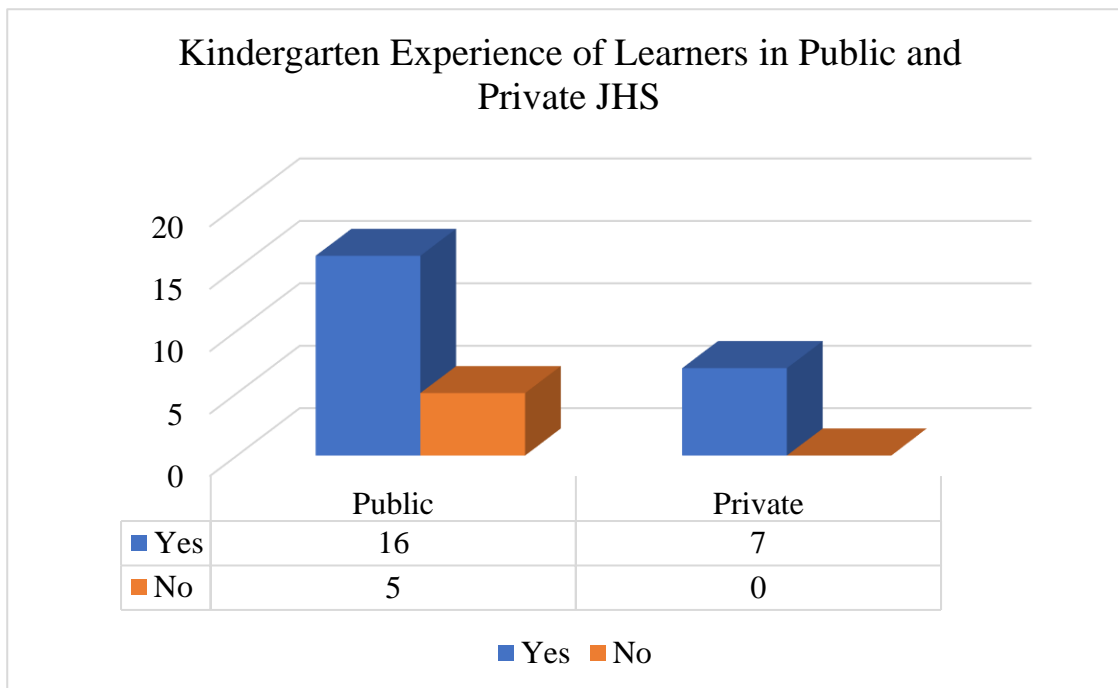


Source: Field Data, 2023

In general, as depicted in Figure 6, more female students took part in the study than males. 31 students took part in the study of which males were 10 (32%) and females were 21 (68%). Comparing public and private school students who took part, out of the 21 students who took part and are from public schools, 10 (48%) were males and the majority, 11 (52%) were females. That being said Kazaal & Maki, (2024) revealed that in recent years majority of our prep school graduates are girls, and they typically participate with excessive zeal in school

activities. With the private schools, all the 10 respondents were females with no male taking part in the study. The kindergarten experience of these learners was also assessed. Kindergarten is very crucial in the educational leather. This is because, it is the level where learners are introduced to most lettering, numeracy, reading, and many other important basics that are built upon as they go through the leather of education. Responses of students when they were asked the question; “Did you attend kindergarten?” analysed in Figure 7.

Figure: Kindergarten Experience of Learners in JHS

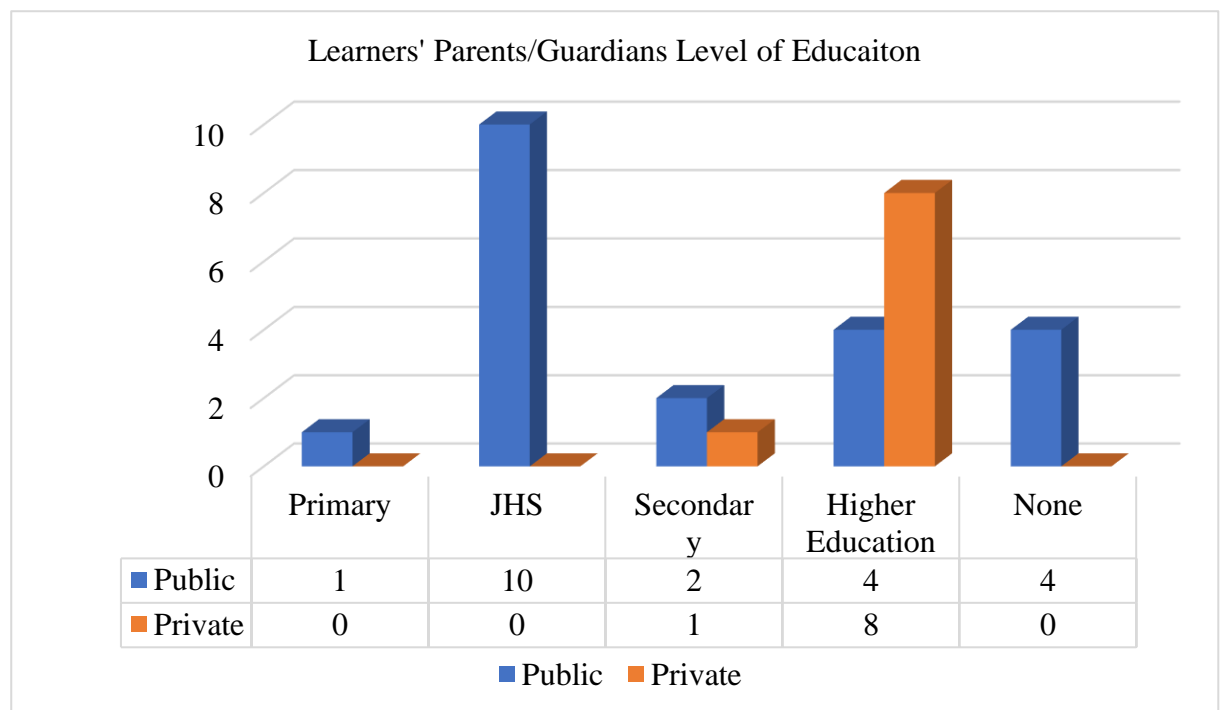


Source: Field Data, 2023

A greater number of the respondents indicated that they attended kindergarten. That’s, 23 (82%) out of the 28 students had kindergarten experience whereas the remaining 5 (18%) did not. Comparatively, there were 16 (76%) students in the public schools contacted who had kindergarten experience. The remaining 5 (24%) did not attend kindergarten. This is different from the responses of the students in the public schools the study assessed. All the 7 students who responded to this question had kindergarten experience.



Unlike the private schools' students, having a number of students who did not have kindergarten experience as indicated by some students in the public schools contacted, implies that had their reading, writing, numeracy, and other important basics in basic one, holding all other factors constant, and that comes with its own challenges to both the teacher and the learner. Parents are encouraged to try as much as possible to help their wards to have kindergarten experience as it goes a long way in helping the child academically. Also, learners were assessed on their parents/guardians' level of education. Responses by students are



analysed in Figure 8.

Figure 7: Learners' parents/guardians' level of education Source:

Field Data, 2023

Responses by students in the public schools indicated that 1 (5%) learner's parent/guardian had up to primary level of education, 10 (48%) learners' parents/guardians JHS experience, 2 (10%) of the learners too parents/guardians made it to the SHS level and an equal of 4 (19%) each had higher education and none respectively. Varying from the above, only one learner indicated that the parent/guardian had up to SHS education, the remaining 8 (89%) learners had their parents/guardians making it to the higher education. Summarizing the demographic



characteristics of the learners, more females took part in the study than males and all other than 5 (16%) of the learners in the public schools, all the students had kindergarten experience with their parents/guardians having educational experience except 4 (13%) of the students in the public schools contacted.

4.5. Assessment of Learners' Factors Accounting to the Differences in Public and Private Schools' Performances at BECE.

In examining learner factors accounting for the differences in public and private schools' performances at Basic Education Certificate Education, learners were asked to indicate "Yes" or "No" a number of given questions of which learners' responses are presented in Table 11.

Table 11: Learner Factors accounting to the differences in public and private schools' performances at BECE

Learner Factors accounting to the differences in public and private schools' performances at BECE.	Public		Private	
	Yes	No	Yes	No
Do you own textbooks for the all the core subjects?	9	12	5	6
Do you do extra classes after school	12	8	1	8
Teachers give us class and home works more than 2 times a week	17	3	6	1
Able to write essays without assistance	10	11	4	6

Source: Field Data, 2023

Responses of learners to the question "*do you own textbooks for all the core subjects?*" 9 (43%) of learners in the public schools indicated that they have textbooks for all the core subjects while the remaining majority (12, 57%) stated that they do not own any of the core subjects' textbook.

Also, in the private schools, five (5) out of the 11, representing 45% stated that they had textbooks for all the core subjects, and 6 (55%) said no, they do not have any of the core



subjects' textbooks. The lack of text books on the part of learners renders them incapable of personal studies. On the other hand, the availability of textbooks should encourage teachers and students to do fruitful research in addition to expanding the scope of what is taught ((Shulman, 1987) This is evidence of the response from both teachers and heads of schools especially in the public schools as discussed in the previous sections that learners do not like studying on their own and also most parents/guardians do not support in this regard.

What learners do after school was also asked for learners to correctly indicate their stand. With this, the learners were to correctly choose either "Yes" or "No" as to whether they do extra classes after school. Majority of learners in the public schools, i.e., 12 (60%) of them said that they attend extra classes after school but remaining 8 (40%) learners stated "no". According to Veraksa et al., (2021), all students who attended extra-classes develop their cognitive, expressive, physical, artistic-esthetic, and socio-communicative skills. Notwithstanding, only one learner in the private schools indicate that s/he attends extra classes after school, representing 11% of the total. The remaining 8 (89%) learners expressed that they do not attend extra class when they close from school. Dolgikh et al., (2023) on the potential impact of extra education on the development of executive functions within a year in preschool children concluded that majority of children in their study sample did not participate in any extra classes (n=64), which is in sync with this study finding.

When the learners were interviewed further, some has it that 9 learners comprising 8 public school learners and 1 private school learner mentioned that they engage in selling after school. Whereas another 2 public school learners also expressed that they engage in apprenticeship, 7 other learners (4 public and 3 private school learners) also stated that what they do after school is house chores. Only one learner stated religious activities as what she/he does after school. These coupled with other activities drain learners' strength leaving them to be tired and less active to have personal study at home.



Majority of both the public and private schools' learners stated that they can't write essays without assistance. Sector wise, there were 10 (48%) learners who expressed that they can write essays without assistance in the public schools and the remaining 11 (62%) stated the others. In the same vein, less than half, i.e., 4 (40%) out of 10 learners in the private schools mentioned that they can write essays without assistance. The remaining 6 (60%) stated otherwise.

In summary, learners in both public and private schools are facing similar challenges. However, from the analyses, the challenges faced by learners in private schools are mild compared to public schools. Some of the common factors expressed by learners in both sectors as challenges included lack of textbooks, unstable electricity power, unable to comprehend when taught in school, colleagues' disturbances, lack of school laboratories, house chores and others.

4.6. The difference in the Performance of Pupils in Public and Private Schools at BECE

As a first step towards further education or career training, the Basic Education Certificate Examination (BECE) is an important evaluation in students' educational journeys. Students' achievement on this test frequently serves as an indicator of how well the educational system is working, as well as the standard of instruction, resources, and support that are offered in various kinds of schools. There is a continuous discussion over the academic differences between pupils who attend public and private schools in many different countries. In order to determine whether students in public and private schools perform significantly differently on the BECE, this study uses Analysis of Variance (ANOVA).

The ANOVA results highlight a number of important conclusions about the BECE performance gap between public and private institutions. First off, there are statistically significant disparities in BECE performance between students in public and private schools, as indicated by the substantial F-value linked with inter-group differences ($F = 7.361, p < 0.001$). This implies that variations in academic achievement are largely influenced by the type of school.



Table 12: ANOVA analysis showing difference in the Performance of Pupils in Public and Private Schools at BECE

Sum of Squares	Df	Mean Square	F	Sig
17.500	11	1.591		
14.833	17	.873	7.361	.000
22.167	187	.119		
37.000	204	.181		
54.500	215	.253		

Grand Mean = 1.25

Source: Field Data



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1. Introduction

This chapter offers the conclusions drawn from the study's findings as well as a summary of its key findings. Once more, recommendations based on the study's findings concludes this chapter.

5.2. Summary of Findings

5.2.1 Contribution of Headteachers Instructional Supervision to The Academic Performance of Public and Private Basic (JHS) Schools in Tamale Metro.

The analysis revealed that headteachers in private schools demonstrated a higher level of instructional supervision compared to their counterparts in public schools. They were more involved in regular classroom monitoring, teacher support, and the implementation of effective teaching strategies. This proactive approach positively impacted students' academic outcomes, contributing to the higher BECE performance observed in private schools. On the other hand, limited supervision and less frequent engagement by headteachers in public schools were associated with lower student performance.

These findings are consistent with existing literature. According to Eyana et al., (2024), effective supervision by school heads significantly improves teaching practices and student outcomes. Similarly, Rusli et al., (2021) highlight that headteachers' active engagement in classroom observations and feedback sessions leads to improved teacher effectiveness and student performance. Ullah et al., (2024) argue that strong instructional leadership is a critical determinant of school success, especially in underperforming systems. The disparities observed



in this study align with the assertion that the quality and frequency of supervision directly correlate with academic achievement.

5.2.2 Instructor Experience and its impacts on differences in pupils' academic performance between public and private basic schools in Tamale Metropolis.

The findings indicate that teachers in private schools generally have more teaching experience compared to their counterparts in public schools. This experience translates into better classroom management, the use of effective teaching strategies, and an improved ability to address diverse learning needs. In public schools, a significant number of teachers were found to have limited experience, which affects their ability to deliver quality education consistently. The disparities in teaching experience contribute to the performance gap observed in the BECE results between public and private schools.

Supporting literature emphasizes the importance of teaching experience in shaping student outcomes. For example, Smale-Jacobse et al., (2019) argue that experienced teachers are better equipped to employ differentiated instruction and foster student engagement. Similarly, Wenglinsky, (2002) highlight those years of teaching practice significantly correlate with student achievement, particularly in critical subjects like Mathematics and Science. David & Naparan, (2024) underscore that teacher retention and ongoing professional development are essential for ensuring high-quality instruction in both public and private schools. These insights reinforce the study's findings and emphasize the role of teacher experience in academic performance disparities.



5.2.3 Influence of different teaching methodologies by instructors on academic performance in public and private basic schools in the Tamale Metropolitan Area.

The study found that private school teachers frequently employed student-centered teaching methodologies, such as group discussions and project-based learning, which enhanced student engagement and understanding. Public school teachers, however, relied primarily on lecture-based methods, which limited active participation and critical thinking. This difference in approaches significantly contributed to the observed performance gap in BECE results between the two types of schools.

Literature supports these findings. Saini et al., (2023) assert that student-centered teaching approaches foster deeper understanding and critical thinking skills. (Benware & Deci, 1984) highlight that active learning strategies encourage motivation and improve performance in standardized assessments. These insights emphasize the importance of effective teaching methodologies in bridging performance disparities.

5.2.4 Educational resources availability for instruction and learning in public and private institutions and their influence on differences in academic performance

The findings revealed that private schools had better access to teaching and learning resources, such as textbooks, science equipment, and libraries, compared to public schools. These resources facilitated effective teaching and provided students with opportunities for hands-on learning and research. Conversely, public schools often faced shortages of basic educational materials, which hindered instructional delivery and student engagement. These disparities in resource availability contributed significantly to the performance gap in BECE results.

Existing literature affirms the importance of resources in academic success. For example, Darling-Hammond, (2000) emphasizes that adequate teaching and learning materials are



fundamental for improving student outcomes. Similarly, (Kabir et al., 2023) found that resource availability directly impacts the quality of education, particularly in under-resourced schools. Sofroniou et al., (2024) highlight that the provision of adequate resources can bridge performance gaps and promote equity in education. These findings align with the study and underscore the critical role of educational resources in influencing academic performance.

5.3.0 Conclusions

The study clearly reveals that there is high difference in the academic achievement of public and private basic schools in Tamale Metropolis. Though, both educational sectors are faced with similar challenges, the public sector's own appear very intense resulting in low academic achievements compared to the private schools. Teaching and learning facilities as well as materials are very crucial in the educational process irrespective of the availability of good and professional quality teachers, lack of the former does not enhance the latter's instructional delivery and learners' comprehension of concepts.

Like the private schools in the Tamale Metropolis, basic public schools should put measures in place to have a working collaboration with parents/guardians and help motivate learners to give out their best. Promoting and maintaining this and the likes will help better the performances of the basic public schools in the Tamale Metropolis and other educational institutions facing similar challenges.

5.4. Recommendations

Drawing from the study's findings, the research recommends the following.

1. Complementing the supervisory role of heads of schools, more and intensive supervision from the School Improvement Support Officers (SISO) and the monitoring division of the metro (education) are needed.



2. Metro and district educational offices should periodically embark on programs that will enlighten parents/guardians on the importance of supporting their wards and collaborating with their wards' schools improved performance.
3. Educational policy makers should consider and formulate plans that will invite parents/guardians' views as well as teachers who are constantly in the class with the learners.
4. There should also be road maps to furnishing schools with the necessary teaching and learning facilities like textbooks supplementary readers and laboratories for practical lessons.
5. GES should rebrand the teaching profession to help make teachers respected in the society.

5.5 Suggestions for Further Research

The researcher recommends the following for further studies based on the study's findings: A comprehensive study on the effectiveness of parental participation in the education of learners.

Inclusive research on the effects of teacher motivation should be conducted in the Tamale Metropolis and in the country at large to establish the impact of effective teacher motivation on lesson delivery and learner academic achievements



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APPENDICES

Introductory Letters

GHANA EDUCATION SERVICE

In case of reply the date and reference number of this letter should be quoted

Our Ref: GES/NR/MEO/MC.

Your Ref:



REPUBLIC OF GHANA

Metropolitan Education Office
P.O. Box 6,E/R
Tamale, Northern Region
Date: December 8, 2023

Email:tmetroedu@gmail.com

MRS. CATHERINE NSUBAAN MAWAH
SOS CHILDREN'S VILLAGE
TAMALE

GRANT OF PERMISSION TO COLLECT DATA ON 'COMPARATIVE PERFORMANCE OF PUBLIC AND PRIVATE SCHOOLS IN BECE IN THE TAMALE METROPOLIS

I write to inform you that permission has been granted you in respect of the above named subject.

You are required to conduct your activities in line with rules and regulations governing Ghana Education Service.

Heads of schools concerned are urged to grant you the needed assistance to facilitate your work in the schools.

Thank you

NELSON NAAKINIIB KONLAN
METROPOLITAN DIRECTOR OF EDUCATION
TAMALE

Cc: HEADTEACHERS CONCERN ✓
TAMALE METROPOLIS

UNIVERSITY FOR DEVELOPMENT STUDIES
FACULTY OF EDUCATION
EDUCATIONAL MANAGEMENT AND POLICY STUDIES

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P.O. Box TL1350
Tamale
Northern Region
Ghana, West Africa

Our Ref:
Your Ref:

DATE: 27th November, 2023

The Metro Director
Ghana Education Service
Tamale

Dear Sir/Madam,

LETTER OF INTRODUCTION

The bearer of this letter, Mrs. Catherine Nsubaan Mawah is a postgraduate student studying at the Department of Educational Management and Policy Studies at the University for Development Studies (UDS).

She requires some information from headteachers, teachers, and students to write her thesis titled **"A Comparative Study of Performance in BECE of Pupils in Public and Private Schools in the Tamale Metropolis"** as a requirement for her MPhil programme.

Kindly give the necessary assistance that Mrs. Catherine Nsubaan Mawah requires to enable her gather the information she needs for the research.

I would greatly appreciate it if you could provide the required assistance for her data collection in your outfit.

Thank you.

Yours faithfully,

Quansah, JYD
Head of Department

HOD
Educational Mgt. & Policy Studies
UDS
Faculty Of Education

QUESTIONNAIRES

QUESTIONNAIRE

A: Questionnaire for public and private JHS students

This questionnaire is intended to solicit your views with respect to the BECE results of basic education in the Tamale Metropolis. The views shared are only to support academic research and your confidentiality is completely guaranteed.

Socio-Demographic Data

Tick the boxes below and fill in where applicable.

Age: [] Sex: Male [] / Female []

Name of your School: -----

Category of your School: Public [] / Private []

Parent/Guardian's level of education:

Primary [] JHS [] Secondary [] Higher Education [] None []

Father/ Guardian Occupation:

Please provide accurate answers to the following questions as applied to you as an individual.

Your answers should be as clear as possible.

School attendance and Facility

Did you attend kindergarten? Yes [] No []

Do you have a library facility in your school for your studies? Yes [] No []

How regular are you in school and stay in class? One day out of five [] Three days out of five [] All Five days []

Academic Performance

a. How will you rate your Mathematical abilities when you were at the primary school?

Excellent [] Very Good [] Good [] Average [] Poor []

b. Were you able to read fluently before going to JHS? Yes [] No []



- c. I write simple essays with... no assistance [] little assistance [] assistance []

Class size, Teaching and Learning and access to Teaching Learning Resources

- a. How many pupils are in your class at the JHS? 35 [] 40 [] 45 [] 50above []
- b. Do you work in groups Yes [] sometimes [] No []
- c. Did have your own English and Mathematics textbooks at primary six? Yes [] No []
- d. Do you have textbooks in English Language and Mathematics? Yes [] No []
- e. How often are you given class exercise and home work by your JHS teachers?
- Everyday [] Every week [] Every month [] Rarely given []
- f. Do you have your own textbooks in all the four core subjects? That's English,
Mathematics, Integrated Science and Social Studies? Yes [] No []

Parental Support

- a. Do you get extra tuition after school in the JHS three? Yes [] No []
- b. Who is taking care of your schooling at the JHS? Both parents [] Mother
only [] father only [] Guardian [] others [] please specify.....
- c. How will you describe the care offered you by your parent/guardian at the JHS?
- Excellent [] Very good [] Good [] Average []

What are some of the extra activities your parent/guardian engage you in after
school in JHS?

What is your major challenge of learning at the JHS?

Who is responsible for the poor performance of your school in the BECE?

My school head [] My Teachers [] My Parents/guardian [] myself []

I am very appreciative of your Support



QUESTIONNAIRE

B: Questionnaire for Core Subjects' Teachers

This questionnaire is intended to seek your views with respect to the BECE outcomes in the Tamale Metropolis. The views shared are only to support academic research and your confidentiality is completely guaranteed.

A. Socio-demographic data

Tick the following boxes and fill in where applicable.

- A. Age: [] Sex: Male [] / Female []
- B. Name of your school:
Category of your JHS: Public [] / Private []
- C. Marital status: single [] married [] divorced [] separated []
- D. Level of Education: WASSE/SSSE/GCE O'level [] Teacher Cert 'A' []
Diploma/HND [] First Degree [] Postgraduate []
- E. Religious affiliation: Christian [] Moslem [] Traditional [] Other [] please specify-
.....

Please answer the following questions as accurately as possible:

1. Are you a trained or untrained teacher? Trained [] / Untrained [].
2. How many years have you been teaching? []
3. What subject(s) have you been teaching in the school? -----
4. How many years have you been teaching your current subject? []
5. How many minutes are allocated to a period in your lesson? []
6. How many periods do you teach in a week? []
7. How many exercises do you give your pupils in a week? []

B. Supervision practices employed in the school.

8. The headmaster observes my lesson and provide feedback. Strongly Agree [] Agree []



Neutral [] Strongly Disagree [] Disagree []

9. The headmaster inspects and vets my lesson notes and scheme of work. Strongly Agree []

Agree [] Neutral [] Strongly Disagree [] Disagree []

10. The supervisory role of the head of this school is very satisfactory.....

I strongly agree [] I agree [] I disagree [] I strongly disagree []

11. Which of these positions best describe your head teacher?

Very approachable [] Approachable [] Unapproachable [] Very unapproachable []

12. Use the table below to appraise your head teacher's administrative practices in terms of the indicators in the table. Choose the most appropriate by ticking as many as possible:

- My headteacher provides teaching and learning materials for learning on time []
- Regularly visits classroom during the period of teaching and learning []
- Frequently checks pupils note and exercise books []
- checks teachers weekly lesson notes regularly []
- Gives prompt feedback after supervision []

15 Most of my students' parents approached the school to ascertain how their wards are faring in class. Strongly agree [] Agree [] Disagree [] Strongly disagree []

16. How will you describe the School Management Committee (SMC) of your school?

Very active [] Active [] Inactive [] Very inactive []

17. Your school is enjoying cordial relationship with the school community

18. I strongly agree [] I agree [] I disagree [] I strongly disagree [] Neutral []

C. Motivation and its contribution to academic performance

19. I have all the teaching and learning materials for my subject. Strongly agree [] Agree []

Disagree [] Strongly disagree []

20. There is a full cooperation between parents and the teachers in running the school.



Strongly agree [] Agree [] I disagree [] Strongly disagree []

21. How much is your monthly salary? Choose among the following categories:

22. Less than GH¢ 300 [] GH¢300-400 [] GH¢ 500-600 [] GH¢700-800 [] GH¢900-1000 [] GH¢1000 above []

23. Are you satisfied with your current level of earning? Yes [] No [], if 'no'

why?.....

.....

24. Do you get extra income apart from your monthly salary? Yes [] / No []

25. What in your opinion should government/parents do, apart from increase in salary, to help you put up your best in the classroom?

.....

26. Which of the following is your main reason for teaching? For salary [] Pupils

welfare [] For respect [] Enjoys teaching [] Other

27. If you were to be given a chance to choose another profession, would you choose teaching? Yes [] / No []. If 'no' why?

D. Teaching Methodologies employed in the school and Students Performance

28. What instructional methods do you use?.....

.....

29. I use play-based and other interactive approaches in my delivery. Strongly Agree []

Agree [] Neutral [] Strongly Disagree [] Disagree []

30. The learners are provided the opportunity to ask question. Strongly Agree [] Agree []

Neutral [] Strongly Disagree [] Disagree []

E. General Performance of the learners

31. Are you satisfied with the current level of pupils' performance in your subject?



Yes []

No []

32. If answer to question 10 above is ‘no’, what in your opinion accounts for the low academic performance of pupils in your subject?

.....

.....

33. In your opinion, who should be blamed for the low performance of pupils in BECE in your school, whom will you blame first and why?

.....

.....

34. What measures are you taking to reverse the poor performance if in the subsequent Basic Education Certificate Examination in your subject?

.....

.....

.....

35. What are some of the challenges you are facing as a teacher in both your professional life and as an individual?

.....

.....

.....

I am very appreciative of your Support



QUESTIONNAIRE

C: *Questionnaire for JHS Headteachers*

This schedule is design to implore your views with respect to the BECE outcomes in the Tamale Metropolis. The views shared are only to support academic research and your confidentiality is completely guaranteed.

Socio demographic data

Tick the following boxes and fill in where applicable.

Age: [] Sex: Male [] / Female []

Marital status:

Married [] Single [] Divorced [] Separated []

Name of your JHS:

Category of your JHS: Public [] / Private []

Level of Education:

WASSE/SSSE [] Teacher Cert 'A' [] Diploma/HND []

First Degree [] Postgraduate [] others []

Religious affiliation:

Christian [] Moslem [] Traditional [] Other [] please specify.....

Please answer the following questions as accurately as possible:

1. How long have you been in the teaching profession? []
2. Are you a trained or untrained teacher? Trained [] / Untrained []
3. How many years have you been the head of your current school? []
4. Were you given special training before assuming your headship role?

Yes [] /No []



5. What in your opinion constitutes quality education?

.....

.....

6. What precise leadership styles are you applying to ensure that quality education is achieved in your school?

7. Do you give your staff any extra motivation apart from their monthly salary?

Yes [] / No []

8. If your answer to question above is 'Yes', what kind of motivation do you give your teachers?

9. Indicate the number of teachers in your school in the following categories, Number of staff [] Trained teachers [] Untrained teachers [] Male teachers []

Female teachers []

10. Are you satisfied with the current level of educational facilities in your school?

Yes [] / No []

11. List the facilities you want in your school that are currently not available to enhance teaching and learning activities:.....

.....

12. My teachers are very competent in teaching their subjects.....

I strongly agree [] I agree [] I disagree [] I strongly disagree [] Neutral []

13. The major problem I have with my teachers is

Absenteeism [] Lateness [] Closing before time [] Lazy to teach [] other [] please

specify

14. Parents are supporting me a lot in running the school smoothly

I strongly agree [] I agree [] I disagree [] I strongly disagree []

15. What was the pass rates of students in your school over the past three years at the



BECE: 2020 [] 2021 [] 2022[]

16. Are you satisfied with the current level of your school's performance in the BECE?

Yes [] / No []

17. If your answer to question above is '**no**', what in your opinion accounts for the low level of academic performance at the BECE?

.....
.....

18. What challenges are you facing in running your school?

.....
.....

19. What leadership styles do you practice to enhance students' academic performance in your school?.....

20. What were the fees charged for the past three years in your school? applicable to only private schools

2020 GH¢ [] 2021 GH¢ [] 2022GH¢ []

21. Indicate the following records in your school over the past three years:

Attendance rate of pupils: 2020[] 2021[] 2022[]

Attendance rate of teachers: 2020[] 2021[] 2022[]

Enrolment rate: 2020[] 2021[] 2022[]

Dropout rate: 2020[] 2021[] 2022[]

Number of pupils in your school [] Male [] Female []

Stock of English textbooks [] Mathematics [] Social Studies [] Integrated Science []

22. How frequent do you supervise teachers' activities in class per week?

.....



23. How many times have you attended capacity building workshop as a head teacher in the last three years?

24. What are some of the shortcomings you have experienced as the head of the school over the years?.....

.....

25. What are your recommendations in solving the high rate of failures in the BECE conducted annually in the Tamale Metropolis?

.....

.....

.....

I am very appreciative of your Support



MAP OF TAMALE METROPOLIS

