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**UNIVERSITY OF GHANA
COLLEGE OF HUMANITIES**

**A COMPARATIVE STUDY OF PUBLIC AND PRIVATE SCHOOL ACADEMIC
PERFORMANCE IN BASIC EDUCATION CERTIFICATE EXAMINATION AT
NSAWAM-ADOAGYIRI MUNICIPAL ASSEMBLY**

BY

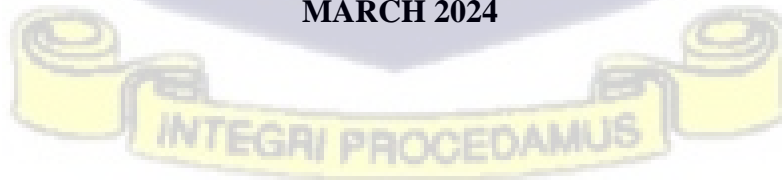
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**THIS DISSERTATION IS SUBMITTED TO THE UNIVERSITY OF GHANA, LEGON
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IN DEVELOPMENT STUDIES DEGREE.**

INSTITUTE OF STATISTICAL, SOCIAL AND ECONOMIC RESEARCH (ISSER)

MARCH 2024



DECLARATION

I, **LILA ADOM YAMUAH**, hereby declare that this Thesis is the result of my own investigation, apart from references to other people's work which have been duly acknowledged. I also confirm that this Thesis is original and has never been presented either in whole or in part for an award of any academic degree in this institution or any other university.



... ..

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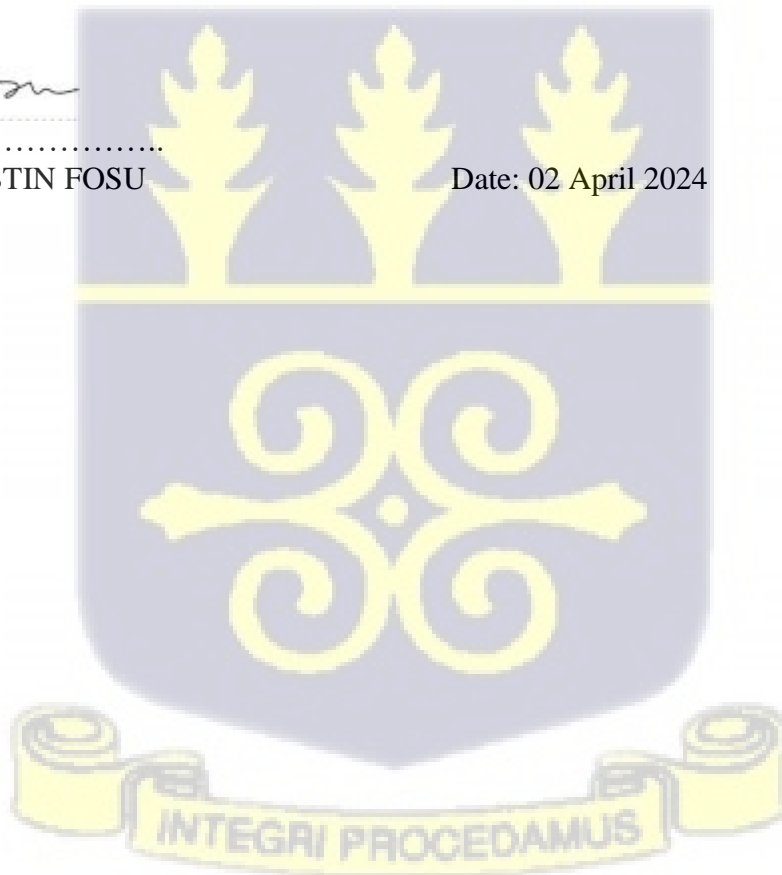
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PROF. AUGUSTIN FOSU
(Supervisor)

Date: 02 April 2024



DEDICATION

This thesis is dedicated to all people who didn't give up on me to finish my Masters Program. Especially to my lovely mother, brothers, and grandfather, who did their best to help me finish. A great achievement after being delayed for two years.



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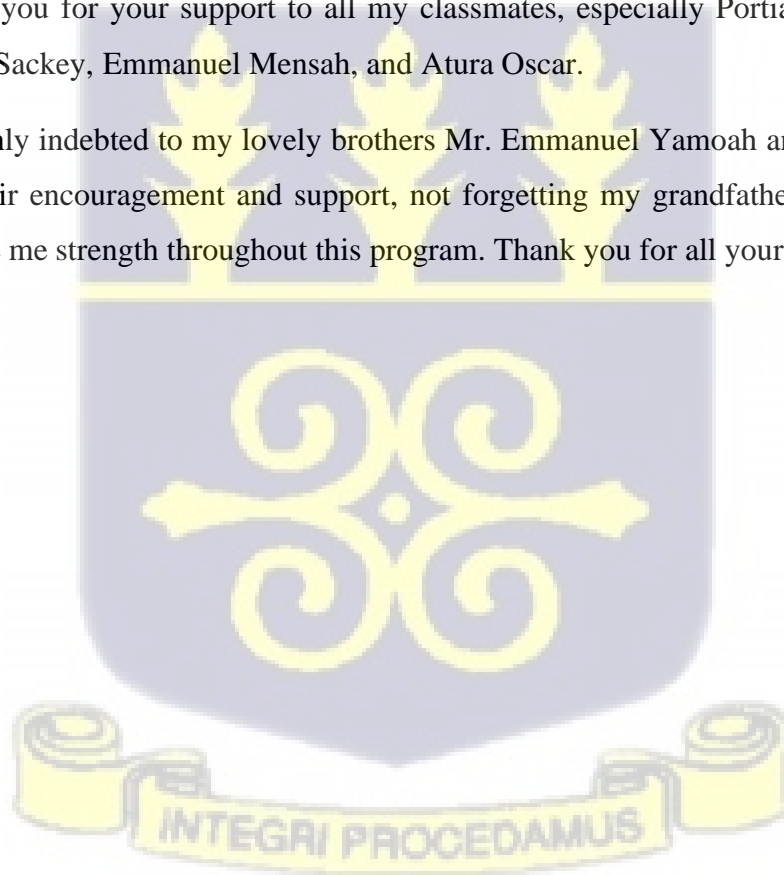


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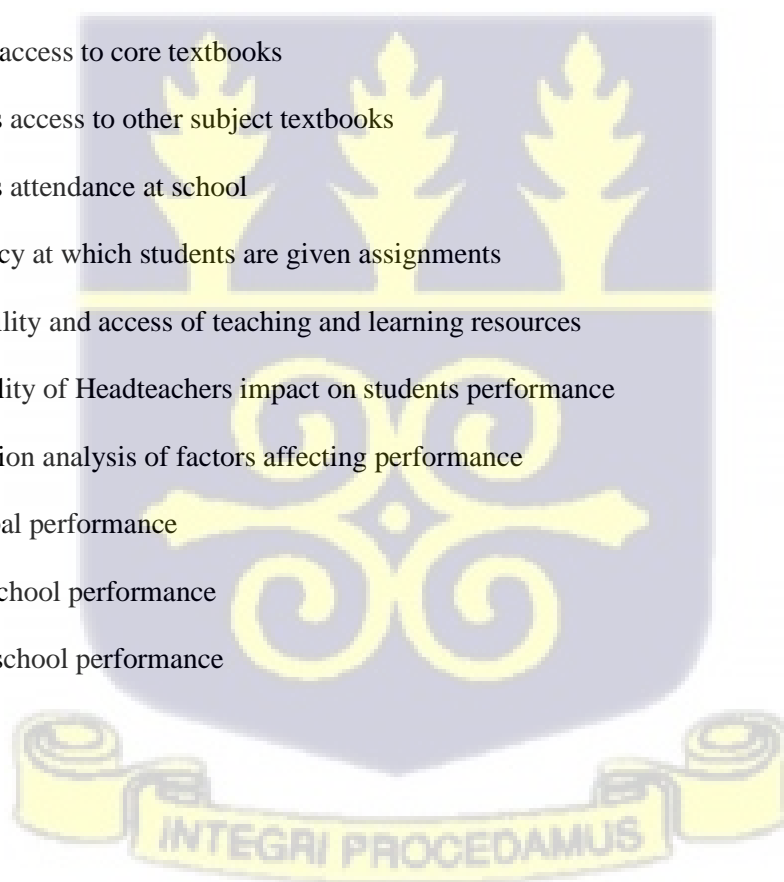
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GLOSSARY

LIST OF ABBREVIATIONS	
ADPE	Accelerated Development Plan on Education
BECE	Basic Education Certificate Examination
CA	Continuous Assessment
CBE	Complementary Basic Education
CSSPS	Computerised School Selection Placement System
DFID	Department for International Development
DLT	District League Table
EFA	Education for All
EMIS	Educational Management Information Systems
ESMTDP	Education Strategic Medium Term Development Plan
FCUBE	Free Compulsory Universal Basic Education
GDP	Gross Domestic Product
GEQAF	General Education Quality Analysis Framework
GES	Ghana Education Service
GESI	Gender Equality and Social Inclusion
GETFund	Ghana Education Trust Fund
IQ	Intelligent Quotient
ISSER	Institute of Statistical, Social and Economic Research
JHS	Junior High Schools
JSS	Junior Secondary School
JSSCE	Junior Secondary School Certificate Examinations
MDGs	Millennium Development Goals
MMDA	Metropolitan Municipal and District Assemblies
MoESS	Ministry of Education Science and Sports
NCEE	National Center on Education and Economy
NCES	National Center for Education Statistics

NDPC	National Development Planning Commission
NEAT	National Education Assessment Test
NERP	New Educational Reform Programme
NGO	Non-Governmental Organisation
NSCE	New Structure and Content of Education
OECD	Organisation for Economic Co-operation and Development
PISA	Programme for International Student Assessment
PMT	Performance Monitoring Test
PTR	Pupil-Teacher Ratio
SBA	School-Based Assessment
SES	Socio-Economic Status
SEL	Socio-Emotional Learning
SHS	Senior High School
SPAM	School Performance Appraisal Meeting
SPSS	Statistical Package for Social Sciences
SSS	Senior Secondary School
TIMSS	Trends in International Mathematics and Science Study
TLRs	Teaching and learning resources
TRMs	Teaching Resources and Materials
UBE	Universal Basic Education
UNICEF	United Nations Children Fund
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
U.S.A	United States of America
WAEC	West African Examination Council
WASSCE	West Africa Senior Secondary Certificate Examination

ABSTRACT

Educational policies in Ghana have consistently emphasized the pursuit of quality in primary education. Despite these noble intentions and various educational reforms, achieving the desired level of quality remains an elusive goal. This study seeks to uncover the factors contributing to the significantly better academic performance of primary private schools compared to their public counterparts.

A quantitative-method research design was employed, utilizing questionnaires and interview guides for data collection. The sample selection process combined convenience and purposive sampling, resulting in a total of 739 respondents. The study comprised 58 Head-teachers, 175 teachers from both public and private schools, and 232 students. Statistical analyses such as frequencies, percentages, independent sample t-tests, and one-way ANOVA were conducted to assess the data.

The findings of the study underscore the disparities between public and private schools. Private schools were found to have superior resources in terms of infrastructure, a more favourable teacher-student ratio, and greater access to Teaching and Learning Resources (TLRs). Their smaller class sizes facilitated regular class tests and exercises. Additionally, private schools exhibited a high level of parental involvement, particularly among families with higher socioeconomic status. Conversely, public schools boasted a higher percentage of professionally qualified teachers compared to private institutions. Notably, teachers in both sectors resorted to improvisation due to resource constraints.

This study concludes that these identified factors significantly contribute to the observed variation in academic performance between public and private schools in the Nsawam Municipality. Analysis of the data confirmed that certain variables have a statistical influence on school performance, thereby elucidating the superior performance of private schools. The hypotheses underpinning this study, though not explicitly delineated, involve various independent and dependent variables. Regression analysis, one of the employed methods, further reinforced these findings.

In summary, the investigation indicates that factors such as resource endowment, class sizes, parental involvement, and teacher qualifications are crucial determinants of the variance in academic outcomes between public and private primary schools. These findings shed light on the higher mean performance of private schools and their effective strategies for delivering quality education.



CHAPTER ONE

1.0 INTRODUCTION

The research focuses on investigating the variations in academic performance between public and private junior high schools in the Nsawam Municipality. It seeks to shed light on the factors that contribute to the differences in educational outcomes within these two types of schools. To comprehensively understand these disparities, the study considers various socio-demographic characteristics of the respondents.

The socio-demographic characteristics of the respondents play a significant role in shaping the educational landscape. Gender distribution, age groups, educational levels, teaching experience, and years of headship (for headteachers) are all influential factors that can affect teaching practices, student engagement, and overall academic achievements. This introduction aims to provide an overview of these socio-demographic characteristics within the context of the research, setting the stage for a detailed analysis.

Understanding the socio-demographic profiles of teachers, students, and head teachers is essential for interpreting the subsequent findings regarding academic performance differences. The diverse backgrounds and experiences of these individuals can offer insights into the underlying dynamics that contribute to disparities in academic outcomes between public and private junior high schools. By delving into these characteristics, the research aims to provide a comprehensive framework for interpreting the broader implications of the study's findings.

1.1 Background of the study

The significance of education is apparent everywhere in the world (MoESS, 2008). For every child, “access to quality primary education is a fundamental human right”. This fundamental right equips the child with the readiness to access education, promoting social integration and enabling economic freedom (Iddi, 2016). A profound statement by Nelson Mandela and it clarifies the role and

influence of education as a potential weapon for world change (UNESCO 2020).

Education is a form of learning in which a group of people's knowledge, skills, and habits are transferred from one generation to the next through teaching, training, or research. A report published by the Basic Education Coalition (2013), recommends that governments of emerging economies should not view education as a luxury that can be dealt with once the rest of the government is in order. The report further relies on evidence to suggest that quality education is a precursor to all factors necessary for the attainment of the Sustainable Development Goals, which in sum, signals national development. It is worth noting that, education promotes tolerance and appreciation of varying government policies and development agendas as well as provide the individual, the requisite skills that impacts across generations.

Public educational institutions are prevalent in many sub-Saharan African nations, but their estimated capacity is insufficient to accommodate the region's expanding student population. More and more people are pointing out that public finances are insufficient to support the region's growing enrolment of students and the necessary educational infrastructure. (Kitaev, 1999). In recent decades, the world has noticed innovative systems of global collaboration starting around the pledge for Education for All (EFA) initiatives, in defiance of the point that this action is an intentional movement to reform the world's education inadequacies. Other parties have proposed, however, a regional and national methodology to handle educational challenges, principally in Africa (Strutt and Kepe, 2010).

Quality education is essential for human development and sustainable progress, serving as a catalyst for social, economic, and environmental advancement (UNESCO, 2021). Sustainable Development Goal 4 (SDG 4) underscores the importance of inclusive and equitable education, aiming to provide all learners with the knowledge, skills, and competencies needed to thrive in today's rapidly changing world (UN, 2015). While significant progress has been made towards expanding access to education globally, disparities in educational outcomes persist, particularly between public and private schools (World Bank, 2018). Understanding the factors influencing academic performance

in different educational settings is crucial for informing policy decisions and promoting educational equity.

This study employs a comparative research design to analyse the academic performance of students in public and private schools in the Nsawam-Adoagyiri Municipal Assembly. BECE results from the past 10 years will be collected and analysed to assess differences in pass rates, subject scores, and overall performance between public and private school students. Preliminary findings indicate significant variations in academic performance between public and private schools in the Nsawam-Adoagyiri Municipal Assembly. Private schools tend to outperform their public counterparts in BECE results, with higher pass rates and average scores across subjects. Factors contributing to this disparity include differences in resources, teaching methodologies, teacher qualifications, parental involvement, and school management practices. Public schools face challenges such as overcrowded classrooms, limited resources, and teacher absenteeism, which impact student learning outcomes.

The findings of this study have important implications for advancing SDG 4 objectives on inclusive and equitable quality education. By identifying factors influencing academic performance disparities between public and private schools, policymakers can develop targeted interventions to improve educational outcomes for all students. Investments in teacher training, infrastructure development, curriculum reform, and parental engagement are essential for enhancing the quality and equity of education in the Nsawam-Adoagyiri Municipal Assembly and beyond.

Enrolment rates of students in Ghana over the last two decades have steadily been projected as achievements for all governments. The surge in enrolment can be attributed to development initiatives in Ghana, such as the School Feeding Program, the Capitation Grant, and the Ghana Education Trust Fund (GETFund), which were introduced by governments as a means of meeting some specific goals in the educational sector. However, as enrolment numbers increased, there was a decline in the quality of lesson delivery and the lack of conducive learning environments, and the quality of teacher-student interaction (Ministry of Finance, 1984; Iddi, 2016; Kadingdi, 2006)

prevented the attainment of some of the successes that were initially envisaged. The measure of how much and how effectively children learn, as well as the degree to which their abilities manifest in test scores or the job market, are two concepts used to characterise the quality of education (Ampiah, 2010; Iddi, 2016). Providing a child with the opportunity to enrol in school holds little significance if the education they receive is of substandard quality, resulting in inadequate development of essential skills in literacy, numeracy, and life skills (Iddi, 2016).

Parents' decisions regarding the choice of school for their children might be influenced by perceived school efficiency or performance, often gauged by the proportion of students who achieve success in standardised tests. Furthermore, there exists substantial evidence from developing countries that private schools generally outperform their public-school counterparts in external examinations (Akaguri, 2011; Iddi, 2016). Presently, the public education sector faces various shortcomings such as insufficient infrastructure, inadequate teaching and learning resources, teacher absenteeism, a decrease in student discipline, disengaged parental involvement, and consequently, unsatisfactory performance on standardised assessments. As a result, parents often opt for private primary schools instead of public ones for their children due to reasons such as superior examination outcomes and access to advanced educational levels (Rolleston & Adefeso-Olateju, 2012, p. 6; Iddi, 2016).

According to Ankomah and Hope (2011), Ghana has observed a fixed pattern of academic performance between students in public and private primary schools. Over the years, the educational assessment landscape in Ghana, particularly the examinations administered by the West African Examination Council (WAEC) and the Performance Monitoring Test (PMT) conducted by the Ghana Education Service, has consistently demonstrated a trend favouring private educational institutions in the realm of basic education. These assessments indicate that private schools consistently exhibit superior performance compared to public schools (Oduro, 2000).

This observation aligns with the findings of Iddi (2016), who noted that the quality of education and academic outcomes in Ghana's educational system have prompted a preference for private institutions over their public counterparts. This preference is often driven by perceived better

performance and academic achievements within the private education sector. These trends are reflected not only in national examinations like those conducted by WAEC and PMT but also in other scholarly investigations and reports.

Private schools' overall performance in these assessments could be attributed to several factors. Research by Ampiah (2010) highlights that private schools in Ghana often have more focused teaching strategies, smaller class sizes, better learning resources, and enhanced teacher commitment compared to public schools. These elements contribute to an environment that is conducive to effective teaching and learning, ultimately leading to improved academic outcomes.

Furthermore, Akaguri's (2011) work on education in developing countries provides additional support to this trend. The study underscores the common finding that private schools generally exhibit higher academic performance than public schools on external examinations. This could be attributed to factors like greater accountability, more efficient management, and potentially higher teacher dedication in the private education sector.

In essence, the performance differential between private and public schools in Ghana, as evidenced by WAEC, PMT, and supported by the research of scholars such as Iddi (2016), Ampiah (2010), and Akaguri (2011), underscores the impact of various educational parameters on students' academic achievements. These observations emphasise the need for continuous efforts to improve the quality of education, particularly in the public sector, to ensure equitable access to high-quality education for all students.

The study seeks to understand the quality of education, instruction between the public and private schools using the BECE pass rate to assess performance. The Basic Education Certificate Examination (BECE) pass rate is a critical gauge, representing the proportion of students who successfully complete the BECE examination. This metric stands as a vital yardstick for evaluating the academic outcomes of students in both public and private schools. The BECE holds significant importance as the principal qualifying examination for gaining admission into secondary and vocational institutions in countries like Ghana and Nigeria. Administered by the Ghana Education Service under the Ministry of Education, the BECE serves as the culminating evaluation at the end

of the basic education level (JHS 3) to determine a student's eligibility for progression to technical, vocational, or tertiary institutions. The examination is annually undertaken in June by eligible candidates in the third year of junior high schools approved by the Ghana Education Service. This extensive examination is managed by the West African Examinations Council (WAEC), encompassing eighteen subjects. A student must pass at least six subjects, including English and Mathematics, out of a maximum of ten to be considered successful (Ebow & Anokye, 2014).

In this examination, all candidates are tested in four core subjects: Mathematics, English Language, Integrated Science, and Social Studies. Additionally, they are examined in four to five elective subjects. The Computerised School Selection Placement System (CSSPS) utilizes a minimum of six subjects to allocate candidates to various second-cycle institutions, considering their performance. This system is designed to ensure a fair and objective placement process based on academic achievement (Ebow & Anokye, 2014). Conducting a comparative analysis of the BECE pass rates between public and private schools would offer valuable insights into performance disparities. Such an examination can help identify contributing factors to varying academic achievements and provide a deeper understanding of the overall educational landscape in relation to the BECE outcomes.

1.2 Ghana's Educational Reforms

Ghana's educational reform journey began shortly after gaining independence under the leadership of Dr. Kwame Nkrumah. The Accelerated Development Plan on Education (ADPE) initiated in 1951 marked the first major milestone in this journey. This plan laid the groundwork for subsequent educational policies and programs, emphasizing the alignment of education with national development goals (Agyeman et al., 2000).

Over the decades, Ghana has implemented several educational reform programs, each aimed at addressing specific challenges and advancing the quality of education. These programs include the ADPE (1951-1973), the New Structure and Content of Education (NSCE) (1974-1986), the New Educational Reform Programme (NERP) (1987-1994), the Free Compulsory Universal Basic

Education (FCUBE) Policy (1995-2006), and the Educational Reform Programme (ERP) (2007-2010) (Nudzor, 2012).

1.2.1 Accelerated Development Plan on Education (ADPE) 1951-1973

The Accelerated Development Plan on Education, initiated in 1951, marked a significant milestone in the country's educational history. Dr. Kwame Nkrumah led the government to implement this plan aimed to align education with development policies and programs (Agyeman et al., 2000). A pivotal step taken under the Accelerated Development Plan was the enactment of the Education Act of 1961 (Act 87), which introduced important reforms. One of the key provisions was the establishment of free and compulsory basic education as noted by Akyeampong et al. (2007) and Kadingdi (2006).

In addition, private schools were permitted to complement public institutions, contributing to increased educational opportunities (Akyeampong et al., 2007) and penalties were introduced for parents who did not enrol their children in school, highlighting the government's commitment to ensuring widespread education. This move sought to address issues of access and equity in education.

1.2.2 The New Structure and Content of Education (NSCE) 1974-1986

In the early 1970s, Ghana's education system faced several criticisms, including issues like underprepared students, inadequate teacher quality, inappropriate curriculum, and high unemployment rates among middle school graduates (Djangmah, 2011). To address these concerns, the Dzobo education committee in 1973, during Acheampong's military government, introduced the New Structure and Content of Education (NSCE) as a reform measure (Dzobo, 1974). The NSCE was part of a broader Five-Year Development Plan from 1975/76 to 1979/80 and aimed to rectify the shortcomings of the existing educational system (Akyeampong et al., 2007). This reform is considered a significant post-independence initiative in pre-tertiary education in Ghana (Agyeman et al., 2000). The NSCE reform involved changing the structure of education by replacing the four-

year middle school with a three-year Junior Secondary School (JSS) system (Akyeampong et al., 2007).

Before the comprehensive reforms in 1987, Ghana's education system faced challenges such as poor management, limited access for disadvantaged families, and declining enrolments (Kate, James & Dzigbodi, 2003). However, the full implementation of the NSCE was hindered by economic and political instability that affected the country during the late 1970s and 1980s (Oduro, 2000).

1.2.3 The New Educational Reform Programme (NERP) of 1987-1994

During the period between 1970 and 1983, Ghana experienced a series of adverse economic conditions that had significant repercussions on its education system. This economic turmoil resulted in a decline in GDP per capita, industrial, and agricultural output, and a drastic reduction in government funding for education (Tabatabai, 1986; Akyeampong & Furlong, 2000). The New Educational Reform Programme (NERP) of 1987-1994 marked a pivotal moment in Ghana's education system, aiming to address significant challenges and improve access to quality education for all. This paper examines the impact of the NERP within the context of Sustainable Development Goal 4 (SDG 4) on quality education and explores its implications for Ghana's educational landscape.

NERP Implementation and Objectives was initiated in response to a myriad of challenges facing Ghana's education system, including insufficient financing, teacher shortages, inadequate infrastructure, and a deficient curriculum. By abolishing the middle school system and introducing a nine-year schooling structure comprising six years of primary education and three years of junior secondary education, the reform sought to enhance access to basic education for a larger segment of the population. The dire state of the public education system was a driving force behind the educational reforms of 1987. The reasons for the near collapse of the system were attributed to insufficient financing, lack of qualified teachers, low motivation among teachers, inadequate learning materials, dilapidated school infrastructure, and an inferior curriculum (Akyeampong & Furlong, 2000; Kadingdi, 2006).

1.2.4 The “Free Compulsory Universal Basic Education” (FCUBE) Policy 1995 -2006

The introduction of the Free Compulsory Universal Basic Education (FCUBE) policy in September 1995 marked a significant step towards enhancing access to quality basic education in Ghana. The primary objective of this policy was to ensure that all children between the ages of five and thirteen had access to free, compulsory, and universal primary education for a duration of ten years, spanning from 1996 to 2005 (Nudzor, 2012).

The implementation of the FCUBE policy brought about important developments that facilitated increased access to formal basic education, particularly for children from less privileged communities (Nudzor, 2012). This policy aimed to address concerns about the quality of basic education delivery, and it received support from international agencies such as the United Nations Development Program (UNDP) and the UK Department for International Development (DFID) (Kadingdi, 2006).

To support the FCUBE initiative, additional resources were allocated at the basic education level, focusing on addressing quality and administrative challenges. However, these efforts led to only minor improvements in quality, falling short of the substantial changes needed to significantly impact educational outcomes at the post-basic level (Akyeampong, 2001).

Despite its positive intentions, the FCUBE policy encountered several major constraints and challenges during its implementation. These challenges included the inability to provide adequate logistical support, insufficient community cooperation and participation in educational matters, low retention rates of girls in schools, parents' inability to meet the school needs of their children due to poverty, a shortage of trained teachers, and insufficient financial support from District Assemblies (Kadingdi, 2006).

1.2.5 The Educational Reform Programme (ERP) of 2007-2010

The government of Ghana took significant steps to reinforce the implementation of the Free Compulsory Universal Basic Education (FCUBE) policy in 2002 through the introduction of major policy initiatives. These initiatives included the implementation of the "capitation grant" and the

"school feeding program," among other programs aimed at achieving the objectives of the basic education sub-sector (Nudzor, 2012).

In 2007, another round of educational reform was introduced, which extended the duration of basic education to eleven years. This structure comprised two years of kindergarten, six years of primary education, and three years of junior secondary education, now termed Junior High School (JHS). The secondary education structure also underwent changes, with Senior Secondary School (SSS) being renamed Senior High School (SHS) and its duration extended to four years. This reform aimed to enhance access to early childhood education, which is crucial for the cognitive development of children, and to strengthen the capitation grant policy to promote enrolment and retention in schools (Nudzor, 2012).

Subsequent changes in government led to further reviews, and in 2010, the secondary education duration was reverted to three years, while other educational programs remained unaffected. These reforms collectively aimed at improving access and quality in the Ghanaian education system, particularly at the basic and secondary levels.

Although Ghana's educational policies and strategies, as implemented by the Ministry of Education, have successfully increased access and reduced barriers to education for Ghanaian children, there are challenges in consistently improving the quality of education at both the basic and secondary levels (Ampiah, 2008). This implies that while efforts have been made to enhance educational opportunities, there remains a need for more focused interventions to ensure the delivery of quality education.

1.2.6 National Education Assessment Test (NEAT)

The National Education Assessment Test (NEAT) is a pivotal tool in the educational landscape of Ghana, designed to provide a standardized evaluation of students' knowledge and skills across various subject areas. By subjecting both public and private school students to this assessment, researchers can obtain an unbiased gauge of their academic prowess. These results offer a

foundation for the comparison of academic performance levels between these two distinct school categories, thereby unearthing any potential disparities that might exist.

The NEAT stands as a nationally recognized standardized examination in Ghana, strategically aimed at measuring learning outcomes in crucial subjects like English and Mathematics, spanning both the lower and upper primary levels.

The analysis of NEAT scores enables educators and policymakers to identify specific areas of strength and weakness in students' learning outcomes (Amu, 2018). NEAT serves as a valuable tool for monitoring trends in educational performance over time (Kwofie et al., 2019). By tracking changes in pass rates and proficiency levels, policymakers can assess the effectiveness of educational policies and interventions and make informed decisions to enhance teaching and learning practices. The analysis of NEAT scores often reveals disparities in academic performance between public and private schools (Akyeampong et al., 2007). Research indicates that private schools tend to outperform their public counterparts in standardized assessments, highlighting potential disparities in resource allocation, teaching quality, and learning environments.

The National Education Assessment Test (NEAT) serves as a crucial instrument for evaluating students' academic proficiency and learning outcomes in Ghana, particularly in core subjects such as English and Mathematics. NEAT offers a standardized means of assessing students' knowledge and skills, allowing for objective comparisons across different schools and regions (Ankoma-Sey et al., 2017). This standardized approach ensures fairness and reliability in the assessment process, enabling researchers and policymakers to draw valid conclusions about educational performance.

These educational reform programs have had varying impacts on the quality of education and academic performance in Ghana. While some initiatives focused on expanding access to education, others aimed to enhance the curriculum, teacher training, and infrastructure. Overall, these reforms have contributed to increased enrolment rates, improved infrastructure, and enhanced educational opportunities for Ghanaian children.

Despite the progress made, challenges persist in Ghana's education sector, including disparities in

resource allocation, teacher quality, and learning outcomes between urban and rural areas. Additionally, the COVID-19 pandemic highlighted the digital divide and its impact on remote learning, further underscoring the need for continued reforms and investments in the education sector.

Ghana's educational reform programs from 1957 to 2020 have been pivotal in shaping the country's education system and improving access to quality education. While significant strides have been made, challenges remain in ensuring equitable access to education and enhancing academic performance. Moving forward, sustained efforts and investments are needed to address these challenges and build a more inclusive and equitable education system in Ghana.

1.3 Problem Statement

The academic performance of students in the Basic Education Certificate Examination (BECE) has drawn considerable attention to the Ghanaian educational system (Oduro, 2000) which plays a crucial role in evaluating students' academic ability and guiding their educational advancement (Hugo, 2012). However, concerns have been raised about the declining performance of students in the BECE, particularly in public schools, compared to their private school counterparts (Okyere-Darko, 2011). Despite efforts to improve public school performance, the disparity between public and private schools in terms of academic achievement persists (Ankomah & Hope, 2011). The reasons for this difference in academic performance have been attributed to various factors, such as teacher quality, parental involvement, and school resources (Davis-Kean, 2005; Khan, Iqbal, & Tasneem, 2015).

This research topic is motivated by the significance of quality education and its impact on students' prospects. Studies have shown that the type of school, whether public or private, can influence students' academic outcomes (Appiah, 2010). Certainly, understanding the variations in academic performance between public and private schools in a specific context holds significant implications for educational policy and practice. Drawing from relevant literature, including Iddi (2016), further

supports the argument.

The variations in academic performance between public and private schools have been a subject of interest in educational research. Iddi (2016) conducted a comparative study on the quality and access to basic education in Ghana, focusing on public and private schools. The study highlighted how differences in factors such as teacher qualifications, resources, and school management contribute to variations in academic performance. This finding underscores the importance of understanding these differences to improve education standards.

Research by Ampiah (2010) also contributes to the discussion by looking at the dichotomy between private and public education in Ghana. The study emphasised the need for a nuanced understanding of factors influencing school performance, including teaching methodologies and resources. These factors are vital for policymakers seeking to address performance disparities.

Furthermore, Akaguri (2011) examined the performance of private and public schools in the context of WASSCE (West African Senior School Certificate Examination) in Ghana. The study found out that private schools generally performed better in these external examinations. This aligns with the argument that understanding academic performance variations can guide policymakers in implementing targeted interventions to bridge performance gaps.

The significance of academic performance in both public and private schools is highlighted by UNESCO (2015) And it laid emphasis on education as a crucial factor in societal development and individual opportunities. Analysing performance disparities can lead to informed decision-making, allowing policymakers to allocate resources effectively and implement reforms tailored to the specific needs of each school sector.

Bringing these perspectives together, the variations in academic performance between public and private schools hold implications beyond mere competition. The insights gained from understanding these differences can inform the development of comprehensive strategies that address teacher training strategies, resource allocation, and curriculum development, aiming to improve overall education standards. By considering these aspects, policymakers can work toward

enhancing education quality and equity for all students.

Additionally, this research aligns with the broader goals of educational development and equity, as it sheds light on potential disparities in academic achievements among students attending public and private schools in the area (UNESCO, 2007). Research, globally, has consistently shown that private school students tend to outperform their public-school peers in various educational systems. In the United Kingdom (UK), private school students consistently perform better in Advance-level exams and are more likely to attend top universities and earn higher salaries later in life (The Guardian, 2020).

Similarly, in the United States of America (U.S.A.) private school students consistently outperform public school students in national exams such as the National Assessment of Educational Progress and the Programme for International Student Assessment (Braun et al., 2006). Studies in Ghana and Nigeria have also found that private schools tend to have higher average scores in various subjects because these schools have better infrastructure, more qualified teachers, and more rigorous academic programs than public schools (Addei & Opoku-Amankwa, 2020; Asante & Oduro, 2018; Uwaifo & Edigin, 2018).

Another study by Bonney et al., 2015 titled "The relationship between the quality of teachers and pupils' academic performance in the STMA Junior High School of Western Region of Ghana" found that private senior high schools in Ghana had higher average scores than public schools in both the 2012 and 2015 West African Senior School Certificate Examinations. The study also noted that private schools tended to have more qualified teachers, better resources, and more rigorous academic programs than public schools.

Uwaifo and Edigin (2018) found out that private secondary schools in Nigeria had higher average scores than public schools in most subjects, including mathematics, English language, and science subjects. The study also noted that private schools tended to have better infrastructure, more qualified teachers, and more effective teaching methods than public schools. The researcher is keen

to find out what accounts for the better performance of public schools in the Nsawam-Adoagyiri Municipality when the general situation in the country is the reverse (UNESCO, 2007).

Since there is a paucity of literature on public schools outperforming private schools in Ghana, the researcher sought to investigate this unique occurrence and the possible reasons for the better academic performance among public schools in the Municipality.

Disparities in academic performance between public and private schools have garnered significant attention in educational research recently. Understanding the factors that contribute to these disparities is crucial for the government to enact laws and policies to address these disparities. If this is not done, the public school system may continue to deteriorate or the private school system may not serve its purpose of taking some of the pressure off the public school system which is unable to enrol all eligible students. However, existing literature presents conflicting findings regarding the extent and nature of these disparities. This demonstrates the need for the present research to highlight disparities in academic performance and provide an avenue to address issues based on the research findings.

The first research objective of this study is to examine the disparities in academic performance between public and private schools in the Nsawam Municipality. It is imperative to investigate these disparities to identify educational inequities, inadequacies, and devise strategies to address them. By understanding the factors that contribute to differential academic outcomes, policymakers, educators, and stakeholders can implement targeted interventions to reduce disparities and promote equal educational opportunities for all students.

Despite the significance of examining disparities in academic performance, the existing literature offers conflicting findings, further underscoring the need for the present study. Some studies suggest that private schools consistently outperform public schools academically. These studies highlight factors such as smaller class sizes, better resources, and more qualified teachers in private schools as potential explanations for the observed disparities.

However, other studies present contrasting findings, suggesting that the differences in academic

performance between public and private schools are less pronounced or even negligible. These studies argue that once socio-economic factors are taken into account, the disparities diminish, indicating that the socio-economic background of students plays a crucial role in explaining academic outcomes.

These conflicting findings create a gap in knowledge and understanding, necessitating further investigation to provide a clearer picture of the disparities in academic performance between public and private schools. It is crucial to consider the specific context of the Nsawam Municipality into account for local factors that may influence the observed disparities and to generate insights that are relevant to the community.

This study therefore seeks to fill the existing research gap by conducting a comparative assessment of academic performance between public and private schools in the Nsawam Municipality. By examining the specific local context, the study aims to provide evidence-based insights and recommendations that can inform educational policies, resource allocation, and interventions aimed at reducing disparities and promoting equitable educational opportunities.

The findings of this study can contribute to the broader body of knowledge by providing a more comprehensive understanding of the factors that influence academic performance between public and private schools. Furthermore, the study will serve as a valuable resource for policymakers, educators, and stakeholders in making informed decisions regarding educational reforms and initiatives.

1.4 Concepts and Theoretical Framework of the study

The quality of Basic Education plays a crucial role in shaping the academic outcomes and future prospects of students. This study aims to assess the quality of Basic Education in the Nsawam Municipality by conducting a comparative analysis of academic performance between public and private schools. By examining the disparities and identifying factors affecting student performance, this research seeks to provide insights into the strengths and weaknesses of both categories of

schools, with the ultimate goal of improving the overall educational system.

1.3.1 Concepts

The theoretical framework of this study draws upon several key concepts and theories.

First the concept of school segregation and its impact on academic achievement gaps, as discussed by Vivian (2017). Their concept provides a theoretical lens to understand the disparities in academic performance between public and private schools. School segregation, the unequal distribution of students based on race, socio-economic status, or other factors across different schools, has been a persistent issue in education systems worldwide. Vivian (2017) shed light on the concept of school segregation and its implications for academic achievement. This study draws insights from Vivian (2017) to establish the link between school segregation and the disparities in academic performance between public and private schools.

Vivian (2017) defined school segregation as the differential sorting of students into different schools based on social, economic, or racial factors. It occurs when students from different backgrounds are concentrated in schools that vary in terms of resources, educational quality, and opportunities. Such segregation can perpetuate inequalities in academic achievement, exacerbating the disparities observed between different student groups. The concept of school segregation becomes highly relevant in the context of this research objective, which is to examine disparities in academic performance between public and private schools. Vivian (2017) findings suggest that school segregation plays a significant role in shaping the disparities in academic performance between different types of schools.

Schools with high concentrations of students from disadvantaged backgrounds, often found in public schools, may face additional challenges due to limited resources, overcrowding, and a lack of specialised programs. This negatively impacts the academic achievement of students in public schools, contributing to the observed disparities. In contrast, private schools, which are often associated with higher tuition fees and selective admissions, may have greater access to resources, smaller class sizes, and specialised programs. These advantages can lead to higher academic

performance among students attending private schools, potentially widening the disparities when compared to their counterparts in public schools.

The extent of school segregation within the Nsawam Municipality and its impact on academic achievement, provides insights into the specific factors contributing to disparities in academic performance between public and private schools, helping to identify the educational challenges faced by students in public schools, and highlight the need for targeted interventions and resource allocation to address these disparities. The concept of school segregation as discussed by Vivian (2017), highlights the unequal distribution of students across different schools and its implications for academic achievement. By drawing the link between school segregation and disparities in academic performance between public and private schools, the study would contribute to a deeper understanding of the underlying factors influencing educational outcomes in the municipality, and inform policymakers, educators, and stakeholders in developing strategies to mitigate the negative impact of school segregation to promote equitable access to quality education.

In addition, the Human Capital Theory posits that individuals' education and skills contribute significantly to their productivity and economic success (Becker, 1964). In the context of the study on public and private school academic performance, this theory suggests that differences in academic outcomes between public and private schools may be attributed to variations in the quality of education provided, teacher qualifications, and learning resources available. Private schools, which often have smaller class sizes, better infrastructure, and more qualified teachers, may foster a more conducive learning environment conducive to student success, aligning with the principles of human capital theory (Belfield et al., 2006; Hanushek & Woessmann, 2008). Human Capital Theory, proposed by economist Gary Becker, emphasizes the role of education and training in enhancing individuals' productivity and economic outcomes (Becker, 1964).

This theory suggests that investments in education, such as attending private schools, contribute to the accumulation of human capital, leading to better academic performance and long-term economic benefits (Heckman, 2000). Human Capital Theory could be used to analyse how differences in

educational resources and teaching quality between public and private schools influence students' academic performance in the Basic Education Certificate Examination (BECE).

Again, Structural-functionalism views society as a complex system with interrelated parts that function together to maintain stability and order (Parsons, 1951). Applied to the study topic, this theoretical framework suggests that both public and private schools serve specific functions within the educational system. Public schools, as government-funded institutions, aim to provide universal access to education and promote social cohesion. Private schools, on the other hand, may cater to specific socioeconomic groups and offer educational alternatives that meet the needs of diverse communities. By examining the roles and contributions of public and private schools within the educational landscape, the study can provide insights into how different institutional structures and functions influence academic performance (Durkheim, 1893; Merton, 1949).

1.4.2 Educational Productivity

The theoretical framework underpinning this study is the Theory of Educational Productivity and it identified three major factors that had direct associations with the efficiency of an educational system and its outcomes. These three interdependent issues are factors determining the academic performance of students in schools: parents (family causal factors), teachers (academic causal factors), and students (personal causal factors) (Diaz, 2005). Furthermore, the Theory of Educational Productivity postulates that personal factors can be well explained in motivational and psychological theories.

Motivation, whether intrinsic or extrinsic, directs a person's activities towards an aim or goal. Thus, a student who is well motivated to learn to achieve academic excellence in school is more likely to spend extra time and resources in learning than a less motivated student. On the other hand, self-concept is a result of the person's internalisation of his/her social image or capacity (Woolfolk, 1998). Therefore, an academic self-concept refers to the individual student constantly evaluating and judging his/her academic performance abilities in school. It serves as a base for future educational success or failure. It is believed that academic self-concept positively correlates with

academic achievement based on psychological theories (Hung & Pey-yan, 2007). In several studies, self-concept was found to reflect a student's performance better than other factors such as age and gender (Edward, 2005, cited in Diaz, 2005). In addition, studies have shown that self-concept influences academic performance indirectly employing its influence on intrinsic motivation (Woolfolk, 1998).

The second class of factors that influence the academic performance of students in school is family factors. The variables that are often associated with family factors are mostly parental involvement in a child's education, which positively contributes to children's academic performance in schools (Desforges & Abouchaar, 2003).

According to Diaz (2005), a student's family background is the most important factor in determining the children's academic performance in school. Family factors of greatest influence are social class variables, parents' educational background, and family structure.

Social class factors are mostly the family values and expectations from the child's outcomes from school. The influence of social class determines family expectations, values, and attitudes regarding a child's education. A child's perception of parental support directly affects his/her performance in school (Hung & Peyyan, 2007).

Besides, parents' educational attainment influences the amount and nature of care a child receives from the family. Thus, all things being equal, there is a positive relationship between pupils' perception of their academic performance in school and the perceived expectations of their parents (Diaz, 2005).

There is evidence that positive parental care resulting from the parent attainment of formal education, favours the development of a well-mannered, stable, and integrated personality, while unfavourable parenting produces immature and insecure personality (Desforges & Abouchaar, 2003).

The final group of factors that influence pupils' academic performance is mostly school variables. The most important noticeable aspect in these variables is the class teacher and the students'

colleagues. The characteristic of a teacher is considered key for the student's personal and academic development and the values given from the teacher to the student are usually reciprocal, highlighting additional personal relationships. Diaz (2005) indicated that “teacher expectations significantly influence a student's examination score and two factors influence the teacher's assessment in the classroom: first is the student intelligence, which guarantees that the higher the child's intelligence, the better the academic performance, which strengthens reciprocal appreciation between the teacher and the student and secondly, teachers' relationship with pupils who perform abysmally in his/her class assessment attributes the poor performance to the pupil and, in this case, the reciprocal relationship between the teacher and the pupil could be strained” (Diaz, 2005). Besides, research has shown that a student's interaction with peers in the school environment promotes the acquisition of competencies such as temper control and expression of his/her prosocial behaviour, which could lead to a positive attitude of learning.

1.4.2.1 Resource-Based View (RBV) Framework:

The Resource-Based View (RBV) framework, originating from strategic management literature, focuses on how organizations utilize their unique resources and capabilities to achieve competitive advantage (Barney, 1991). According to RBV, an organization can be considered as a collection of physical resources, human resources and organizational resources (Barney, 1991; Amit and Shoemaker, 1993). Resources of organizations that are valuable, rare, imperfectly imitable and imperfectly substitutable are main source of sustainable competitive advantage for sustained superior performance (Barney, 1991).

A resource must fulfil ‘VRIN’ criteria in order to provide competitive advantage and sustainable performance. A ‘VRIN’ criterion is explained below.

1. *Valuable (V)*: Resources are valuable if it provides strategic value to the firm. Resources provide value if it helps firms in exploiting market opportunities or helps in reducing market threats. There is no advantage of possessing a resource if it does not add or enhance value of the firm.
2. *Rare (R)*: Resources must be difficult to find among the existing and potential competitors of the

firm. Hence resources must be rare or unique to offer competitive advantages. Resources that are possessed by a several firms in the marketplace cannot provide competitive advantage, as they cannot design and execute a unique business strategy in comparison with other competitors.

3. *Imperfect Imitability (I)*: Imperfect imitability means making copy or imitate the resources will not be feasible. Bottlenecks for imperfect imitability can be many viz., difficulties in acquiring resource, ambiguous relationship between capability and competitive advantage or complexity of resources. Resources can be basis of sustained competitive advantage only if firms that do not hold these resources cannot acquire them.

4. *Non-Substitutability (N)*: Non-substitutability of resources implies that resources can't be substituted by another alternative resource. Here, competitor can't achieve same performance by replacing resources with other alternative resources. According to Barney valuable resource 'must enable a firm to do things and behave in ways that lead to high sales, low costs, high margins, or in other ways add financial value to the firm' (1986, 658). Barney also emphasized that 'resources are valuable when they enable a firm to conceive of or implement strategies that improve its efficiency and effectiveness' (1991, 105). RBV helps managers of firms to understand why competences can be perceived as a firms' most important asset and, at the same time, to appreciate how those assets can be used to improve business performance. RBV of the firm accepts that attributes related to past experiences, organizational culture and competences are critical for the success of the firm (Campbell and Luchs, 1997; Hamel and Prahalad, 1996).

In the context of education, RBV emphasizes the importance of educational resources, such as qualified teachers, learning materials, infrastructure, and financial resources, in influencing academic performance (Hussey & Hussey, 1997).

RBV posits that schools with superior resources and capabilities, whether public or private, are more likely to achieve better academic outcomes in examinations like the BECE (Mahoney & Pandian, 1992).

This framework enables the researcher to analyse how the differential allocation and utilization of

resources between public and private schools contribute to variations in academic performance in the BECE.

The Resource-Based View framework allows for an in-depth analysis of how the availability, allocation, and utilization of resources within public and private schools influence their academic performance in the BECE. By examining the distinctive resources and capabilities of each school type, researchers can gain insights into the factors driving differences in academic outcomes and inform policy interventions aimed at enhancing educational quality and equity.

1.4.2.2 Institutional Theory Framework:

Institutional theory focuses on how organizations conform to institutional pressures, norms, and rules within their environment (DiMaggio & Powell, 1983).

In the context of education, institutional theory examines how public and private schools respond to institutional forces, such as government regulations, societal expectations, and professional norms, which shape their practices and performance (Meyer & Rowan, 1977).

Public and private schools may adopt different institutional logics and strategies in response to external pressures, leading to variations in academic performance (Scott, 2001).

This framework enables researchers to analyse how institutional factors, such as funding mechanisms, accountability structures, and curriculum requirements, influence academic outcomes in the BECE across different types of schools.

The Institutional Theory framework offers a lens through which to examine the role of institutional pressures and dynamics in shaping the behaviour and performance of public and private schools in the context of academic achievement. By exploring how different institutional logics influence educational practices and outcomes, researchers can gain insights into the underlying mechanisms driving disparities in BECE performance between public and private.

1.5 Objectives of the Study

The main objective of the study is to assess the quality of Basic Education by conducting a comparative assessment of the academic performance between public and private schools within

the Nsawam Municipality.

1.5.1 Research Questions

- I. Are there differences in academic performance among private and public schools in the BECE results?
- II. What factors account for students' academic performance in BECE results?

1.5.2 Specific Objectives

- I. To examine the disparities in students' academic performance of public and private schools in the BECE Examination Results in the Nsawam Adoagyiri Municipality.
- II. To identify factors affecting a student's performance in BECE results in the Nsawam Adoagyiri Municipality.

1.6 Significance of the Study

The associated benefits of quality in a state's educational system and its subsequent impact on the high academic performance of students cannot be overemphasised; education's apparent importance for personal and societal development in Ghana is common universal knowledge in many less developed countries. Education is mainly seen as a critical policy instrument for eradicating poverty. It may help individuals access better opportunities that raise their labour earnings and thus improve their lives. In the labour market, education offers both employers and employees the productive capabilities and potential indicators of the job requirement for the respective parties to be met – therefore, attained qualifications are the main asset in employee competition for jobs available on the labour market (Gangl, 2000, p. 3).

Notwithstanding the above-stated benefits of education, it is alarming to realise that academic standards are declining year in year out because certain conditions that are supposed to be met for a conducive learning environment to be created are absent especially in most primary schools (Adeyemi, 2014). Regardless of successive governments' efforts, a cursory observation of our educational institutions shows many schools are overwhelmed by dilapidated physical facilities,

schools without adequate and appropriate furniture and equipment, and schools where instructional materials are either not given or insufficient. Also, not forgetting that schools are understaffed; poorly remunerated teachers', little or no formal supervision from the education directorate inspectorate due to low allocation of logistics; schools with no discipline, among other things (Adeyemi, 2014).

However, a comparative study in “Business Studies for Public and Private Junior Secondary School Certificate Examinations (JSSCE) in Ovia Southwest Local Government Council Area of Edo State”, by Igbinedion and Epumepu (2011), showed that there was a significant difference in the academic performance between the public and private schools from 2008 to 2011. The study further proved that the percentage performance trend of public schools was far higher than that of the private schools. In this similar context, the researcher seeks to compare students' academic performance between the public and private schools' performance in the Nsawam Adoagyiri Municipality.

Therefore, the research sought to increase the existing literature on the academic performance of pupils at the primary school level in Ghana to determine whether there is any significant difference in students' academic achievement between public and private schools in the Municipality. The study will also explore the factors accounting for pupils' high or poor performance in BECE in public schools in the Municipality to make policy recommendations to help other public schools perform better than their private school counterparts. It will also emphasise the factors accounting for the high performance of public schools compared to private schools and suggest measures to be adopted by other public schools. It will also show how public schools' contribution to quality education delivery can be enhanced. The advantages associated with the quality academic performance of the pupils in both public and private schools cannot be overlooked since this is the only way we can get a rigorous set of qualifications for the individuals in place to ensure a competent and confident future workforce. Therefore, this study will draw the attention of

educational stakeholders to focus their attention on the municipality's primary education system. The study can also assist academic managers and planners to adopt methods of managing the schools for better results in other public schools.

1.7 Research Hypothesis

- I. Null Hypothesis (H₀): There is no significant difference in performance between public and private schools.
- II. Alternative Hypothesis (H₁): There is a significant disparity in performance between public and private schools.
- III. Null Hypothesis (H₀): There is no significant relationship between the independent variables and the dependent variable.
- IV. Alternative Hypothesis (H₁): There is a significant relationship between the independent variables and the dependent variable.

1.8 Scope of Research

Geographically, the study was centred in the Nsawam Municipality and, contextually, on the nature and characteristics of public and private schools for their academic performance at the BECE. However, more importantly, the study focuses on the calibre of qualified Junior High School (JHS) students as they transition to Senior High School (SHS) within a time frame from 2009 to 2019.

1.9 Limitation of the Study

The major constraint on this study was the unavailability of some respondents due to the closure of schools as a result of the Covid-19 pandemic in 2020 as Head-teachers, core subject teachers, and other vital respondents were not at the post.

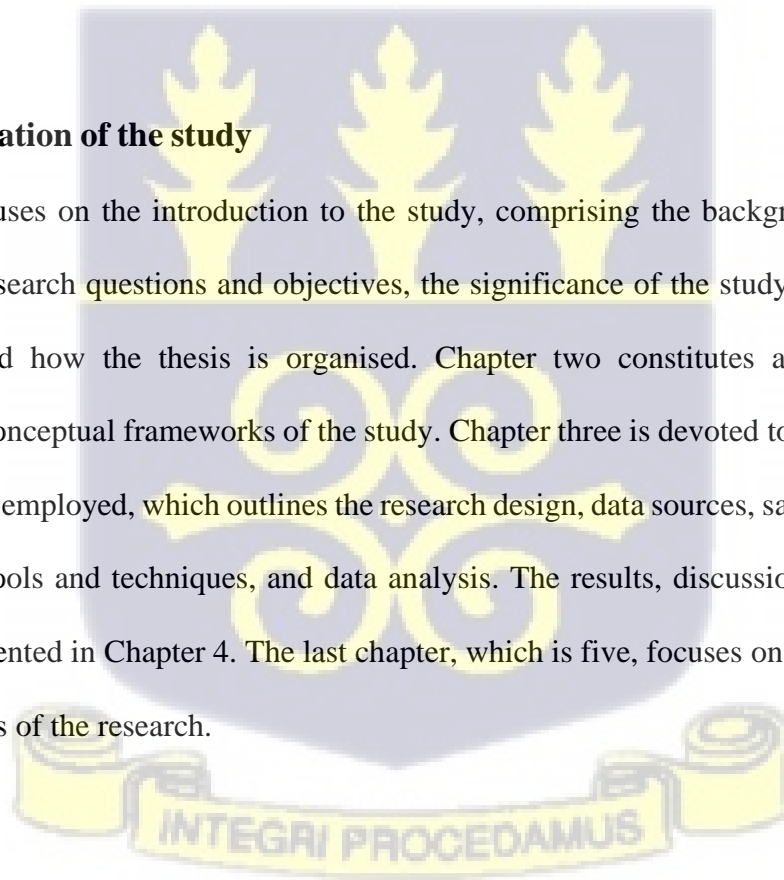
Also, time was another hurdle for the researcher. The outbreak of the pandemic also posed a challenge in meeting timelines, as basic schools were not in session from March 2020 to July 2020, with education offices closed. In addition, administering questionnaires consumed a lot of time but the research was, however, successfully done through perseverance and patience. Despite the

challenges, the researcher followed all the steps to ensure that the findings of this research reflect the reality on the ground.

The study thrives on the premise that all children, when given the right learning environment, essential resources, and appropriate support systems are made accessible, would automatically improve their academic performance across-board without considering other factors. However, this assumption poses a significant limitation in this study. This assumption is premised on the fact that all students are presumed to have the same intelligent quotient (IQ). Thus, only prejudicial management of the children results in their failure to perform well in external examinations. The researcher consciously avoided this bias by fairly assessing all students based on standard exams by the WAEC.

1.10 Organization of the study

Chapter one focuses on the introduction to the study, comprising the background, the problem statement, the research questions and objectives, the significance of the study, the limitations of the research, and how the thesis is organised. Chapter two constitutes a literature review, theoretical and conceptual frameworks of the study. Chapter three is devoted to the study area and the methodology employed, which outlines the research design, data sources, sampling techniques, data collection tools and techniques, and data analysis. The results, discussions, and significant findings are presented in Chapter 4. The last chapter, which is five, focuses on the conclusion and recommendations of the research.



CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Introduction

This chapter reviews the literature on factors that influence the academic performance of pupils in schools. It delves into history, the progress of basic education sub-sector, theories, and concepts that underpin the issues of quality education in basic schools, including the learning environment (School), the content (Curriculum), processes (Teaching and Learning), and Outcomes (Test Systems, Assessments or Examination).

2.2 Background to Basic Education in Ghana

Education, whether in formal or informal settings, can be characterised as a structured and organised body of knowledge intended for learners (Akyeampong, 2001). The concept of "basic education" extends the boundaries of the right to education and emphasises the importance of lifelong learning (Buckland, 2000). According to the Millennium Report of Education for All in 2007, Basic Education encompasses a range of competencies, including skills, knowledge, attitudes, values, and aspirations, that are fundamental for children to acquire a comprehensive education (Akyeampong, 2001; Buckland, 2000; UNESCO, 2007).

Basic education is essential in an endeavour to improve the eminence of the majority of people especially women, rural folks, the urban poor, marginalised ethnic minorities, and the millions of children who are not attending school but working (UNESCO, 2007). Therefore, basic education builds the prospect to offer children the precise channel to carry on to higher levels of learning and for those who cannot, it provides them the opportunity to obtain work-inclined skills (Oduro, 2000). Basic education is relatively abstract, and many countries have decided to border 'basic' as the initial phase of formal schooling. According to Oduro, 2000 basic education in its proper sense is described as the level of education that is targeted to meet the rudimentary learning needs of learners. As part of the determination to achieve the

Millennium Development Goals and the charter for Education For All (EFA), many developing countries, including Ghana, introduced Universal Basic Education (UBE) to improve access to basic education for their citizens. The Republic of India, “with the second-largest education system in the world, had made a Constitutional provision to provide free and universal Primary and Middle-grade education for all Indians as far back as 1960” (NCEE, 2005). Nigeria, for instance, introduced its first universal access to basic education in 1976 but was unsuccessful, however, since 1999 she has been providing unaltered free access to six-year primary school and three-year junior high school for every Nigerian child of school-going age. Thus, she ensures the reduction of the incidence of dropout from the formal schooling system (Rolleston & Adefeso-Olateju, 2012).

Similarly, the Republic of Rwanda, in 2012, won the Commonwealth Education Good Practice Awards for inventive fast-tracking strategies of the nine-year basic education programme. Rwanda's basic educational structure comprises a pre-primary education for children between three to six years and a six-year complete primary education. Theoretically, it enrolls children of seven to twelve years of age and, a three year lower secondary cycle which in addition to primary, constitutes Rwanda's nine-year basic education system (World Bank, 2011).

2.2.1 Promotion of Quality Basic Education in Ghana

One of the cornerstones of educational policy in Ghana is the consistent enhancement of teaching quality and learning methodologies to elevate academic achievements among students (NDPC, 2012). This commitment to improvement is evident in the metrics employed by the Ministry of Education to gauge progress in this domain, which include the National Education Assessment Test, the pass rate in the Basic Education Certificate Examination (BECE), the ratio of pupils to core textbooks, and the pupil-teacher ratio (NDPC, 2012).

These indicators serve as critical tools for assessing the effectiveness of education delivery in both

public and private schools, rendering them particularly relevant in the comparative analysis of academic performance between these two school types in the context of BECE results. The utilization of such diverse metrics underscores the multidimensional nature of education quality and its assessment. These indicators not only offer a quantitative measure of performance but also provide insights into the broader educational environment, including resource availability, student-teacher interaction, and curriculum effectiveness.

In addition to the metrics mentioned, the promotion of quality basic education in Ghana involves a multifaceted approach that encompasses various aspects of the educational system. Research suggests that investing in teacher training and professional development programs is crucial for improving teaching quality and student performance (Asiedu-Addo, 2019; Akyeampong et al., 2007). Effective teacher training programs equip educators with pedagogical skills, subject matter expertise, and instructional strategies to address diverse learning needs and enhance classroom engagement.

The design and implementation of a robust curriculum play a pivotal role in shaping the quality of education. Academic studies emphasize the importance of aligning curriculum frameworks with national educational objectives, promoting learner-centered approaches, and integrating innovative teaching methodologies (Mensah & Attua, 2016; Adadevoh & Timmer, 2018). Adequate provision of educational resources, including textbooks, teaching aids, and infrastructure, is essential for creating conducive learning environments (Dzisi, 2018; Dartey-Baah & Amoako, 2011). Research underscores the significance of addressing resource disparities between public and private schools to ensure equitable access to quality education for all students (Ackah & Tanle, 2016). Engaging parents and communities in the educational process can positively influence student outcomes. Studies highlight the importance of fostering collaborative partnerships between schools, families, and local communities to support students' academic progress and holistic development (Dzisi, 2018; Bonsu & Addo, 2015).

Effective educational policies and governance structures are essential for driving systemic

improvements in education quality. Academic literature emphasizes the need for coherent policy frameworks, transparent governance mechanisms, and sustained investment in education to address systemic challenges and promote equitable access to quality education (Asiedu-Addo, 2019; Ampiah & Mensah, 2017).

Through these indicators, policymakers and education stakeholders can glean comprehensive insights into the strengths and areas requiring improvement within the education system. This data-driven approach allows for evidence-based decision-making, allocation of resources, and targeted interventions to foster enhanced learning outcomes. The study therefore seeks to have a comprehensive understanding of the factors influencing the promotion of quality basic education in Ghana and how that can be fully attained by identifying areas for intervention with evidence-based strategies to enhance teaching quality and learning outcomes in both public and private schools. By considering these indicators within the context of a comparative study of academic performance in public and private schools, a more nuanced understanding of the factors influencing student achievement can be achieved.

2.2.1.1 Textbook to Pupil Ratio in Basic Schools

The pupil core textbook ratio and pupil-teacher ratio serve as vital indicators reflecting resource allocation and class sizes within educational institutions. A higher pupil core textbook ratio signifies restricted access to textbooks, potentially impeding students' effective engagement with the curriculum. The availability of textbooks is a fundamental aspect of assessing the educational quality at the basic school level. Ideally, each student should have access to all necessary reading materials for the ten subjects offered in schools to ensure a conducive teaching and learning environment. At the Junior High School (JHS) level, it is anticipated that every student would possess a minimum of four core textbooks, implying a textbook ratio of 1:1 for complete individual access. However, data derived from the Education Management Information System in 2013 revealed that this objective of achieving a 1:1 ratio had not been realized across any level of basic education in the country (MoE, 2013:150).

Examining and comparing these ratios between public and private schools enables a scrutiny of resource disparities and their potential implications on academic performance. Resource availability and equitable distribution significantly influence the learning process and subsequently impact student achievements (Iddi, 2016).

2.2.1.2 Pupil-Teacher Ratio in Basic Schools

“Pupil-Teacher Ratio (PTR) is the mean number of students per teacher at a specific level of education in a given school year” (UIS, 2011). The “number of pupils/students being taught by teachers is one of the key indicators of quality in education at a school level. Ghana Education Service (GES) policy is to have a PTR of 40:1 at the primary school level and 35:1 at the JSS level, respectively” (NDPC, 2012). Similarly, a higher pupil-teacher ratio indicates larger class sizes and potentially reduced individualised attention and instructional support for students.

Empirical evidence from the Ministry of Education in the 2012/13 academic year showed that “private schools tend to have smaller class sizes and hence lower pupil-to-teacher ratios than public schools, but in terms of access to the proportions of trained teachers, the public JHS had 84% of teachers trained, while in private schools have only 18% of their teachers trained” (MoE, 2013:49).

2.3 Strategies for Improving Quality Basic Education Services in Ghana

Significant policies and strategies employed from 2012/13 to advance access to quality education concentrated primarily on, widening the coverage of the school feeding program, fortifying the capitation grant, intensifying the provision of free school uniforms and exercise books, as well as the provision and rehabilitation of educational infrastructure (NDPC, 2012). In addition, the government of Ghana, right from 2012, vowed to build and remove all basic schools operating under trees; unfortunately, there is no time limit regarding this political promise.

2.4 Factors Influencing the Academic Performance of Pupils in Schools

The academic performance of students is a key feature of education (Rono, 2013). It is considered

to be the centre around which the whole education system revolves. Narad and Abdullah (2016), observed that “students' academic performance determines the success or failure of any educational institution”. Other scholars, like Singh, Malik, and Singh (2016), also pointed out that students' academic performance directly impacts socio-economic development. Studying hard, making good exam scores, and attaining excellence goes a long way to yield great accomplishments with mastery for the student.

On the other hand, setting targets that are not met based on milestones covered may be considered underperformance (Sonntag & Michael, 2002). Students' academic performance remains a topmost pre-eminence for many educators, parents, and national governments. Constructive “academic achievement of students makes the difference regarding raising children locally, regionally, nationally, and globally for various levels of development” (Chaudhry & Shafiq, 2011). Therefore, students' academic performance in schools is directly related to the socio-economic advancement of a country. Pupils' academic performance is important, as it plays a crucial role in their future and produces human capital for the country's economic and social transformation (Mushtaq & Khan, 2012).

A solid foundation of pupils in basic schools could consolidate their performance to escalate to the highest level of the educational ladder. Higher education makes it possible and increases the chances for a better life, influence, and prestige for fortunate individuals who have it. Indeed, in today's society, occupational attainment and allocating one's social status depend largely on higher education. Ghana's many benefits cannot be realised if a child does not perform commendably on national examinations such as BECE and the WASSCE to secure tertiary or higher education admission.

According to Mushtaq and Khan (2012), when conceptualising organisational performance, there is a need to differentiate between an action aspect and an outcome aspect of performance; in this context, the performance conceptualises the action as teaching and learning and the academic achievement of pupils in schools as outcomes. There are two types of broader factors that generally

affect the students' academic performance in schools. The measured factors have been divided into extrinsic factors (extracurricular activities, family problems, work, financial, social, and other problems) and intrinsic factors (students' competence and aptitude, class: schedule, size, environment, textbooks, and exam systems, learning facilities, and technology).

2.4.1 The intrinsic (internal) Factors that Influence Children's Academic Performance

The academic performance of students is influenced by various intrinsic (internal) factors, such as the individual learner's characteristics, including their intelligence quotient (IQ), social-emotional learning (SEL) skills, temperament, and other personal attributes (Mushtaq & Khan, 2012). These internal factors play a significant role in shaping students' academic outcomes and can provide valuable insights when examining the disparities in academic performance between public and private schools in the context of the BECE results.

Research has shown that a student's IQ can impact their academic performance. IQ represents an individual's cognitive abilities and their capacity to understand and process information. Students with higher IQ scores may demonstrate better academic achievements compared to their peers with lower IQ scores. Understanding the relationship between students' IQ levels and their performance in the BECE examination can contribute to the comparative analysis between public and private schools.

Moreover, social-emotional learning (SEL) skills have gained recognition as crucial factors influencing students' academic success. SEL encompasses various competencies, including self-awareness, self-management, social awareness, relationship skills, and responsible decision-making. Students who possess strong SEL skills are better equipped to handle academic challenges, regulate their emotions, and engage effectively in the learning process. Examining the impact of SEL skills on academic performance in public and private schools can provide insights into the role of socio-emotional development in educational outcomes. Additionally, a student's temperament, which refers to their innate behavioural and emotional tendencies, can influence their academic performance. Certain temperamental traits, such as

persistence, self-regulation, and adaptability, are associated with better academic achievement. Understanding how different temperamental characteristics manifest in students attending public and private schools can contribute to the exploration of performance disparities. This analysis can help identify areas where interventions and support can be targeted to improve the academic performance of students, regardless of school type.

2.4.2 External Factors that Influence Children's Academic Performance

Although the school environment can strongly impact students' academic performance, it is crucial to mention that other external factors, such as economic status, parental educational attainment, family size, and other home-based factors, can also affect the pupils' performance and educational outcomes (DCSF, 2008). For example, there is enough indication from education and psychology that the household's economic status substantially influences the child's academic performance in school. Furthermore, numerous studies have shown that household factors affecting a child's educational performance in school have reliably demonstrated that parental involvement in children's education does make a progressive transformation to pupils' academic achievement.

2.4.3 The influence of parental education on child's outcomes

Research has shown that parents' educational accomplishments positively influence students' academic performance or achievement in school (Davis-Kean, 2005). According to scholars like Khan, Iqbal, and Tasneem (2015), parents with a higher level of education show much interest in the academic performance of their wards. The two scholars added that there was a significant positive relationship between the level of parents' education and students' academic performance. Ntitika (2014) also espoused that parents with a higher level of education serve as an inspiration for their children to work hard in achieving academic goals,

and he established that such students have higher ambitions in education.

2.4.4 The influence of family structure and child's school outcomes

The progress of a child is dependent on his immediate family before formal education. The system of a child's family, size, socio-economic status, and educational background play important roles in students' academic performance and social integration (Ushie, Emeka, & Owolabi, 2012).

2.4.5 Teachers Motivation and Students' Academic Performance.

The role of teachers in the academic performance of students is vital. However, Kimani et al.'s (2013) research on teacher factors that influence academic attainment established that teachers' experience, age, gender, and professional qualifications have little or no statistically significant relationship with their students' academic performance. Nevertheless, performance targets, completion of the syllabus, paying attention to weak students, regular assignments, student evaluation, and the teaching workload of a teacher had major implications for the students' academic performance. Nonetheless, to enable the researcher to adequately appreciate the relationship between theory and practice, an overview of the theories of motivation and job satisfaction and a review of the literature on some perspectives and models of motivation processes are presented in this study.

Among theories of motivation claimed to explain human needs concerning working life are the equity theory and Herzberg's two-factor theory. These models were chosen because they are grounded in psychological theories and represent aspects of the motivational dimensions of personality. (Keller, 2006).

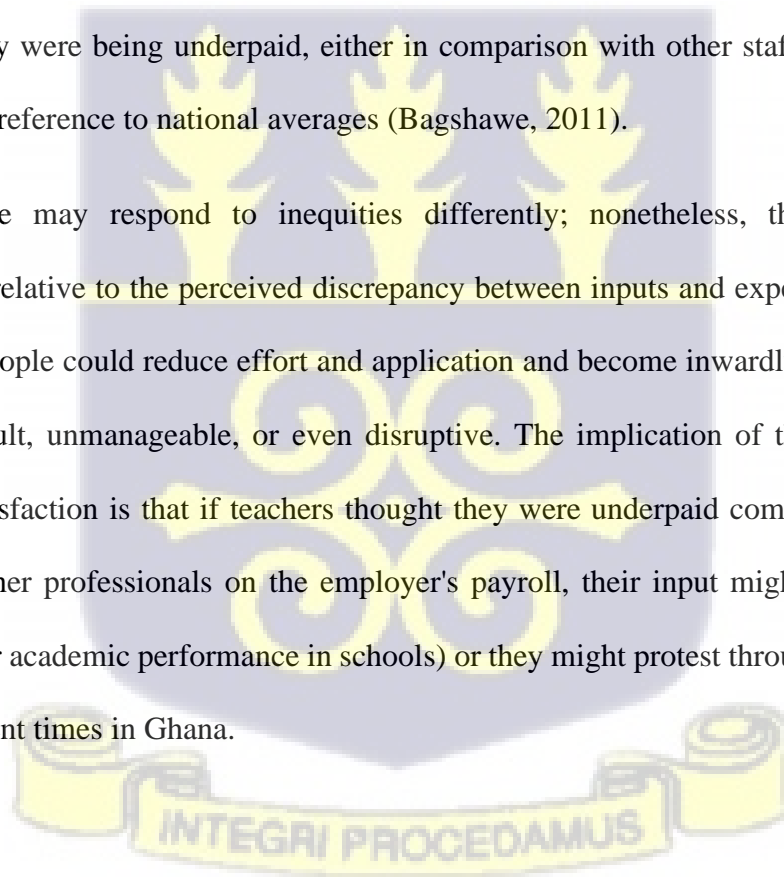
2.5 Equity Theory of Motivation

The academic performance of students is influenced by various intrinsic (internal) factors, such as the individual learner's characteristics, including their IQ, social-emotional learning (SEL) skills, temperament, and other personal attributes (Mushtaq & Khan, 2012). These internal factors play a significant role in shaping students' academic outcomes and can provide valuable insights when examining the disparities in academic performance between public and private schools in the context of the BECE results.

For example, changing rewards received, changing the comparison points, and psychologically distorting the comparisons (MTD Training, 2010).

Like teachers, other workers may equate their workload and remuneration with those of their colleagues in other professions. Teachers would regard salary as their motivation source if they thought they were being underpaid, either in comparison with other staff in the same business or with reference to national averages (Bagshawe, 2011).

However, people may respond to inequities differently; nonetheless, the degree of demotivation is relative to the perceived discrepancy between inputs and expected outputs. In this regard, people could reduce effort and application and become inwardly disgruntled, outwardly difficult, unmanageable, or even disruptive. The implication of this theory on teachers' job satisfaction is that if teachers thought they were underpaid compared to their colleagues or other professionals on the employer's payroll, their input might be reduced (resulting in poor academic performance in schools) or they might protest through strikes, as witnessed in recent times in Ghana.



2.6 Herzberg's Theory of Motivation

Scholars have explained how a working environment affects workers' emotions through satisfaction or dissatisfaction, the proposal in this theory is that when workers were satisfied at work, they would be motivated to work, and vice versa (Armstrong, 2010:140). The theory

is alternatively called a motivation-hygiene theory because it considers the factors that satisfy the employee as motivators and those that dissatisfy as '*hygiene factors*'. A safe environment may not circumvent job dissatisfaction, but a hazard-prone environment can de-motivate an employee (MTD Training, 2010). Besides, the availability of motivators in the workplace causes endless employee motivation, but their absence does not lead to discontent. On the other hand, "*hygiene*" produced an acceptable working environment. It does not increase fulfilment; its absence, however, causes job dissatisfaction.

Herzberg's theory is important and applicable to teacher motivation in Ghana. For example, it shows how different decisions in a school environment will affect teachers' and students' satisfaction and dissatisfaction. For instance, if the school Head focused on motivating teachers and students, they would concentrate on factors leading to fulfilment within the school climate. Thus, the failure of the school Head to create the opportunity for their subordinates' growth, advancement, achievement, and recognition would create a team lacking satisfaction and motivation, which would lead to poor academic achievement at the school.

It is imperative to note from Herzberg's theory that when people become dependent on rewards such as salaries to perform their duties, there will be significant negative consequences when they perceive their earnings below this level. This has led the researcher to propose that rewards such as increases in salaries and allowances must not be used to motivate teachers. Instead, working conditions such as housing schemes, transportation, free medical care, and nonpayment of fees by teachers' children will far more motivate teachers than constantly increasing their salaries in a currency depreciation economy.

2.7 The Concept of Quality in Education

More than a few classifications have been put forward for the concept of quality in education,

affirming the difficulty and diverse nature of concepts (Buckland, 2000). In Ghana, like elsewhere, it is most often difficult to define quality in education; it becomes even harder when conceptualised as a specific aspect of education because all the features connected with educational quality are interconnected (Ankomah et al., 2005). While some define quality in education in terms of resource input, others perceive it as positive outcomes, such as obtaining good grades after schooling. However, certain factors are often considered key to positive educational results, as identified by the UNESCO General Education Quality Analysis Framework (GEQAF). These include the quality of the teachers, ease of access to educational resources, a supportive learning environment, the background of learners, and the assessment system to gauge the progress of the learners against the stated educational objective.

2.7.1 Efficient Teaching Personnel

Almost all educational reforms rest on the shoulders of trained teachers. Teachers are the direct implementers of the national education curriculum, as they have first-hand contact with pupils/ students to guarantee teaching and learning in the classroom. Consequently, what happens in classrooms between teachers and pupils is a major factor in ascertaining the quality of education (UNICEF, 2009). A fundamental facet of classroom procedures recognized to impact the delivery of quality education includes the quality of pedagogy, duration of learning, children's confidence and engagement, and children's participation in literacy, numeracy teaching and learning (Sammons et al., 2008). Pedagogical knowledge deals with the teaching process, which includes representing and formulating the curriculum content and making it comprehensible to the learners.

2.7.2 Effective Use of Instructional Time

The attendance of teachers and pupils at school must be consistent to ensure uninterrupted learning that contributes to students' performance improvements. Regular class exercises and

homework are ways in which the teacher can evaluate students' performance. These exercises must be marked, offer corrections, and be recorded, preserving the child's academic progress through the School Based Assessment (SBA). WAEC uses the SBA proportion mark of 30% as Continuous Assessment (CA) for determining examination results at the BECE (MoESS, 2008).

Adequate educational facilities, such as teaching aids, are required to improve learning outcomes in classrooms and must be made available to support the process. On the other hand, inadequate educational facilities adversely impact the outcomes of the learning process. Moreover, teachers must apply their skills to exploit the formative and summative assessments to observe children's development and ascertain that they are acquiring good understanding and knowledge that will improve their academic achievements” (OECD, 2012).

In Botswana, scholars like Dunne & Leach (2005) (quoted in Akaguri, 2011) opined that an important factor in identifying poor-performing schools is the low level of professionalism among teachers in such schools. Problems identified among such schoolteachers include leaving school before closing time, drunkenness, absenteeism, lack of preparation of lesson notes, poor conduct of class exercises, lateness to school, and, above all, refusal to teach even when in school.

2.7.3 Effective Teaching and Class Sizes

Class size and effective teaching are subjects that are often discussed with respect to quality in education. As indicated many times, smaller class sizes allow “teachers to pay closer attention to the needs of individual learners and allow for a wider range of teaching methodologies to be applied in classrooms. Assuredly, smaller classes are advantageous for slow learners and children with special needs, especially in the early years. In addition, some evidence has shown that smaller class sizes allow for more constructive teacher-student

relationships (OECD, 2012). Consequently, a smaller class size would allow the teacher to offer class exercises, mark, and offer feedback, which would be the opposite for larger class sizes. On the other hand, larger class sizes result in less significant academic achievements, especially in the initial years of education. In addition, larger classes are challenging for teachers to handle and may often result in unproductive teaching approaches and minimal supervision received by students from teachers (UIS, 2011).

2.7.4 Supportive Learning Environment

The learning environment can either be structured or unstructured. Schools are recognized buildings or structures that are put up for teaching and learning. Supportive learning environments have a heightened influence on learners. The child's learning environment must be receptive enough; an environment where they can feel safe and prepared to learn (UNESCO, 2012). All learning environments must consider the locational safety, period of learning, and availability of adequate facilities to sustain the learning process in the schools; without sufficient facilities within the learning environment, teaching and learning will be negatively affected.

2.7.5 Availability of Teaching and learning resources in Schools

The school improvement program can include basic infrastructure such as blackboards, furniture, basic teaching and learning resources, electricity, and water and toilet facilities. However, the most important factor in improving quality education delivery is providing basic textbooks to schools and basic equipment, furniture, and computers for JHS workshops. Access to core textbooks is an essential indicator of the quality of education in Ghana. Unfortunately, the available data from the Ghana Education Management Information System in 2013 indicated that most basic schools in Ghana lack adequate teaching and learning textbooks (MoE, 2013).

2.7.6 The Individual Learner's Circumstances

The process of acquiring knowledge among children is strongly influenced by their parental care at home and the kind of attention offered in the school environment (UNICEF, 2005). Therefore, evaluating the nature of training at any level must mull over the underlying individual contrasts among the students. These distinctions may incorporate issues such as the sum and nature of earlier learning, the financial foundation of the students, and the measure of every admission, as well as their wellbeing foundations. Before starting conventional training, the nature of children's endurance impacts their kind of students. Numerous things go into making a quality student, including wellbeing, early youth encounters, and home help. Going to a decent pre-school can construct a solid establishment for learning and help youngsters advance from one degree of training to the next without trouble (UNESCO, 2012:48).

In 2009, the Programme for International Student Assessment (PISA) asserted in research that in 58 out of 65 countries, pupils who had attended at least a year of pre-primary school performed academically better than students who had not, even after accounting for their socio-economic background. Thus, some good numbers of children in private schools in Ghana do have the privilege of attending a good school at pre-school and, hence, exhibiting good performance in standard examinations.

Numerous investigations point to how this affirmation exposes the fact that some tuition-based schools charge exceptionally low expenses, moderated to guardians' needs (Tooley, 2007).

2.7.7 Assessment Systems in Ghanaian Schools

In Ghana, end-of-term exams, class tests, class exercises, and BECE in JHS are the standardised assessment systems used to grade students for the next level of education. Studies have shown that exam systems could negatively affect students' performance as they

often result in a huge amount of stress (Wang and Yeh, 2005: 111). Many students today feel much pressure during exams, probably because they have not prepared adequately. Megan Weyrauch (2012: 89) observed that stress is a normal physical response to events that make you feel threatened. Edward (2006: 51) suggests that standard exam systems are not adequate to determine intelligence; many highly intelligent people are poor thinkers, and many are of average intelligence.

An examination is a form of assessment that is key in today's educational system and serves as an individual evaluation system, comparing performance across various subjects. The purpose of the evaluation is to gather relevant information about student performance, progress, or interests to judge their learning process. Educational assessment occurs in two major contexts. The first is the classroom, where assessment is used mainly to assist learning and measure students' collective understanding over the long term. Second is large-scale valuation, operated by educational leaders to evaluate programs and determine whether individual students have met learning goals to graduate to the next level.

Evaluating comprehensively, helps measure the students' qualities and shortcomings (examples: quality of grades obtained, competencies, positive values, dexterity acquisition, and equity in the acquired knowledge) (UNESCO, 2012).

Assessment systems in Ghana's pre-tertiary education are inclined towards three main types of activities, each of which serves a different purpose and addresses different information needs. These are classroom assessments, examinations, and large-scale, system-level assessments (World Bank, 2013).

Classroom assessment provides real-time information to support ongoing teaching and learning in individual classrooms, using various formats, including observation, questioning, paper, and pencil tests, to evaluate student learning daily.

These assessment forms constitute formative assessment, whose main focus is to ascertain the learner's level of achievement or competence. Classroom assessment often requires that

all stakeholders in education get the necessary report to make the essential inputs through the School Performance Appraisal Meeting (SPAM) for better educational outcomes. Policies and programs on classroom assessments could serve as a basis for providing swift feedback for improving teaching and learning activities in basic schools.

On the other hand, examinations provide a basis for selecting or certifying learners as they change from one level of the education system to the next or into the workforce. All eligible students are tested annually, or more often if the system allows for repeat testing. Examinations normally cover the main subject areas in the curriculum and usually involve essays and multiple-choice questions. The standardised examination assessment constitutes the summative assessment that works towards a pupil's or student's achievement at the end of the study, such as the quality of grades obtained, literacy and numeracy skills, and life and emotional skills. These examinations in Ghana include BECE for certification and selection into second-cycle institutions and WASSCE for certification and admission into tertiary institutions.

The large-scale system-level examination makes the necessary arrangements for the general performance of the entire education system at particular grades or age levels; these forms of assessments typically cover a few subjects regularly (such as every 3 to 5 years), are often sample-based, and use multiple-choice and short-answer formats (World Bank, 2013). In addition, they may be national or international in scope; an example of a national assessment in Ghana is NEAT, and that of the global is Trends in International Mathematics and Science Study (TIMSS), in which Ghana has been participating since 2003.

2.7.8 Computerised School Selection and Placement System (CSSPS)

The demand for secondary education has increased in Ghana, following the successive growth in population over the years. Nonetheless, there persist inequalities in this demand, as three-fourths of youth typically either do not have adequate qualifications to enter SHS or

cannot afford to move to the schools where they are placed (World Bank, 2014:2). The Computerised School Selection and Placement System (CSSPS) for second-cycle schools was introduced in 2005 by the government of Ghana to eradicate the discrepancy in access to post-basic education in the country. The system is purely based on the quality of grades obtained by pupils in the BECE. Consequently, there is high competition among the candidates for a limited number of 'First Class' secondary schools. A student must credibly obtain the range of aggregates from six to twenty. Therefore, a candidate in this category needs to obtain very good grades to gain admission into a well-endowed SHS because of the limited number of places available to the large number of JHS graduates that complete annually (Ahiatrogah, Dela, and Bevell, 2013). The CSSPS is done after the students submit a list of ranked choices for second cycle schools of their choice; then take the standardised BECE, after which they are placed into various secondary schools based on their performance. The main objective of the BECE is the certification and selection of basic school pupils into various second cycle schools.

2.8 High Academic Performance Among Private Schools

Learning (formal education) has always been linked to going to school, and most people almost believe that learning takes place only in schools. This perception of learning has been largely affirmed by references to schools as institutions of learning and Universities, Polytechnics, and colleges of Education as institutions of higher learning (Butt et al., 2022).

Theorists acknowledge the progressive impact of education on economic growth and its benefits for individuals and the country. Several arguments maintain that education upgrades individuals' capacities, skills, and knowledge for better jobs, efficient productivity, and higher wages. Education is mostly seen as a critical policy instrument for eradicating poverty. It may help individuals access better opportunities that raise their labour earnings and thus

contribute to improving their lives. In the labour market, education offers both employers and employees the productive capabilities and potential indicators of the job requirement for the respective parties to be met; therefore, attained qualifications are the main asset in employee competition for jobs available on the labour market (Gangl, 2000, p. 3).

Research conducted in the U.S. by Lubienski and Lubienski (2006) compared academic performance among public and private schools. One of the most important conclusions from the study revealed that private schools scored higher than public schools. In another related research project, Braun, Jenkins, and Grigg (2006), also in the U.S.A., matched students' academic performance in public and private schools to determine if there were disparities in their achievement. The findings showed that the private schools performed much better than their public-school counterparts in reading and mathematics, which was the focus of their study, and other course subjects too. Overall, the conclusion in their findings points out that the average private school score was higher than the average public-school score and that the difference was statistically significant.

The Federal Government of Nigeria, UNICEF, and UNESCO 1977 carried out joint research to observe the learning achievement of primary school students throughout the Federation; it was observed that most of the private schools scored higher means in the three subject areas than the national mean score, unlike the public schools. Likewise, Yoloye (1998) equally assessed the state of education in Osun State, comparing the quality of education in five federation states. In his study, he compared performance between urban and rural schools, public and private schools. He concluded that although the state's performance was generally poor, the private schools performed better than the public schools.

This opinion was further confirmed by Liloyd (1966), as he argued that in state-funded schools (public schools), though teachers consider formal training to be beneficial, they do next to nothing and rather pursue private lessons for students after school and academic

achievement in the hands of students and their parents. The assertion that teaching is not taken with all the seriousness it requires in government-funded schools is a situation that has brought about a laid-back attitude amongst government workers, including public school teachers. This contributes to the apathy of the general public toward government's owned businesses or property. Teachers from most public schools assume that brainy students will succeed naturally at school with no dynamic help coming from them.

In Ghana, public Junior High Schools are three times larger and have the highest number of students than private Junior High Schools. Currently, more private Junior High Schools are emerging and are performing better in the BECE, and most of the parents are taking their wards from public JHS to private JHS on the basis that private JHS provide quality education, have good supervision, high parental commitment, motivation, and good methodology, leading to a higher commitment of kids in their education than public JHS (Bonsu, 2016).

Ghana has observed a unique discrepancy between students in public and private basic schools (Ankomah & Hope, 2011). In most situations, private schools in Ghana have been performing very well in relation to the examination conducted by the “WAEC and Performance Monitoring Test (PMT) by the Ghana Education Service” (Oduro, 2000). In addition, the research conducted by CDC Consult Ltd. in 2008 and 2009 showed that the average pass rate of the low-income private school pupils in Ghana at the BECE was 98% and 96% in 2007 and 2008, respectively, compared to national pass rates of 62.17% and 62.16% within the same period (CDC Consult, 2010:35). These tests consistently showed higher academic performance of private school pupils than public school pupils in English and Mathematics (Djangmah, 2011:7).

In Ghana, a national study by Oduro (2000) reviewed skills acquisition in Ghana from basic education. He elaborated that *"Basic education provides the essential building blocks to continue to higher levels of education. For those who do not continue to higher education, it*

provides the foundation upon which work-related skills are developed". He adopted a two-way criterion to assess the performance against quality in our basic education and access to basic education. This measure is not mutually exclusive; hence, it is done simultaneously assessing the quality level as access increases. The first, is progress that has been made in increasing access to basic school, which on its own is not adequate to pronounce a judgement on the success or otherwise of an education program in enlightening the human capital base of the state. Hence, the assumption is that as access increases, quality automatically is maintained in the basic education system. The second angle of the study draws on academic performance by determining the extent to which the basic education sector has succeeded in equipping its students with significant skills to enter the job market or proceed to higher levels of education based on their performance. Oduro (2000) concluded that "*A rapid expansion of education in terms of numbers enrolled can be at the expense of the quality of education.*"

Similarly, Bonsu (2016), while assessing the quality of the state of education in Sekondi-Takoradi, compared performance between public and private schools and attempted to identify the many reasons why basic private schools were doing considerably better than public schools.

Moro (2016) equally carried out a similar study in Mampong Municipality. The focus of the study was to examine the various factors that account for the poor performance of students in the BECE in selected Public JHS. The study identifies student-related factors, household conditions, and school-related matters that contribute to poor academic performance in the BECE of students. He observed that lack of access to quality instructional methodology, lack of textbooks to cover the syllabus, poor revision management, too many extracurricular activities, poor economic background of parents, low academic background of parents and high divorce rates among parents, teachers' absenteeism from classes, students'

bullying/humiliation, lack of proper supervision among others are some factors that contribute to poor performance of students academically.

A related study carried out in the Tamale Municipality by Iddi (2016) attempts to establish the causes of poor BECE results in the Tamale Municipality and establish reasons why basic private schools were doing considerably better in external examination than their public counterparts. The study results revealed some differences in academic achievement between the public and private schools and recommended measures to remedy the disparities. It discovered that private schools were performing academically better than their public counterparts in the Tamale Municipal.



3.2.2 Economic activities

The economy of the Nsawam Municipality used to be predominantly agrarian, as agriculture previously employed about 40 % and 37 % of the working population in 1995 and 2000, respectively. The major crops cultivated were pineapples, pawpaw, oranges, tubers, maize, and vegetables. In addition, an indigenous fruit processing company is located at Nsawam, which processes pineapples grown by farmers within the municipality in commercial quantities. Thus, the economic activities sustaining the residents' livelihoods are categorised into agriculture, commerce/trade, and industry (Ghana Statistical Service, 2014).

3.2.3 Education in the Municipality

According to the latest data from the Ghana Statistical Service (2021), the literacy rate among individuals aged 11 years and older in the district stands at over 90%. Approximately 70% of the literate population are proficient in both English and a Ghanaian language, with around 30% being proficient solely in the English language. The disparity between male and female literacy rates has narrowed, with nearly equal proportions of males and females achieving literacy.

In terms of educational enrolment, the majority of the population in the district is currently enrolled in primary schools, accounting for approximately 50% of the total population. Junior High Schools (JHS) and Kindergarten follow, representing 25% and 15% of the population, respectively. Senior High Schools (SHS) and tertiary institutions enrol less than 10% of the population, with a slightly higher proportion of males attending compared to females.

Regarding past educational attainment, a significant portion of the population has attended Junior Secondary School (JSS)/Junior High School (JHS), constituting approximately 30%. Middle school attendance follows closely, accounting for around 25% of the population. Those who have attended primary school in the past make up approximately 20% of the

population, while tertiary education attendees represent approximately 10%.

Overall, there is a trend of increasing educational attainment and literacy rates in the municipality, reflecting ongoing efforts to improve access to quality education for all residents. The population that has attended primary school in the past constitutes 17.6%, while those who have attended tertiary form 7.1%. The population of the Municipality according to 2021 population and housing census stands at 155,597 with 76,417 males and 79180 females. (Ghana Statistical Service, 2021).

3.3 Research Design

The study adopted a quantitative method research design. The purpose was to ensure the reliability (the extent to which results are consistent over time) and validity (how accurate measurements are) of the research. Sandelowski (2000) elaborates that an integrative methodological approach controls bias and ensures the validity and reliability of research findings. In addition, a quantitative approach was used to generalise the findings of a population and develop a detailed view of the meaning of a phenomenon or concept being studied” (Creswell, 2003).

Quantitative data was used to explore the BECE outcomes in public and private JHS in the Nsawam municipality. The quantitative data describes both the numerical and categorical data. The survey was responded to by Head-teachers, core subject teachers, parents, and students of public and private schools in the Nsawam municipality.

As a case study, the research was bounded by time and activity, and the researcher collected detailed information using a variety of data collection procedures over a sustained period (Creswell, 2014). The Case study in this research helped collect data from public and private schools to assess their performance, deduce multifaceted factors that influence their academic performance during BECE, and further strengthen what is already known concerning public JHS. BECE results from 2009 to 2019 for the 48 schools in the municipal capital were collected quantitatively.

3.4 Data Analysis

Data were analysed using Microsoft Excel and the Statistical Package for Social Sciences (SPSS) by illustrating the relevant information with graphs and charts to make the findings clearer. All quantitative data categorised were edited, coded, and then fed into the computer using SPSS version 20. In addition, data that was captured through observation and written statements was put into themes for analysis. Finally, the data collected from the questionnaires and interview guides were analysed using descriptive statistics (regression analysis, correlation, cross-tabulations, frequencies, mean scores, and percentages).

3.5 Target Population

The study's target population was the 48 Junior High Schools in the Municipal capital that presented candidates for the annual BECE in the 2019 academic year. Both public and private schools presented 2,375 candidates for the BECE examination. For data analysis, mean percentage exam scores in BECE for the past ten years (2009 to 2019) were summed up and divided by the total number of years to get the average performances of the schools to categorise schools into high, average, low, and very low performing schools, respectively. BECE results from 2009 to 2019 were used in analysing school performance. The results showed that 9 out of 48 schools constantly recorded a mean score of 89%, above the general performance score of all schools' results for the district, hence being categorised as high performing schools. On the other hand, the average performing schools were those that at least recorded mean pass rates of 50% to 65% during the ten years, and schools that consistently recorded 40% or below pass rate from 2009 to 2019 were regarded as low performing schools, and their total number was 19.

For this study, all 48 JHS in the municipal capital were selected, and their BECE results were analysed based on scores over the past ten years available in the Nsawam Adoagyiri Educational Directorate. According to scholars like Arnold and Matus (2000), "in the event

of a researcher experiencing multiple cases with a similar variation in a target population, what is required to avoid bias is to lay out the dimensions along which each case varies and then examine at least one example of each type of case". Regarding this analogy, the JHS schools in the municipality were categorised as High performing, Average performing, and Low performing schools.

The target population used for this study was all school Heads of both public and private schools, four (4) core subject teachers from each school, and 316 BECE graduates from the selected public schools. The core subject teachers who participated in the study were obtained from the education directorate office, whereas graduates were selected from the class registers. Therefore, the estimated population for the study of these schools was 533 respondents, comprising 48 Head-teachers, 196 core subject teachers, and 316 JHS graduates. In total, 316 students were interviewed from the public schools, while 102 were interviewed from the private schools. Out of the top 9 schools in the municipality, 5 are public schools ranking 1st, 2nd, 4th, 7th, and 9th, with the remaining 4 being private schools in the 2019 BECE results as observed from data from Municipal Education Directorate Annual BECE Report, 2019.

3.6 Sampling Techniques

In research design, population target refers to the larger group of interest from which the researcher selects respondents to participate in the research, representing the sample (Gravetter & Forzano, 2018). For this study, a sample of 48 out of 73 schools was selected, covering 32 public and 16 private JHS located within the Nsawam Municipal Capital. The study adopted quantitative method sampling strategies in the selection of sample sizes. Purposive sampling is a non-random procedure that does not require a set number of informants or theories (Lewis & Sheppard, 2006). The study focused on only the relevant

knowledge and selected people who, by their knowledge and experience, could and were willing to provide the information. It is a cautious collection of informants because of the individual's qualities (Bernard, 2002; Lewis & Sheppard, 2006). This sampling method was used to collect data from the Education Directorate, Head-teachers, and Core Subject teachers at the selected schools in the municipality. The Education Directorate (GES) is in charge and responsible for all formal education, and therefore, they are the institutions that have in-depth knowledge in the area in terms of education, hence the need to purposely sample respondents from them for data collection. Convenience sampling is a non-probability sampling method where the sample is taken based on an easy-to-contact group of people (Babbie, 1990, as cited in Creswell, 2009). Convenience sampling was used because most of the graduates were not available.

For both sets, the study focused on the four (4) core subjects per school, English, Mathematics, Integrated Science, and Social Studies. The determining pass to get placement through the CSSPS into Senior High School for every candidate in the BECE is to pass all four core subjects, including any other two from the remaining five out of six subjects; hence, core subject teachers were targeted. The field data produced 160 out of 192 core subject teachers. Sixty-six (66) teachers from the private schools answered the questionnaires, and ninety-four (94) teachers from public schools responded to the questionnaires for the study.

3.7 Sample Size Determination

Sample size determination is a critical aspect of quantitative method research as it ensures the adequacy of data. In quantitative method research, researchers aim to provide a comprehensive understanding of the research problem (Creswell & Plano Clark, 2003). Determining the sample size in quantitative research involves several considerations and methods to ensure that the sample adequately represents the population of interest while balancing practical constraints such as time,

budget, and resources. Here are some common methods used to determine sample size (Teddlie & Tashakkori, 2009).

In quantitative method research, researchers can use different strategies to determine the sample size for each component.

On the other hand, for the quantitative component, researchers use established statistical methods to determine the sample size, such as power analysis. Power analysis takes into account factors like the desired level of statistical power, significance level, effect size, and expected variability in the data (Cohen, 1988). By conducting a power analysis, researchers can estimate the required sample size to detect significant effects in their quantitative data.

The use of quantitative data research method offers the opportunity for triangulation, validation, and corroboration of findings, enhancing the overall rigour and trustworthiness of the study (Creswell & Plano Clark, 2018). Therefore, the determination of an appropriate sample size in quantitative method research is crucial to ensuring the study's ability to address research questions comprehensively and draw meaningful conclusions. There are also diverse opinions on the suitable number of respondents required in research incorporating quantitative method to draw meaningful conclusions and generalise them carefully.

In determining the sample size, the total number of students who were presented and sat for the 2019 BECE examination was used as the sample frame. One thousand five hundred and twenty-six (1,526) students sat for BECE exams in public schools, and eight hundred and twenty-six (826) for private schools were presented in the municipality. The sample frames for the study were taken from the list of registered candidates. The sample size for the study is determined using the statistical formula proposed by Yamane (1967). This formula is widely used for sample size determination in research studies.

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

Where:

n = Sample size

N = Sample frame

α = margin of error

Thus, using the formula to calculate the sample size for JHS students, the sample frame for public schools was 1526, and for private schools, it was 826 at the time of the research. This resulted in a sample size of 399 for both public and private schools, making the total sample size for the study 798 respondents.

3.8 Sample Techniques

The sampling techniques used in data collection per respondent group is presented in Table 1 below.

Table 1: Sampling Techniques Used for Data Collection from Participants

Units of analysis	Sampling Technique	Definition
Public and Private School students	Convenience sampling	Easily accessible students who completed the 2019 BECE exams.
Education Directorate	Purposive sampling	Based on their positions and knowledge of the issues under study, the Director of Education, the Basic School Coordinator, and the Head of Monitoring and Supervision were interviewed.
Head Teachers of selected schools	Purposive sampling	All 48 Head-teachers at the selected schools in the municipal capital.
Core Subject teachers	Purposive sampling	The four core subject teachers in each school were equally interviewed.

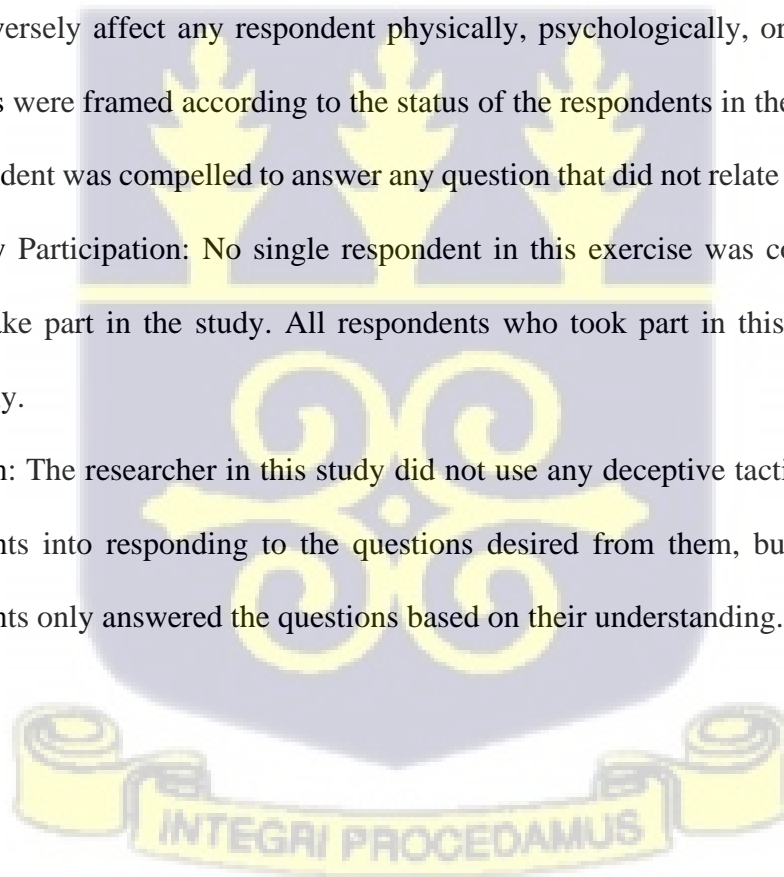
Source: Author's Construct, 2019.

3.9 Ethical Consideration

The ethical considerations for this academic research were determined in accordance with the University's research guidelines. The study was conducted with the voluntary

participation of participants, ensuring their confidentiality and anonymity, as emphasised by Creswell (2014). This approach fostered a sense of trust and confidence among the participants, leading to positive responses. Furthermore, proper acknowledgment was given to information obtained from other sources through the use of citations and references to maintain academic integrity. The following were strictly complied with during the research:

- **Anonymity and Confidentiality:** All the study participants were assured of the confidential information they were ready to give to the researcher. The confidential issues included the protection of the respondent's identity and the information given to the researcher.
- **No harm to the participants:** The researcher in this study did not do anything that could adversely affect any respondent physically, psychologically, or emotionally. Questions were framed according to the status of the respondents in the study. Thus, no respondent was compelled to answer any question that did not relate to him or her.
- **Voluntary Participation:** No single respondent in this exercise was coerced in any way to take part in the study. All respondents who took part in this study did so voluntarily.
- **Deception:** The researcher in this study did not use any deceptive tactics to lure the respondents into responding to the questions desired from them, but instead, the respondents only answered the questions based on their understanding.



CHAPTER FOUR

4.0 DATA PRESENTATION

4.1 Introduction

This section presents the results of a study that aimed to assess the performance disparity between public and private Junior High Schools (JHS) in the Nsawam Adoagyiri Municipality. The study involved collecting primary data from 232 school pupils (BECE graduates), 58 Head-teachers, and 290 core subject teachers in both public and private JHS. Questionnaires were administered to teachers and pupils, while interviews were conducted with Head-teachers and other stakeholders from the education directorate. The data included academic performance records from the Municipal Education Office for the years 2009 to 2019. Descriptive statistics and multiple regression analysis were used to analyse the data and test the hypotheses. The findings obtained through in-depth interviews and data analysis provided valuable insights into the factors affecting academic performance in the Municipality and supported the study's argument.

4.2 Socio-Demographic Characteristics of Respondents

The study delves into a comprehensive exploration of the academic performance disparities between public and private junior high schools in the Nsawam Municipality. A crucial foundation for understanding these differences lies in examining the socio-demographic characteristics of the study's respondents. This introduction aims to provide a synopsis of the socio-demographic profile of the participants, including teachers, students, and headteachers. These characteristics encompass gender distribution, age groups, educational levels, teaching experience, and years of headship.

Through this examination, the study seeks to uncover how these socio-demographic variables interplay with academic outcomes and educational practices. The socio-demographic

characteristics offer insights into the diversity within the respondent groups, allowing for a nuanced analysis of how various factors influence educational performance and management strategies in public and private schools. By understanding the backgrounds and experiences of teachers, students, and headteachers, the research endeavours to provide a comprehensive context for interpreting the subsequent findings regarding school performance disparities.

4.2.1 Socio-Demographic Characteristics of Respondents - Students

Table 2 presents a comprehensive overview of the socio-demographic characteristics of the student respondents, categorized based on various variables. These characteristics provide crucial insights into the composition of the student sample and serve as a foundation for understanding the dynamics influencing academic performance in public and private junior high schools.

4.2.1.1 Sex Distribution:

The distribution of students by sex shows a slightly higher percentage of males at 53.02% compared to females at 46.98%. This gender distribution ensures a balanced representation of both sexes in the sample, allowing for a comprehensive analysis of academic performance disparities across genders.

4.2.1.2 Age Groups:

Students are categorized into different age groups. Those below 12 years comprise a small proportion at 1.89%, while the majority fall within the 13-15 age range (64.78%). The age groups of 16-18 and 19 & above make up 31.45% and 1.89% respectively. This age distribution captures the range of ages typically associated with junior high school students and ensures a diverse representation for the study.

4.2.1.3 JHS Category:

In terms of the junior high school category, majority of students (60.34%) come from private schools, while 39.66% are from public schools. This distribution ensures a significant representation of students from both types of schools, allowing for a comprehensive comparison

of academic performance and its underlying factors.

4.2.1.4 Parents' Level of Education:

The education level of students' parents provides insights into their socio-economic background.

A notable proportion of parents have attained tertiary education (32.7%), followed by those with JHS (23.9%) and SHS (19.5%) education. The diversity in parental education levels enables the research to consider socio-economic factors that may influence academic performance.

Overall, Table 2 offers a comprehensive snapshot of the participating students' socio-demographic characteristics, ensuring a diverse and representative sample that encompasses various age groups, gender distributions, parental education levels, and school categories. This diverse representation serves as a robust foundation for analysing the factors contributing to academic performance disparities in the context of the Nsawam Municipality's educational landscape. It underscores the research's commitment to capturing a comprehensive understanding of the student factors influencing academic performance in both public and private schools.

Table 2: Socio-Demographic Characteristics of Respondents - Students

GROUPINGS	VARIABLES	FREQUENCY	PERCENTAGE
Sex	Male	123	53.02
	Female	109	46.98
	Total	232	100
Age Groups	below 12	16	1.89
	13 -15	123	64.78
	16 – 18	68	31.45
	19 & above	25	1.89
	Total	232	100
JHS Category	Public	92	39.66
	Private	140	60.34
	Total	232	100
Parents Level of Education	No Formal Education	69	5.66
	Primary	42	18.24
	JHS	48	23.9
	SHS	37	19.5
	Tertiary	36	32.7
	TOTAL	232	100

Source: Data (Field questionnaire)

4.2.2 Socio-Demographic Characteristics of Respondents – Teachers

Table 3 presents a comprehensive overview of the socio-demographic characteristics of the teachers who participated in the research study, categorizing them based on various variables. These characteristics provide crucial insights into the composition of the teacher sample and serve as a foundation for understanding the dynamics influencing academic performance in public and private junior high schools.

4.2.2.1 Sex Distribution:

The distribution of teachers by sex reveals a relatively balanced representation, with 54.5% being female and 45.5% male. This gender parity suggests a diverse sample, which is essential for capturing a holistic perspective on the research topic. A well-balanced gender distribution contributes to a comprehensive understanding of teaching practices and their impact on student outcomes.

4.2.2.2 Category of JHS:

In terms of the category of Junior High Schools, most teachers (60.34%) came from public schools, while 39.66% are from private schools. This distribution ensures a fair representation of both school types, enabling a comparative analysis of teaching practices and academic performance across the two sectors.

4.2.2.3 Category of Teachers:

The division between trained and untrained teachers stands at 83.45% and 16.55%, respectively. This distribution reflects a predominantly trained teacher population, which is essential for assessing the role of teacher training in shaping teaching methodologies and subsequently influencing student achievements.

4.2.2.4 Educational Level:

The educational level of the teachers further diversifies the sample. Teachers with postgraduate degrees constitute 15.27%, those with first degrees make up 45.34%, and those with

Diploma/Higher National Diploma and WASSCE represent 28.37% and 11.02%, respectively.

This variation in educational background enriches the research by encompassing teachers with different levels of academic qualifications and their potential impact on teaching practices.

Overall, Table 3 offers a comprehensive snapshot of the participating teachers' socio-demographic characteristics, ensuring a well-rounded and diverse sample that is representative of both public and private schools, various educational levels, and different degrees of training. This diverse representation serves as a robust foundation for analysing teaching practices, teacher motivation, and their implications on student academic achievements. It underscores the research's commitment to capturing a comprehensive understanding of the factors contributing to academic performance disparities in the context of the Nsawam Municipality's educational landscape.

Table 3: Socio-Demographic Characteristics of Respondents – Teachers

GROUPINGS	VARIABLES	FREQUENCY	PERCENTAGE
Sex	Male	132	45.5
	Female	158	54.5
	Total	290	100
Category of JHS	Public	175	60.34
	Private	115	39.66
	Total	290	100
Category of Teachers	Trained	242	83.45
	Untrained	48	16.55
	Total	290	100
Educational Level	Postgraduate	44	15.27
	First Degree	132	45.34
	Diploma/HND	82	28.37
	WASSCE	32	11.02
	Total	290	100

Source: Data (Field questionnaire)

4.2.3 Characteristics of Respondent - Headteachers

Table 4 provides an insightful summary of the characteristics of the respondent headteachers, focusing on their teaching experience and years of headship. These variables play a significant role in shaping the leadership and management qualities of headteachers, which in turn can influence the overall performance and educational environment of schools.

4.2.3.1 Core Teacher Experience (Years):

The distribution of headteachers based on their prior teaching experience is quite balanced across different ranges. The largest proportion of headteachers falls within the experience range of 6 to 10 years (31.47%), closely followed by those with 11 to 15 years of teaching experience (28.01%). Headteachers with 1 to 5 years of experience constitute 22.41%, while those with 16 years and above make up 18.11%. This distribution ensures representation from both relatively newer and more seasoned educators, allowing for a comprehensive understanding of how prior teaching experience may influence their leadership strategies and decisions.

4.2.3.2 Years of Headship:

The distribution of headteachers based on their years of headship showcases a diverse range of leadership tenures. Headteachers with 1 to 5 years of headship experience comprise 36.21%, making it the largest group. The group with 6 to 10 years of headship accounts for 31.03%, followed by those with 11 to 15 years (18.97%), and 16 years and above (13.79%). This distribution captures a wide range of leadership experience among headteachers, enabling the research to explore how varying levels of headship experience may relate to school performance and management approaches.

The information provided in Table 4 aids in understanding how teaching experience and years of headship might contribute to the leadership effectiveness and management practices of headteachers. By considering these characteristics, the research gains deeper insights into how headteachers' leadership qualities intersect with school performance, helping to establish a more comprehensive understanding of the factors influencing the academic outcomes of both public

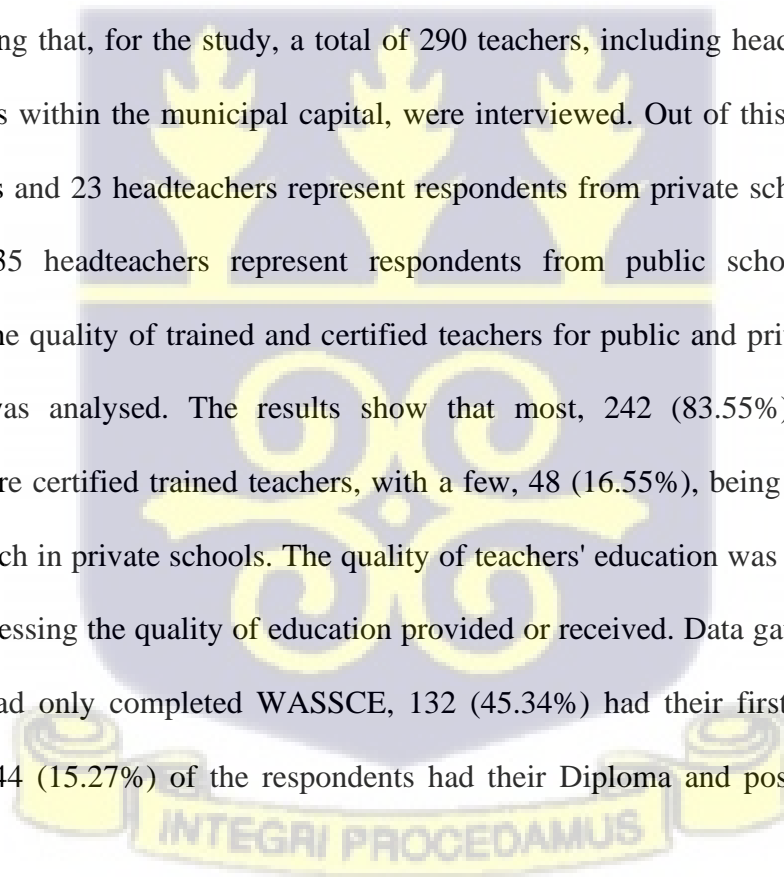
and private schools.

Table 4: Characteristics of Respondent – Headteachers

GROUPINGS	VARIABLES	FREQUENCY	PERCENTAGE
Core Teacher Experience (Years)	1 – 5	70	22.41
	6 – 10	93	31.47
	11 – 15	75	28.01
	16 & above	52	18.11
	TOTAL	290	100
Years of Headship	1 – 5	21	36.21
	6 – 10	18	31.03
	11 – 15	11	18.97
	16 & above	8	13.79
	TOTAL	58	100

Source: Data (Field questionnaire)

It is worth noting that, for the study, a total of 290 teachers, including headteachers of the 58 selected schools within the municipal capital, were interviewed. Out of this number, 119 core subject teachers and 23 headteachers represent respondents from private schools, whereas 175 teachers and 35 headteachers represent respondents from public schools, totalling 290 respondents. The quality of trained and certified teachers for public and private schools in the municipality was analysed. The results show that most, 242 (83.55%), of the teachers interviewed were certified trained teachers, with a few, 48 (16.55%), being untrained teachers who mainly teach in private schools. The quality of teachers' education was equally relevant to the study in assessing the quality of education provided or received. Data gathered showed that 32 (11.02%) had only completed WASSCE, 132 (45.34%) had their first degree, while 82 (28.37%) and 44 (15.27%) of the respondents had their Diploma and postgraduate degrees, respectively.



4.3 District Performance of JHS Graduates in BECE from 2009-2019

It is important to note that in Ghana, during BECE, eighteen (18) subjects are administered, out of which each candidate is expected to sit for a maximum of ten (10) subjects. A candidate is deemed to have passed the BECE if he/she has passed in six (6) subjects, including the four (4) major core courses; English, Mathematics, Integrated Science, and Social Studies (Ebow & Anokye, 2014).

In this examination, all candidates are tested in four core subjects and four to five elective subjects. Ebow and Anokye (2014) state that the Computerised School Selection and Placement System (CSSPS) utilises a minimum of six subjects to select all candidates for placement into various second-cycle institutions, while candidates may choose any other two subjects in which they performed well in the BECE. Many schools in Ghana run between eight and ten (8–10) subjects. These subjects range from: Mathematics, English Language Basic/Integrated Science, Agricultural Science, Physical Education, Introductory Technology, Social Studies, Religious Studies, Business Studies, Ghanaian Language, ICT, French, Civic Education, Home Economics, and Culture & Creative Arts. Most private schools offer more subjects compared to their public-school counterparts.

For better comprehension and fair analysis of any disparities in academic performance between private and public schools, the study adopted the BECE result for only the core subjects over the period of study. The average performance of Junior High Schools in the municipality was calculated for the ten years of study using the BECE scores of each school. To answer the research question (1), the study sought to compare both public and private schools' performance for the selected -10-year period to have an in-depth understanding of the trends in academic performance of both public and private schools within the Municipality.

4.4 General Performance Trends in BECE of Public and Private Schools from 2009 - 2019

The study also presented the performance of pupils in BECE in the municipality. The details are shown in Table 5. From the table, it is possible to observe the general performance trends in the Basic Education Certificate Examination (BECE) from 2009 to 2019. The table presents data on the number of students who passed and failed the BECE in each year, along with the corresponding percentages.

Additionally, it provides the District's overall performance for each year. The distribution of the annual average performance of Junior High Schools within the Nsawam Municipality who presented candidates for the BECE examination from 2009 to 2019, as against public and private junior high schools within the same municipality, is highlighted in Table 5. Over the ten-year period, an average of 61 schools registered to write the BECE. A glance at Table 5 below shows that private schools, on average, perform better than public schools, with a 10-percentage point difference.

4.4.1 Pass and Fail Rates:

Table 5 also shows the number of students who passed and failed the BECE each year. The pass rate is calculated by dividing the number of students who passed by the total number of students who took the examination. The number of students who pass the BECE has generally increased over the years. In 2009, the pass rate was 87.90%, and it gradually increased to a peak of 89.85% in 2019. Whereas the fail rate is calculated by dividing the number of students who failed by the total number of students. Conversely, the number of students who failed the BECE has shown a decreasing trend. In 2009, the fail rate was 12.10%, and it decreased to a low of 10.15% in both 2018 and 2019.

4.4.2 District Performance Mean:

In addition, Table 5 also provides the district's overall performance mean for each year, which represents the average performance of all students who took the BECE in the district. The district's overall performance mean, which represents the average performance of all schools in

the district, has fluctuated over the years. It ranged from a low of 64.15 in 2012 to a high of 90.15 in 2018. However, it generally remained above 70, indicating a relatively good performance level throughout the years.

Notably, 2014 and 2018 were exceptional years in terms of overall performance. In 2014, 86.78% of students passed the BECE, and the district performance mean reached 88.25, the highest among the years listed. Similarly, in 2018, 89.70% of students passed, and the district performance mean peaked at 90.15. The district performance mean ranges from a low of 64.15 in 2012 to a high of 90.15 in 2018. The performance mean appears to show an increasing trend over the years, indicating an improvement in overall academic performance in the district.

4.4.3 District Performance Mean:

Overall, the table suggests that the district's performance in the BECE has generally improved from 2009 to 2019, with higher pass rates and lower fail rates. However, some variations in performance are evident between different years, with notable peaks in 2014 and 2018. These trends can serve as a basis for further analysis and discussions to identify factors contributing to the variations in performance and to develop strategies for continuous improvement.

It is worth noting that the total number of candidates who took the BECE from 2009 to 2019 were 20,990 (17,385 passed, and 3,605 failed), as indicated by the sum of pass and fail numbers across all years. The district performance mean also indicates a positive trend, signifying an overall enhancement in academic performance.

The data gathered for the district performance shows trend in the 10 years based on the proportion of pupils who passed from 2009 to 2019. For the ten-year study period, 2019 recorded the highest percentage of pupils who passed the BECE (89.85%). Thus, on a year-by-year basis, private schools may not be seen as doing well, but cumulatively, there is a considerable improvement.

This serves as a point of interest for future policy interventions by policymakers.

Table 5: General performance in BECE from 2009 to 2019

Year	Pass (%)	Fail (%)	District Performance (Mean)
2009	973 (87.90)	134 (12.10)	70.5
2010	1381 (74.25)	479 (25.75)	71.35
2011	1584 (78.77)	427 (21.23)	69.95
2012	1606 (76.22)	501 (23.78)	64.15
2013	1262 (79.17)	332 (20.83)	76.05
2014	1575 (86.78)	240 (13.22)	88.25
2015	1518 (82.28)	327 (17.72)	82.55
2016	1695 (81.65)	381 (18.35)	83.55
2017	1723 (84.30)	321 (15.70)	85.4
2018	1934 (89.70)	222 (10.15)	90.15
2019	2134 (89.85)	241 (10.15)	89.9
Total	17385	3605	

Source: Data (Nsawam Education Directorate)

Table 5 represents the performance trends in the Basic Education Certificate Examination (BECE) from 2009 to 2019 in terms of pass and fail percentages, as well as the district's mean performance. The pass percentage fluctuated during this period, ranging from a low of 74.25% in 2010 to a high of 89.85% in 2019. Over the years, there is an overall increasing trend in the pass percentage. This indicates an improvement in the number of students passing the BECE. Conversely, the fail percentage varied from 10.15% in 2018 and 2019 to 25.75% in 2010. The failure percentage showed an overall decreasing trend, indicating a reduction in the number of students failing the BECE.

The district's mean performance shows some fluctuations but generally improved over the years, with the highest mean score of 90.15 in 2018. The district's mean performance suggests an enhancement in the overall academic performance of students in the district. The overall trend in this data suggests a positive trajectory in student performance on the BECE over the years. There is a significant improvement in both pass rates and district mean performance, coupled with a decrease in fail rates.

It would be valuable to investigate the factors contributing to the improved performance trends, such as changes in teaching methods, curriculum enhancements, or educational policies. Additionally, examining the reasons behind the fluctuations observed in certain years could

provide insights into areas needing further attention and improvement.

A T-test was run to confirm the existing variance in the academic performance between public and private schools. The T-test was used to determine whether or not to accept the null hypothesis. The research hypothesis aims to establish the disparities between public and private school performance.

Table 6 presents the results of the T-test analysis comparing the average performance of public and private schools from 2009 to 2019.

Hypothesis I (H0: There is no disparity between public and private school performance;

H1: There is a disparity between public and private school performance):

The t-test results indicate that the t Stat value is -2.2. The p-value for a one-tailed test is 0.02, and for a two-tailed test, it is 0.04. Both p-values are less than the significance level ($\alpha = 0.05$). Additionally, the t Stat value (-2.2) is smaller than the critical values for both one-tailed (t Critical = 1.72) and two-tailed (t Critical = 2.09) tests. Therefore, we reject the null hypothesis (H0) and accept the alternative hypothesis (H1). The results suggest that there is a statistically significant disparity between public and private school performance in the municipality.

The t-test analysis supports Hypothesis I, indicating that there is a significant disparity between public and private school performance in the municipality.

Table 6: T-test: Assuming equal variances in the average performance of private and public schools from 2009 to 2019

Variables	Public School Performance	Private School Performance
Mean	74.57	83.94
Variance	149.99	49.4
Observations	11	11
Pooled Variance	99.69	
Hypothesised Difference	Mean	0
Df	20	
t Stat	-2.2	
P(T<=t) one-tail	0.02	
t Critical one-tail	1.72	
P(T<=t) two-tail	0.04	
t Critical two-tail	2.09	

Source: Data (Nsawam Education Directorate)

4.5 Trends in BECE Performance Based on School Category

Table 7 presents the trends in BECE performance based on school category (private schools and public schools) over the years from 2009 to 2019. The table provides the number of students (N) in each category, the percentage of students who passed and failed the BECE, and the corresponding counts for each year.

Private schools consistently showed higher pass rates compared to public schools throughout the study period. In 2009, 99.27% of students from private schools passed the BECE, with no reported failures. Although the pass rate slightly declined in some years (e.g., 2015 with 70.26%), private schools maintained relatively high pass rates, reaching 84.10% in 2019. The number of students in private schools increased over the years, suggesting a growing enrolment in these institutions.

Public schools had lower pass rates compared to private schools in most years, but they showed improvements over time. In 2009, 84.17% of students from public schools passed the BECE, with 15.83% failing. Public schools saw fluctuations in their pass rates over the years. For instance, in 2013, the pass rate was 76.73%, but it increased to 90.29% in 2018. Notably, public schools made substantial progress in 2019, with an impressive pass rate of 93.05% and only 6.96% of students failing.

The results in Table 7 show that almost three times the number of pupils who sat for BECE from 2009 to 2019 were from public schools. In 2009, for example, a total of 1,1078 candidates sat for the examination from public schools, as against 273 pupils from private schools. In 2019, out of the 2,375 candidates presented for BECE in the Municipality, 849 were from private schools, whereas 1526 were from public schools. The trend in performance was overturned in favour of public schools after a decline from 2010 to 2013. By 2014, BECE results looked quite good, and in the case of the public schools, even much better. Even though performance improved generally for both public and private

schools from 2014 to 2019, after a significant improvement in performance output, the public schools outperformed the private schools.

Table 7: Trends in BECE performance based on school category.

Year	PRIVATE SCHOOLS			PUBLIC SCHOOLS		
	N	Pass (%)	Fail (%)	N[1]	Pass (%) ²	Fail (%) ³
2009	273	271 (99.27)	0 (0.00)	834	702 (84.17)	132 (15.83)
2010	466	410 (87.98)	54 (11.59)	1394	971 (69.66)	423 (30.34)
2011	521	486 (93.28)	35 (6.72)	1490	1098 (73.69)	402 (26.98)
2012	529	431 (81.47)	98 (18.53)	1578	1175 (74.46)	403 (25.54)
2013	580	484 (83.45)	96 (16.55)	1014	778 (76.73)	236 (23.27)
2014	475	413 (86.95)	62 (13.05)	1340	1162 (86.72)	178 (13.28)
2015	538	378 (70.26)	160 (29.74)	1307	1140 (87.22)	167 (12.78)
2016	657	531 (80.82)	126 (19.18)	1419	1164 (82.03)	255 (17.97)
2017	626	563 (89.94)	63 (10.06)	1418	1160 (81.81)	258 (18.18)
2018	724	641 (88.54)	83 (11.46)	1432	1293 (90.29)	139 (9.71)
2019	849	714 (84.10)	70 (8.24)	1526	1420 (93.05)	106 (6.96)

Source: Field Survey (2019), Percentage in parentheses.

A detailed view of performance trends based on school category (private/public) is shown in Figure 2. The data clearly indicate that private schools outperformed public schools in terms of BECE pass rates throughout the years under review. Public schools, in particular, have shown significant progress, with a notable increase in pass rates in recent years. The data suggest that educational authorities and policymakers may have implemented strategies to improve academic performance in both school categories, leading to positive outcomes. The increasing pass rates in public schools may reflect efforts to enhance teaching and learning methods, curriculum development, and educational support systems.

It was also observed that in private schools, the proportion of candidates who passed in 2009 was 99.3%; this decreased in 2015 to a pass rate of 70.26%. For students in public schools, the pass rate in 2014 was 86.72%, this increased to 87.22% in 2015. The years 2018 and 2019 saw a major increase in the pass rate of 90.29% and 93.05%, respectively.

While private schools generally maintained higher pass rates, public schools have shown

notable improvements over the years, narrowing the performance gap and significantly overtaking private schools in the last 2 years. The data highlight the importance of continuous efforts to enhance educational quality and outcomes for students in both school categories as can be seen from Table 7 above.

Figure 2: Academic performance of private and public schools from 2009 – 2019

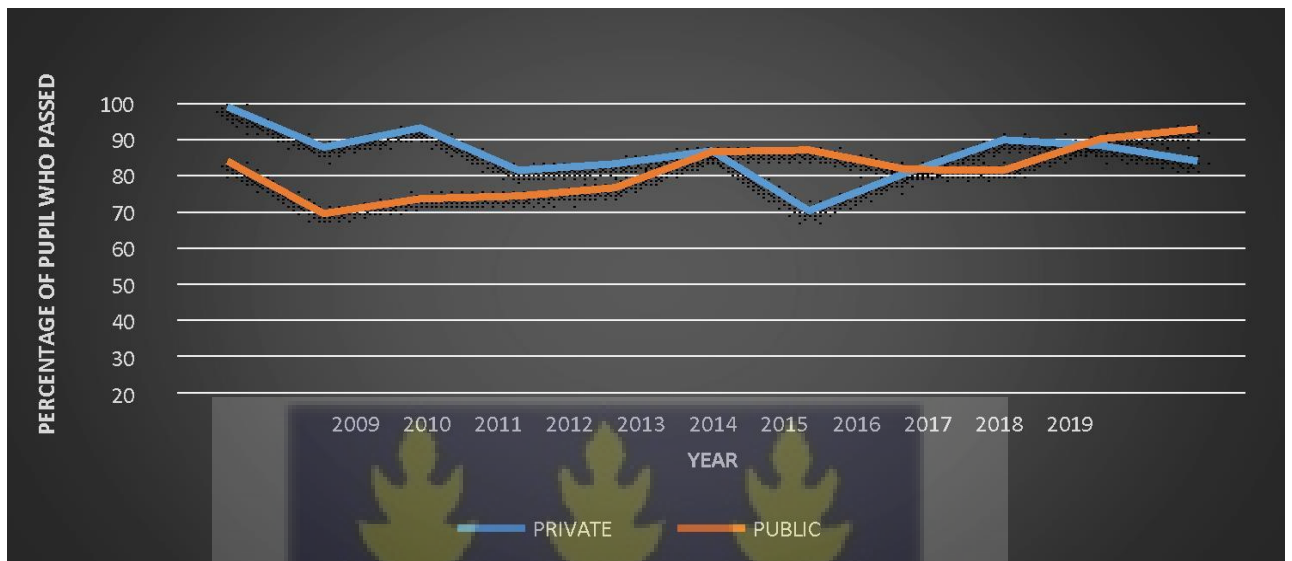


Figure 2 shows the academic performance in the Municipality for both private and public schools, over time.

4.6 School Performance Grading in the Nsawam Municipality

At the end of every academic year, the Municipal education office runs a BECE analysis to determine the overall municipal performance in the region. Schools, based on the scores of students, are categorised into Grade A (Very High performing schools), B (High performing schools), C (Average performing schools) and D (Low performing schools). The schools are graded based on candidates BECE results for 61 public and private JHSs in all the Nsawam Municipal Assembly.

For easy analysis of the schools' performance over the years, the schools were divided into four categories based on the total average performance of public and private schools over the ten years. Each quadrant was based on a class interval of 25 using their percentage score. The district performance category was first calculated, and it was observed in each of the quadrants presented that the performance of schools declined in

increasing order of the quadrants presented (Nsawam Education Directorate). Schools in the first category are the least performing schools that register as low as 0% during BECE, as shown in Table 8.

Table 8: School Performance Grading in the Municipality

Performance Category	District Performance	Schools Percentage Score in BECE
Least Performing school	25- Below	3.20
Average Performing School	26 - 50	10.30
High Performing School	51- 75	17.20
Very High Performing School	76-100	69.32
	Total	100

Source: Data (Nsawam Education Directorate)

These analyses are mandated by the Education Strategic Medium Term Development Plan (ESMTDP) on how school performance is graded. The study further categorised public and private schools using the same performance analysis to better comprehend the performance category. It is important to note that, although both public and private schools have the least performing school category, the public schools have a much larger number of schools. 6.2%, representing approximately three schools within the municipality, have fewer than 400 students registered for BECE. On the other hand, the majority fall within the Very High Performing Schools category in the private school category, with 78.79% representing approximately 13 schools. It is also noted that public schools perform equally well as compared to private schools; on these grounds, the performance analysis will determine whether there is a significant level of disparity between public and private academic performance.

Table 9: Percentage of private and public schools under average performance

Performance Category	District	Average Percentage Score Public	Average Percentage Score Private
Least Performing school	25- Below	9.26	0.24
Average Performing School	26- 50	16.69	8.9
High Performing School	51- 75	22.47	12.07
Very High Performing School	76-100	51.58	78.79
TOTAL		100	100

Source: Data (Nsawam Education Directorate)

BECE is the terminal exam for basic education, which all pupils in JHS 3 take every year to qualify for second-cycle education in Ghana. The District BECE League Table (DLT) is a tool that gives an overall assessment of social development in Ghana by ranking all 216 districts. As shown in Table 9, the performance of schools within the country/region/district helps inform stakeholders in education on what interventions are required to support the least performing schools. Based on these analyses, strategies, methodologies, and interventions to improve performance are developed. Generally, the Municipality has witnessed tremendous improvement in students' performance during the BECE results (District BECE Results Analysis Report, 2019). In the general overview of the average performance in Table 6, the private schools perform much better than their colleagues in public schools. However, a critical look at the individual school's performance postulates otherwise. From the school's performance ranking analysis done every year using Educational Management Information Systems (EMIS), public schools have performed better in the last five years in the Nsawam municipality with four out of the best nine schools being public schools.

4.7 Factors Accounting for Students' Performance

There are numerous factors that either hinder or enhance the academic performance of students in public and private schools. In a study by Etsey et al. (2004) in some schools in Ghana, findings showed that private schools perform much better academically due to intensive and effective supervision of their work. As a result, effective and intensive supervision improves teaching and learning, improving classroom quality and education (Neagley and Evans, 1980). Additionally, the neglect of some teachers and authorities, mainly in public schools, to their duties does not facilitate or promote good learning habits amongst pupils. These teachers abandon their posts at will without permission or proper arrangements for students to attend in their absence; this is mainly due to

inadequate and insufficient supervision by headteachers and circuit supervisors. Also, the inadequate remuneration of teachers cannot be overlooked (Osei, 2006; Fagbamiye, 2000). It is important to note that most public schools painstakingly face many challenges that most private schools, if not all, may not have. Lack of adequate infrastructure, inadequate educational facilities, preliminary reading, and learning material, coupled with large class sizes, are some of the challenges these schools must deal with (Cochran-Smith, 2013). Kraft (1994), for instance, in his research on the ideal class size, discovered that class sizes with over 40 students have adverse effects on students' academic performance. The higher the number of students in a class, the wider the variations in the interests and abilities of pupils, making it close to impossible to control and command attention in class (Okyerefo et al., 2011). All these factors, as mentioned earlier, account for students' high and low academic performance; thus, respondents were asked about the availability or non-availability of some resources to facilitate learning. Some of these factors include, but are not limited to, the library, core subject textbooks, extra tuition at home, and the frequency of assignments and exercises (Table 10). This section of the study throws light on factors that account for students' academic performance in BECE results to address the second research question.

4.7.1 Student access to core textbooks

Table 10: Student access to core textbooks

Students Access to Core Textbooks			
School Category	Yes	No	Total
Private	73(70.35)	19(20.65)	92(100)
Public	86(61.43)	54(38.57)	140(100)
District Total	159(68.53)	73(31.47)	232(100)

N.B. Figures in parentheses represent percentages, while those without parentheses represent absolute numbers.

In Table 10, 159 out of the 232 respondents affirmed that they have access to core subject textbooks, while only 73 indicated they do not have access to core textbooks. Of the 92

student respondents from the private school, 19 representing 8.19% did not have access to these textbooks, and 54 respondents from public schools, representing 23.28%, also did not have access to core textbooks. From the above data, many public schools do not have access to textbooks compared to their private counterparts. In total, 68.53% of respondents had access to core textbooks from both public and private schools. The Headteachers indicated that although the government makes provisions for the core subject textbooks, they are woefully inadequate. Hence, parents are encouraged to get their wards' personal copies for their studies. Most students who answered Yes to the question are those who have individual copies of their core textbooks.

4.7.2 Students' Access to Library other subject Textbooks

Table 11: Students' access to other subject textbooks

School Category	Yes	No	Total
Private	57 (61.96)	35 (38.04)	92(100)
Public	63 (45.00)	77 (55.00)	140(100)
District Total	120 (52.72)	112 (48.28)	232(100)

N.B. Figures in parentheses represent percentages, while those without parentheses represent absolute numbers.

The study sought to observe how many students have access to other subject textbooks and reading materials that could facilitate their learning. It is observed from Table 11 that only 120 respondents, representing 52.72% of respondents, answered Yes; more than half of the students from private schools had access to a private library facility at home. However, 48.28% had no access to a library facility. It is important to note that there is a district/municipal library where learners can go to learn. Again, none of the schools had a library or books for studies and references. Most learners, especially those from public schools, rely heavily on the textbooks provided by the government as their parents cannot afford to buy them.

4.7.3 Students attendance at school

Table 12: Student attendance at school

School Category	3/ 5 days	4/ 5 days	5/5 days	Total
Private	3 (3.26)	32 (34.78)	57 (61.96)	92(100)
Public	33 (23.57)	46 (32.85)	61(29.31)	140(43.57)
District Total	36 (15.52)	78 (33.62)	118 (50.86)	232 (100)

N.B. Figures in parentheses represent percentages, while those without parentheses represent absolute frequencies.

From Table 12, it is observed that most respondents from private schools (61.96%) were present in school all five days, while only three were present in school three out of five days. On the other hand, among the respondents from public schools, 61 students, representing 29.31% of students, were present in school all five days. Also, 33 students, representing 23.75 % of students, were present in school 3 out of 5 days.

Attendance is a vital component of positive academic performance for all students; studies over time have proven that regular and consistent attendance to school has a positive relationship with the academic performance of students, although not much research has been conducted on this topic (Atkinson, 2005; Nyame, 2010). The study, therefore, sought to assess the frequency of student attendance in the Municipality. In Table 12, it can be observed that, on average, students attend school three days out of the five days—absenteeism rates are high amongst students from the public schools.

4.7.4 Frequency at which students are given assignments.

Table 13: Frequency at which students are given assignments.

School Category	Daily	Weekly	Biweekly	Total
Private	62 (67.39)	23 (25.00)	7 (7.61)	92(100)
Public	68 (48.57)	38 (27.14)	34 (24.29)	140(100)
District Total	130 (56.03)	61 (26.29)	41 (17.68)	232 (100)

N.B. Figures in parentheses represent percentages, while those without parenthesis represent absolute numbers.

One-way teachers check for understanding and assess whether learning has taken place is through exercises. Therefore, the study also assessed how often students are given exercises, quizzes, and

class tests to evaluate their quality. It is observed from Table 13 above that sixty-two respondents from private schools reported that they were given assignments daily. On the other hand, only seven respondents said they were given assignments biweekly. Also, sixty-eight respondents from public schools affirmed that they were given assignments daily. However, the rest of the respondents from public schools were given assignments weekly and biweekly.

4.7.5 Availability of Teaching and Learning Resources

Table 14: Availability and Access of Teaching and Learning Resources

School Category	Yes	No	Fairly	Total
Private	9 (7.41)	68 (59.26)	38(33.33)	115 (100)
Public	11 (6.29)	117 (66.67)	47 (26.86)	175 (100)
District Total	20 (6.90)	185 (63.80)	85 (29.30)	290 (100)

Source: field survey; N.B. Figures in parentheses represent percentages, while those without parenthesis represent absolute numbers

The availability of Teaching and learning resources (TLR) in schools is presented in Table 14 above. Notably, most respondents from both private and public schools have limited or no access to TLRs to facilitate the teaching of their students. For example, 62.96% of respondents from both public and private schools responded negatively to having access to TLRs. On the other hand, 31.48% of the private and public schools responded that they had relatively high TLRs. Thus, the items available to teachers may not be enough to facilitate teaching.

4.8 The Impact of Teachers Quality on Students' Performance

The quality of teachers in schools reflects highly on their performance, which plays a vital role in students' performance, and this cannot be underrated. Thus, two hundred and ninety core subject teachers were interviewed. The questions were focused on their academic and professional qualifications, levels of supervision, and classroom management strategies. Most teaching staff from both public and private schools have the prerequisite minimum qualification to teach the Basic School curriculum. Teachers were asked if they had received formal training as teachers and if they had been given some professional development training to keep them

abreast of new pedagogical approaches to integrate into their lesson delivery. Again, their years of teaching experience were important to know if long term experiences in-service impacted the learning outcomes and subsequently the performance of learners.

The study found that inputs and activities such as the integration of cross-cutting issues like Gender Equality and Social Inclusion (GESI) responsiveness, the use of Information and Communication Technology (ICT), communication, and 21st century skills were not incorporated into the lessons. Teachers indicated that they have institutionalised in-service-training to discuss challenging topics and share ideas on how to handle them. Moreover, Non-Governmental Organisations (NGO) and other agencies occasionally provided refresher training, but these were mainly beneficial to project target areas.

However, the study identified challenges regarding professional training for teachers. It was revealed that there was no streamlined system for continuous professional development. The teachers faced difficulties in accessing paid training due to insufficient salaries and a lack of encouraging conditions of service for further studies within the educational system. As a result, only a few teachers were able to pursue further education, and many chose to leave the educational system for other sectors with better conditions of service.

These findings shed light on the need for comprehensive and structured professional development opportunities for teachers in Ghanaian schools to enhance their teaching practices and improve student outcomes. It is essential for educational authorities to address the challenges faced by teachers and provide adequate support to ensure their continuous growth and improvement in the classroom.

4.9 The Role of Headteachers in Students' Academic Performance and years of experience

For many years, educators and policymakers have debated the critical role of school leadership in student success. Among the factors influencing educational outcomes, the experience of school

principals, specifically headteachers, has garnered significant attention. Research has often shown that experienced school leaders are more effective in creating positive school climates, fostering teacher development, and ultimately improving student achievement. However, this relationship may not be as straightforward when comparing public and private school settings. Just as teachers play a fundamental role in students' performance, Headteachers also play a role in students' performance. Headteachers are supposed to play a supervisory role in ensuring academic excellence. Some of these roles include, but are not limited to, the provision of TLRs, supervision of teachers' lesson notes (checking for clarity, relevance, and applicability), providing or organising training for teachers and other workshops to keep teachers abreast of new pedagogical approaches to teaching, providing the most conducive environment for effective teaching and learning, and ensuring that there is a high level of teacher and student relationship, among others.

Table 15: The quality of Headteachers impact on students' performance

CATEGORY	1-5 years of service	6-10 years of service	11-15 years of service	16 years of service & above	TOTAL
PUBLIC	13 (35.14)	12 (32.43)	7 (18.92)	5 (13.51)	37(100)
PRIVATE	8 (38.10)	6 (28.75)	4 (19.04)	3 (14.28)	21(100)
DISTRICT	21 (36.21)	18(22.34)	11(16.07)	8 (13.79)	58(100)

N.B. Figures in parentheses represent percentages, while those without parentheses represent absolute numbers.

Fifty-eight Headteachers were interviewed from the Nsawam municipality. Again, concerning the number of years of headship, 21 (36.21%) of respondents had been Head-teachers between 1 and 5 years, and 18 (31.03%) had been Headteachers between 6 and 10 years. However, just a few (19, or 32.76%) had been Headteachers between 11 and 15 years and 16 years and above. From table 15 above, public schools have long served headteachers as compared to private school.

The role of a headteacher has evolved with changes in educational paradigms. Traditional teaching methods have given way to more innovative and student-centred approaches. In some

cases, highly experienced headteachers may resist these changes, which can hinder academic performance. Over time, headteachers accumulate experience in making crucial decisions for their schools. These decisions can impact resource allocation, teacher quality, and overall school effectiveness, thereby influencing academic performance. The effectiveness of headteachers depends not only on their experience but also on their leadership style. Even experienced headteachers might not contribute to improved academic performance if their leadership is autocratic or uninspiring. It is worth noting that, the role of headteachers' years of experience is an important factor in academic performance, but it is only one piece of the puzzle. While experienced headteachers bring knowledge and leadership skills, other variables, such as their adaptability, leadership style, and the resources availability in the school, are equally significant. Additionally, the impact of experience may vary between public and private schools due to differences in available resources and autonomy. Therefore, a nuanced and holistic approach is necessary to understand the dichotomy between headteachers' experience and academic performance.

4.10 Correlation Analysis of Factors Affecting Academic Performance

The correlation matrix displays the correlation coefficients among selected variables in a research study. The matrix is used in testing the hypothesis of this study to determine whether there is any academic disparity in the performance of public and private schools during BECE. This objective aims to identify the causal factors that positively or negatively impact performance in the Municipality in either Public or Private schools, or perhaps both. Correlation coefficients always range between -1 and +1. +1 means a perfect, positive relationship. 0.00 implies no relationship, whereas -1 represents a perfect negative relationship. The correlation coefficient determines the measure of the direction, and the number refers to the strength of the relationship between each variable and academic performance (Munro, 2005).

A correlation matrix is utilised to depict the correlation coefficients among the selected variables

in the study. This matrix is used to test the hypotheses of the research, which explore the potential discrepancies in academic performance between public and private schools, and whether relationships exist between independent variables and academic outcomes. The objective is to identify factors that positively or negatively affect academic performance and contribute to the educational landscape, specifically within the Municipality.

The study adopts a quantitative, non-experimental approach to analyse the impact of various identified variables on academic performance. The correlation analysis, presented in Table 16 below, delves into the relationships and their significance levels. Notably, all selected variables were assessed, including parents' level of education, student participation in class, learning environment conditions, teaching and resource material adequacy, student attendance, engagement in economic activities, truancy, and parents' economic backgrounds. The correlation was run at a significance level of 0.05 and 0.01. The strength of the values shows a positive relationship and a higher degree of association. The parent's level of education has a strong positive relationship to academic performance at a significance level of 0.01.

There is a negative relationship between the non-conducive learning environment and academic performance at the 0.01 level. Therefore, we reject the null hypothesis and accept the alternate hypothesis that a difference exists between public and private schools. This implies that a well-furnished school environment has some level of influence on how the children perform academically. Schools without proper classroom structures, furniture, and a balanced compound may not perform very well.

Again, the study looked at Inadequate Teaching Resources and Materials (TRMs). Teaching in the abstract impedes the complete comprehension and practicality of the lessons delivered. The availability of TRMs helps augment the new Standardised Curriculum that focuses on child-centred and activity-based learning to improve learning. From the matrix, it can be observed that inadequate TRMs have a negative relationship to academic performance at the 0.01 significance level.

Attendance at school is countered as a critical element in attaining academic success. (Moonie et al., 2008). In the study, the researcher sought to analyse any correlation between absenteeism and academic success. It is observed that Pearson's correlation is at -0.532 with a probability of 0.035, which is less than 5% (0.05). Thus, there is a positive relationship between regular attendance at class and higher academic achievements.

Educationally, truancy is a source of concern because non-attendees have a habit of falling behind in their work, and their behaviour in the case of disruptive truants affects other students, teachers, and themselves. Psychologically, it is a characteristic of students with insecurities in academics and low self-esteem. These conditions may result in more severe conditions in later adolescence and adulthood. Sociologically, truancy is linked to multiple adverse home conditions, low social class, and deprivation. Institutionally, truancy suggests disaffection with school (Reid, 1999). From the matrix, truancy has an inverse relationship to academic performance. The Pearson's correlation shows a negative coefficient of -0.678 at a p-value of 0.000. Hence, we reject the null hypothesis that there is no relationship between the academic performance of public and private schools. As students become truant, they lose interest in school and everything academic, which affects their performance and can also lead to school drop-out.

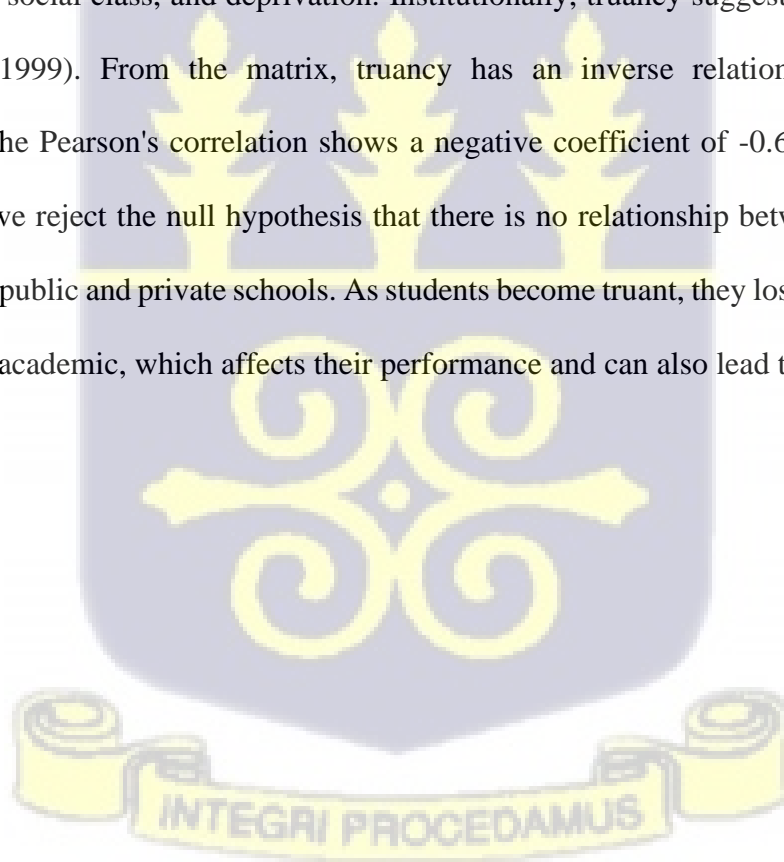
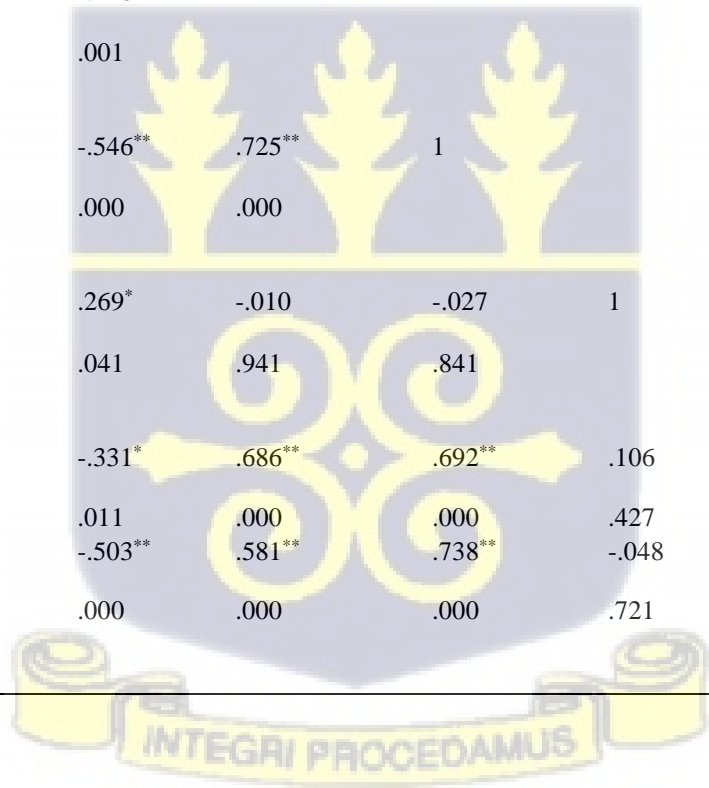


Table 16: Correlation Analysis of factors affecting performance

			BECE SCHOOL PERFORMANCE	Parents level of education	The non-conductive learning environment	Inadequate /No TRMs	Students' regular attendance	Engagement of students in economic activities	Truancy students in
BECE SCHOOL PERFORMANCE	Pearson Correlation Sig. (2-tailed)	1							
Parent's level of education	Pearson Correlation Sig. (2-tailed)	.707**	.000	1					
The non-conductive learning environment	Pearson Correlation Sig. (2-tailed)	-.616**	.000	-.428**	1				
Inadequate/No TRMs	Pearson Correlation Sig. (2-tailed)	-.577**	.000	-.546**	.725**	1			
Students' regular attendance	Pearson Correlation Sig. (2-tailed)	.532	.032	.269*	-.010	-.027	1		
Engagement of students in economic activities	Pearson Correlation Sig. (2-tailed)	-.525**	.000	-.331*	.686**	.692**	.106	1	
Student Truancy	Pearson Correlation Sig. (2-tailed)	-.678**	.000	-.503**	.581**	.738**	-.048	.611**	1
Student Truancy	Pearson Correlation Sig. (2-tailed)	.000	.000	.000	.000	.000	.721	.000	.000



4.11 Regression Analysis

Correlation analysis was used in the study for a quick and simple summary of the direction and strength of the relationship between the various identified factors and the academic performance of students in the municipality. In short, it was used to measure the relationship between the factors that affect academic performance to allow the researcher to know the association or absence of a relationship between two variables. It also helped to measure the strength of their relationship.

In addition, multiple regression analysis was used to explain how each identified variable affected the dependent variable (academic performance), holding constant the other variables. Thus, independent effects of the variables could be estimated.

Data was collected on Students' attendance, parents' level of education, conducive learning environment, and students' engagement in economic activities, among others, in addition to their academic performance. The four selected factors had a very strong relationship with academic performance from the correlation analysis, which was then used for the regression analysis. The selected factors were treated as independent variables, whereas the overall academic performance was treated as the dependent variable. The regression output assists the researcher in determining the significance of the model to establish whether or not there are differences in the academic performance of public and private schools in the BECE exams. It was also adopted to give backing to and establish the findings from the correlation analysis carried out in the study. The study adopted the multiple Linear Regression Equation.

The Multiple Linear Regression Equation

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n + \epsilon$$

Where Y is the dependent/response variable (BECE Performance)

β = Determines the partial contribution of each independent variable (Parents' level of education, non-conducive environment, inadequate TRM)

X_i = are the independent/explanatory variables

ε = the random error term

The study sought to establish the following hypotheses:

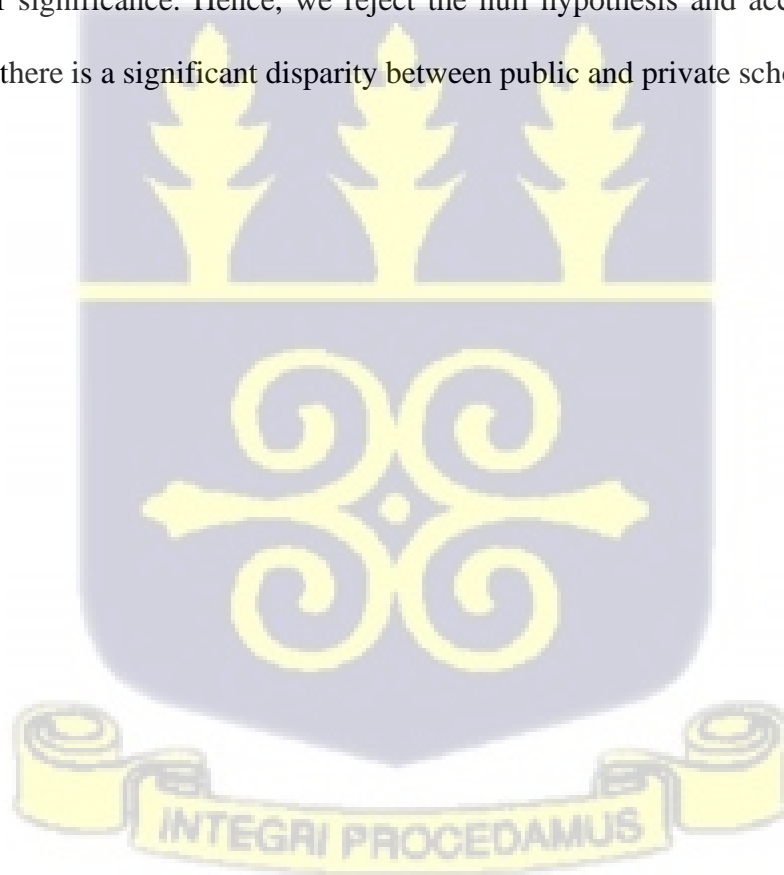
i (H0): There is no significant difference in performance between public and private schools.

ii (H1): There is a significant disparity in performance between public and private schools.

iii (H0): There is no significant relationship between the independent variables and the dependent variable.

iv (H1): There is a significant relationship between the independent variables and the dependent variable.

From Table 17 below, the ANOVA table for the Municipality shows that the model is statistically significant with an F-value of 18.1300 and a P-value of 0.002, which is less than the 1% level of significance. Hence, we reject the null hypothesis and accept the alternate hypothesis that there is a significant disparity between public and private school performance.



CHAPTER FIVE

5.0 DISCUSSION

5.1 Introduction

The study's primary objectives are to examine the difference in academic performance between the private and public schools and to explain the factors that account for this difference between the sixty-one selected public and private schools in Nsawam Adoagyiri Municipality. Several factors that account for the "why" of student academic performance were considered during the study to help identify deficiencies and possible ways to improve them, thereby improving quality in education and academic performance. In the introduction of the study, a comprehensive history of the country's education was discussed. Through literature, it was revealed that there are disparities in the academic performance of public and private primary schools in the country.

BECE results were analysed to compare the percentage pass rates of all selected schools in the Municipality. The top nine schools of each school category with an excellent track record over the last five years showed that public schools performed much better than their private school counterparts in the Municipality. Thus, public schools could perform a lot better if the required conditions were available. A key observation made during the field study was that all the high performing public schools had very good facilities, a conducive environment that fostered learning, a good teacher-pupil ratio, access to TLR, and textbooks, among other things that most public schools did not have. Again, all five of the top public schools were missionary schools with high levels of discipline amongst both staff and pupils. It is of the researcher's opinion that, given the right conditions, students who attend public schools also have a great chance to perform as credibly as their counterparts in the private schools if they put in more effort. The study also focussed on factors such as the educational background of parents/guardians. In the study of the educational background of parents/guardians, it was

realised that a more significant number of parents who completed their education at the technical/secondary school level prefer to take their wards to the public school instead of private school and parents who completed their education at the tertiary level prefer to take their wards to the private schools. For this reason, parents of pupils in the private schools had higher socioeconomic status because they had attained higher education than most parents of pupils in the public schools.

5.2 Academic Performance among Public and Private JHS Graduates.

Though several public schools performed better than some private schools, the entire aggregate performance of private schools was better than the public school. To buttress the findings of Etsey et al. (2004), Akaguri (2011) and Oduro (2000) recounted that private schools perform better than their public counterparts in the BECE. However, some public schools perform better than some private schools; thus, the average performance was ranked and divided into quadrants based on their performance to get a close comparison between the schools. It was observed that the percentage score for all schools in the first quadrant were the same. The differences in percentage scores were observed from the second quadrant through to the last quadrant. This is supported by the findings of a study conducted by the Organization for Economic Co-operation and Development (OECD) where some public schools in Chile perform better or equally well as their private counterparts as is in the case of the Nsawam Municipality in the last five years of the study period.

5.3 Causes of Performance Differences among Public and Private Schools

This study focuses on comparing the academic performance disparities between public and private schools by examining several school-based factors. The aim is to analyse the impact of key educational parameters, such as access to core textbooks, class attendance frequency,

school environment, truancy, and library facilities. The objective is to uncover how these factors contribute to the differences in academic performance between these two types of schools.

It's worth noting that academic performance is influenced by a myriad of factors, and this study acknowledges that there are a lot more variables that also play a role. However, due to constraints, this research specifically focuses on the aforementioned selected factors. These factors were chosen as they are widely recognized as prominent indicators of academic performance on both international and national levels. They are also particularly relevant in various districts and municipalities, including the Nsawam Adoagyiri Municipality in Ghana. While this study doesn't encompass all potential influencing elements, the selected factors offer valuable insights into understanding the performance disparities between public and private schools.

5.3.1 Access to Core Subject Textbooks

On access to core subject textbooks, most respondents from private schools owned copies of core textbooks. Also, a considerable number of students in public schools had access to textbooks. According to DCSF (2004), as mentioned in Ampiah (2008), “learning outcomes depend significantly on textbook supply”, therefore, the academic performance difference between public and private schools may be attributed to more private schools having access to textbooks than public schools in the Nsawam Municipality. This is in line with Ampiah's (2008) findings that “the differences between private and public schools' academic achievement gaps were attributed to the greater availability and use of textbooks in those schools”.

On access to the library, 96% of respondents from private and public schools had no access to library facilities. The findings of a study conducted in Latin America consisting of fifty thousand students in grades three and four found that children whose schools lacked classroom materials and had inadequate libraries were significantly more likely to show lower test scores

and higher-grade repetition than those whose schools were well equipped (Buckland, 2000). The outcome of this study shows that students in Nsawam Municipality have limited or no access to library facilities. According to Lonsdale (2003), in schools with good libraries, students are likely to “perform far better in reading comprehension and use of reference materials than students in schools with little or no library facilities, the provision of library facilities in schools can instil reading habits among the children, leading to positive learning outcomes”. The policy implication of this outcome is that more educational facilities, including libraries, should be provided in the Nsawam Municipality to improve the academic performance of both public and private school pupils.

5.3.2 Students' Attendance and Participation

The frequency at which a child is present in school is a factor that ultimately influences their academic performance (Lonsdale, 2010). Students' regular attendance at school and active class participation are imperative factors that influence their academic performance. Lonsdale, 2010 School Attendance Hypothesis showed that regular attendance at school could help students attain higher academic excellence than those who absent themselves from school. In addition, students need regular school attendance to engage in classroom activities. Nyame, 2010 maintain that regular attendance is encouraged through incessant teacher guidance and enforcement. However, schoolteachers should be diligent in maintaining a daily pupil attendance record for its benefits to be realised. Regular attendance and full participation of students in class discussions, exercises, or quizzes work like a hand in a glove to achieve excellent academic performance. Regular monitoring and supervision of attendance must be done internally by the headteacher and externally by the district supervisor (Circuit supervisor and Head of M&S) of schools as a quality assurance measure (Nsubuga, 2008). There is no doubt that regular attendance is considered a key factor in excellent performance for all students, although astonishingly, very little research has been conducted on this topic

(Atkinson, 2005; Epstein & Shelton, 2002). Epstein and Shelton (2002) noted that reducing the rates of student truancy and excessive absenteeism continued to be a goal of many schools and school divisions. Corville-Smith (1995) asserted that student attendance had received relatively little attention from educational researchers despite a history of concern that adversely affected students' performance. According to the study, most of the public schools in the Nsawam municipality, had a high rate of absenteeism and truancy, with about 40% of students in the public-school system attending school three times a week on average. Some Headteachers lamented that the bane of this is the poor performance of students over the past years. Some extensive efforts have been made to reduce the high truancy rate, according to the Headteachers, but most parents or guardians of such students do not show much commitment, and the parents or guardians are known to engage the children in the markets or farms. Most students with high absenteeism leave with either stepparents or extended families and have little or no choice but to go hawking on market days to compliment the family's earnings. From the correlation analysis, truancy has a negative relationship with the performance of students. It can be concluded that truancy hinders effective learning as it shows a high significance of 0.000 (two-tailed) at 0.001 level. This, in the long run, contributes to the poor academic performance of truants.

5.3.3 Student Engagement in Economic Activity (Child Labor)

The success of life, as presupposed by many, is access to quality education and learning opportunities to attain a good standard of living for oneself and sustainable development for the community. Regrettably, this dream is a fallacy for many innocent children, as their fragile bodies are hauled into early employment in certain activities, which is a barrier to achieving this goal. Basu and Van (1999) explained in their extensions that in recent years, there has been a continued debate on child labour. This study sought to assess the influence of student's engagement in economic activities on the academic performance of JHS students in the

Nsawam Adoagyiri Municipality. The study of this variable out of the lot was to ascertain the resultant effect of child labour practices, which are predominant among most public-school students in the Nsawam municipality, and how they affect this study's objective and subsequently students' academic performance. The study showed a good number of children involved in economic activities among students in Nsawam, including hawking, carrying luggage for money, grazing for money, shopkeeping for money, and doing general manual work. Student engagement in these economic activities is mainly to support themselves through school or compliment the family's income. This practice affects student school attendance and performance in totality, as they are mostly absent from school or too tired to engage in any form of learning. From the Correlation analysis table, this variable has a high negative significant relationship with performance at 0.0001. The adverse effect is detrimental to their performance.

5.3.4 Learning Environment and Facilities

The need for well-trained and qualified teachers cannot be over-emphasized. Largely because lesson delivery is critical to any educational system and no educational institution can rise above the quality of its teachers. This is also coupled with a good structure, proper outlay/infrastructure provision, and a serene environment that facilitates learning. Although the intrinsic abilities of the student account for a much higher percentage of their ability to perform, current knowledge also shows that the school environment can have a significant impact on the academic success and mental wellbeing of the student, contributing to their academic success (Determan et al., 2019). Displaying visual aids, artworks on the walls, and beautifying school compounds drawn from biophilic design and place-identity also play significant roles. Biophilic design is born out of biophilia, the idea that human beings are most comfortable and at ease in physical spaces that resemble the natural world (Determan et al., 2019). The new module observes built and social components of the school environment that

endorse efficiency, performance, and wellbeing and adduces suggestions for best interventions to make the most of student wellbeing and success in and out of the classroom. In the Nsawam Municipality, most private schools and the best public schools have adopted this module and have well-structured facilities, a serene environment, and an elegant compound that fosters excellence.

The frequency at which assignments are given to students is a critical factor influencing their performance. The study's findings showed that 85% of respondents from private and public schools were given daily assignments. However, some students were given assignments weekly and bi-weekly. Whatever the reason, this is not encouraging and does not help improve students' academic performance. This is buttressed by the findings of Oduro (2000), who asserted that the frequency of some teaching and learning elements impacts students' ability to recall all lessons learned in class.

5.3.5 Teachers' Influence on Students' Academic Performance

High levels of educational attainment serve as the measure of an individual's stock of knowledge and capacity, and the more education a person receives, the more knowledge he or she is perceived to possess. Teachers “must have adequate knowledge to be able to impart it to students” (Lonsdale, 2003). A series of factors were considered influential for a teacher to be able to have the desired effect on teaching and learning to improve student performance. Amongst these were the teacher's level of education, pupil-teacher ratio, frequency of class exercises and tests, and availability of teaching resource materials.

5.3.6 Teachers' Level of Education

The need for well-trained and qualified teachers cannot be over-emphasized. This is because lesson delivery is critical to any educational system; no educational institution can rise above the quality of its teachers.

One of the most critical factors in promoting teaching and learning in classrooms is increasing

children's academic performance through teaching and learning resources (Ginsburb 2010). Most of the teachers from both private and public schools reported limited access to TLRs. However, a smaller number of private schools agreed moderately to the availability of TLRs. This implies that the private school teachers did have more teaching and learning resources in their teaching subjects than their public counterparts. The findings of the study are buttressed by a study conducted by Gyan, Mabefam, and Baffoe (2014) on the performance gap between students from the North and South parts of Ghana. In the study, respondents cited limited teaching and learning resources as one of the significant factors that contributed to the poor performance of students at the BECE from the North as compared to their Southern counterparts.

The researcher tasked teachers in this survey with indicating the number of exercises they gave their pupils in a week. The purpose of this was to establish how regularly they teach and evaluate their lessons to ascertain their pupils' academic achievement in both public and private schools. The study revealed that most teachers gave between three to five exercises in a week, and a few more gave about six or more exercises in a week. However, more private school teachers gave their students more assignments than their public counterparts. This finding corroborated Mehmood et al.'s (2012) declaration that formative assessment's impact showed that students assessed by constant formative assessment had higher scores than students who were not. Supporting the same claim, Kimani, Kara, and Njagi (2013), in their study of the relationship between teachers' class activity and students' academic achievement, concluded that there is a significant relationship between regular class exercises and students' academic achievement.

5.3.7 Quality of Teachers

The Ministry of Education in Ghana (MoE) ensures that the best quality teachers are posted to the primary schools to achieve quality education. It is a policy of the Ghana Education Service

(GES) to ensure that only trained teachers are posted to public schools. Teachers at the primary school level have at least a diploma. From the Teachers' demography, all the Public-school teachers are trained, with the least being a diploma certificate, unlike in the private schools where several teachers were just SHS graduates who had been teaching for a year or two. Teacher development is a steppingstone to improving quality education, which has become the focus of education stakeholders in Ghana in recent years. The disparities in performance between public and private schools have widened over the last ten years. Public schools in Ghana have the most trained teachers compared to private schools, which should help improve the quality of education and academic performance. Inversely, the private schools, which have a mix of trained and untrained teachers, perform much better academically. This implies that other factors beyond the quality of teachers impact performance.

5.3.8 Pupil-Teacher Ratio (PTR)

Having a smaller number of children per teacher stimulates greater access to paying attention to each student in the class. This gives the teacher the chance to attend to each student's learning difficulties and assist them. Therefore, the pupil-teacher ratio (PTR) is another critical indicator of quality and efficiency in Ghanaian schools. The prescribed Pupil-Teacher Ratio (PTR) for different education levels in Ghana is notably smaller than conventional norms. At the Kindergarten (K.G.) level, the target PTR is 25:1, at the primary level, it is 35:1, and at the Junior High level, it is 25:1 (UNESCO 2020). However, these ratios have experienced an increase to 50:1, largely attributed to the high enrolment stemming from the Complementary Basic Education (CBE) program. For instance, within the Nsawam educational directorate, PTR ratios for public schools vary between 65:1 and 45:1. On a national scale, the PTR in Ghana currently stands at 51.5:1 (UNESCO 2020), a direct outcome of the Compulsory Basic Education Policy. Unfortunately, the number of trained teachers available is insufficient to adequately cater to the escalating enrolment figures in schools. At the primary level nationwide,

the average PTR is now 45:1, surpassing the stipulated target of 35:1 (UNESCO 2020).

In the context of the Municipality, although the PTR has seen a reduction, it still surpasses the national average, standing at 48:1. Comparatively, at the Junior High level across the nation, the average PTR is 37.4:1. The elevated PTRs present a major challenge, as teachers are unable to allocate sufficient time to address the specific needs of individual students. This predicament is particularly pronounced in public Junior High Schools (JHS). In contrast, private schools maintain a more favourable PTR, averaging 18:1. This lower ratio in private schools enables teachers to provide more personalised attention to students requiring special assistance.

5.3.9 The Role of Headteachers in Student's Performance

At the primary school level, Headteachers are expected to perform several supervisory responsibilities to promote the academic performance of their schools. “These practices, among others, include the provision of learning materials, regular visits to classrooms during the instruction period, vetting of weekly lesson notes, checking pupils’ notebooks and exercise books, as well as motivating teachers and auxiliary workers in the school to give their best for pupils' academic achievements” (Ankomah & Hope, 2011). However, based on the survey's socio-demographic characteristics, only one out of the forty-seven Headteachers in the survey had a WASSCE certificate, and the majority had obtained their first degrees and postgraduate degrees. The observations regarding the qualifications and teaching experience of Headteachers in relation to their leadership roles align with the research conducted by Ankomah and Hope (2011). Ankomah and Hope (2011) reported that Headteachers often possess higher qualifications compared to the teachers they supervise. This finding underscores the potential correlation between educational attainment and leadership positions within educational institutions.

The significance of teaching experience on the effectiveness of Headteachers' leadership roles is highlighted by UNICEF (2009). According to UNICEF (2009), an increase in teaching

experience tends to enhance the impact of Headteachers in their leadership capacities. This connection between teaching experience and effective leadership further substantiates the notion that experience can contribute to the proficiency of educational administrators.

In terms of the tenure of Headteachers in their positions, the majority of those interviewed had been in their roles for 1 to 5 years. This corresponds with the recognition of UNICEF (2009) that many Headteachers have relatively short tenures in their positions. This phenomenon could potentially impact their ability to implement lasting changes and reforms within their schools. The variation in special training for Headteachers before assuming their positions is also in line with the findings of UNICEF (2009). UNICEF's (2009) assertion that only a limited number of Headteachers and administrators in developing countries receive formal training in school leadership functions and this reinforces the idea that professional development opportunities for educational leaders are not consistently provided. Headteachers are often appointed based on the number of years spent in the education service, so it is mainly assumed they have the experience to Head a school (Ankomah & Hope, 2011).

The responses to the question of staff motivation also attracted different responses from the public and private JHS Heads that were surveyed. An additional question on what kind of motivation they were giving to their teachers revealed that most Headteachers affirmed, among others, that words of encouragement, in-service training for staff, provision of snacks, and allowing teachers to organise extra classes are some forms of motivation they give their staff. Again, this aligns with Kadingdi (2004); sometimes, staff motivation is given in other forms aside from monetary benefits.

This study explores the intriguing relationship between the years of experience of headteachers and their influence on the academic performance of students in both public and private schools. While it is commonly assumed that the years of experience are positively correlated with better educational outcomes, this study aims to investigate whether this holds true in diverse

educational settings Brown & Davis (2020).

In both public and private school systems, headteachers play a pivotal role in shaping the educational experience of students. However, the differences in these systems can lead to varying impacts of headteachers' years of experience.

Public Schools:

In the public school system, headteachers often face diverse challenges, including larger student populations, limited resources, and accountability pressures. As a result, headteachers with several years of experience may be better equipped to navigate these challenges, potentially leading to improved academic outcomes. A study by Smith and Johnson (2018) found that in public schools, headteachers with more than a decade of experience were associated with increased student achievement and standardized test scores.

Private Schools:

Private schools often benefit from smaller class sizes, more financial resources, and a highly motivated student body. This unique environment may reduce the influence of headteachers' experience on academic performance. Contrary to public schools, a study conducted by Brown and Davis (2020) found that in private schools, the impact of headteachers' years of experience on academic outcomes was less significant.

To further understand this dichotomy, the paper aims to conduct a comparative analysis of headteachers' years of experience and their impact on academic performance in public and private schools. We will review existing literature, analyse available data, and draw conclusions about the complex relationship between experience and performance in these diverse educational settings Vidoni et al., (2008).

The relationship between headteachers' years of experience and student academic performance is a multifaceted and context-dependent issue. This study recognizes the importance of considering public and private school settings separately Obama et al., (2015). While

headteachers' experience may be a strong predictor of success in public schools, it appears to play a less prominent role in private schools. By examining this dichotomy, we can better tailor leadership development programs and policy initiatives to enhance student outcomes in both sectors.

5.4 Regression Analysis

A regression analysis was done to examine the extent to which each independent variable impacts the level of academic performance for each school category using its coefficient. From the output, the coefficient of the non-conducive school environment is -23.78 for the public school and -4.66 for the private school. This value means that there is a negative relationship between academic performance and a poor school environment. The implications of the analysis reveal that a decrease of one unit in the conducive learning environment is associated with a predicted decrease of approximately -23.7834 units in academic performance for public schools and -4.6552 units for private schools. To assess the significance of this finding, the critical F value and degree of freedom are compared using an F-table, which aids in testing the null hypothesis. This decrease in the conducive learning environment is linked to a decline in the academic performance of students within the school.

Additionally, it's crucial to highlight that the difference in the variable coefficients between public and private schools is notably significant, showing a difference of -19.1282. This points to the fact that public schools encounter more substantial challenges concerning the provision of a conducive learning environment, consequently contributing to the relatively poorer performance of many public schools in the Municipality.

In the context of parental education, the coefficient for public schools is 28.01, while for private schools, it is 29.09. These values indicate a positive correlation between academic performance and the level of education of the parents. Specifically, for every unit increase in parents'

educational attainment, there is a predicted increase of 28.01 units in academic performance for public schools and 29.09 units for private schools. It's noteworthy that the difference in variable coefficients for both school categories is relatively close. This suggests that both public and private schools experience similar positive impacts when parents or guardians possess a certain level of education. A higher level of parental education corresponds to a greater ability to understand and prioritise their children's educational needs, irrespective of the type of school they attend.

5.4.1 Regression Statistics of Municipal Performance

Table 17 below, presents the results of a regression analysis conducted to understand the factors influencing municipal academic performance. The study seeks to ascertain how certain variables impact the overall academic outcomes within the municipality. The following is a summary analysis of the key components of the table:

Regression Statistics: The R Square value of 0.63 suggests that approximately 63% of the variability in municipal performance can be explained by the variables included in the analysis. This signifies a moderately strong relationship between the predictor variables and the academic performance.

ANOVA: The table provides information about the significance of the regression model. The p-value associated with the F-statistic is remarkably low (0.0003), indicating that the model as a whole is statistically significant. In other words, the included variables collectively have a significant impact on the variation in academic performance.

Coefficients: This section presents the coefficients, standard errors, t-statistics, and p-values for each predictor variable. The intercept is 84.95, which is the estimated academic performance when all predictor variables are zero. The positive coefficient for "Parents level of education" (26.59) indicates that higher levels of parental education are associated with improved academic performance.

Non-conducive learning environment: The negative coefficient of -18.95 implies that a non-conducive learning environment has a negative impact on academic performance. This suggests that factors such as classroom conditions or school infrastructure play a role in determining academic outcomes.

Inadequate material resources: The negative coefficient of -9.56 indicates that insufficient material resources also contribute to lower academic performance. This suggests that schools lacking proper resources like textbooks, teaching aids, and equipment might struggle to provide quality education.

Overall, the regression analysis provides insights into how the different factors within the learning environment, such as parental education levels, learning conditions, and material resources, influence the academic performance within the municipality. These findings support the research study's aim to identify key determinants of academic outcomes and offer valuable recommendations for improving the educational environment and enhancing student achievement.

5.4.2 Regression Statistics of Public-school performance

Table 18 below, presents the results of a regression analysis focused on the performance of public schools. This analysis aims to uncover the factors that influence academic achievement specifically within public schools. Here's a concise analysis of the key components of the table:

Regression Statistics: The R Square value of 0.68 indicates that approximately 68% of the variability in public school performance can be explained by the predictor variables in the model. This suggests a reasonably strong relationship between the variables and academic performance within public schools.

ANOVA: The table reveals the overall significance of the regression model. The p-value associated with the F-statistic is very low (0.0001), indicating that the model is statistically significant. This means that the included variables collectively have a substantial impact on the

variation in academic performance in public schools.

Coefficients: This section provides coefficients, standard errors, t-statistics, and p-values for each predictor variable. The intercept is 91.49, which represents the estimated academic performance of public schools when all predictor variables are zero.

Parents level of education: The positive coefficient of 24.77 suggests that higher levels of parental education have a significant positive impact on the academic performance of students in public schools. This underscores the importance of parental education in enhancing student achievement.

Non-conducive learning environment: The negative coefficient of -22.89 indicates that a non-conducive learning environment has a detrimental effect on academic performance within public schools. This emphasizes the significance of a positive and conducive learning environment for student success.

Inadequate material resources: The negative coefficient of -11.67 suggests that insufficient material resources negatively influence academic performance. This underscores the importance of adequate teaching and learning resources for enhancing student outcomes.

The findings of this regression analysis provide valuable insights into the factors that impact academic performance within public schools. The strong influence of parental education, the negative effects of non-conducive learning environments, and the significance of adequate material resources align with the study's research objectives. These results can guide educational policymakers and administrators in developing strategies to improve academic outcomes in public schools, emphasizing the need for supportive learning environments and adequate resources.

5.4.3 Regression Statistic of Private school performance

Table 19 presents the results of a regression analysis focused on the performance of private schools. This analysis aims to uncover the factors that influence academic achievement

specifically within private schools. Here's a succinct analysis of the key elements of the table:

Regression Statistics: The R Square value of 0.57 indicates that approximately 57% of the variability in private school performance can be explained by the predictor variables in the model. This suggests a moderate relationship between the variables and academic performance within private schools.

ANOVA: The table reveals the overall significance of the regression model. The p-value associated with the F-statistic is very low (0.0009), indicating that the model is statistically significant. This means that the included variables collectively have a notable impact on the variation in academic performance in private schools.

Coefficients: This section provides coefficients, standard errors, t-statistics, and p-values for each predictor variable. The intercept is 108.59, which represents the estimated academic performance of private schools when all predictor variables are zero.

Parents level of education: The positive coefficient of 16.60 suggests that higher levels of parental education have a significant positive impact on the academic performance of students in private schools. This underscores the importance of parental education for student achievement, which aligns with similar findings in public schools.

Non-conducive learning environment: The negative coefficient of -19.34 indicates that a non-conducive learning environment has a detrimental effect on academic performance within private schools, similar to the pattern observed in public schools.

Inadequate material resources: The negative coefficient of -17.19 suggests that insufficient material resources negatively influence academic performance in private schools as well, similar to the findings in public schools.

The results of this regression analysis provide insights into the factors affecting academic performance within private schools. The positive impact of parental education, along with the negative effects of non-conducive learning environments and inadequate material resources,

underscores the importance of a supportive learning environment and sufficient resources for achieving academic success in private schools. These findings align with the research study's objectives and can guide educational stakeholders in enhancing academic outcomes in private schools.

It is also important to note that the difference in the variable coefficients for both school categories has a close range. This also indicates that both public and private schools have similar impacts when parents or guardians have a certain level of education. The higher their education, the more they can appreciate and commit to their ward's educational needs. Significantly, most students in the private schools, including the high performing public schools, have parents with higher levels of education, the least being a Higher National Diploma; this can also be attributed to the very high performance of students in the 1st and 2nd quadrant schools in the Municipality.

5.5 Correlation Analysis

Table 16 above, displays the correlation matrix that examines the relationships between various factors affecting BECE performance. Each cell in the table shows the Pearson correlation coefficient between two variables, along with their corresponding significance levels.

Parent's Level of Education and BECE School Performance: There is a strong positive correlation of 0.707 between parents' level of education and BECE school performance. This suggests that students whose parents have higher education tend to perform better in the BECE exams. The correlation is statistically significant ($p < 0.001$).

Non-Conducive Learning Environment and BECE School Performance: There is a strong negative correlation of -0.616 between a non-conducive learning environment and BECE school performance. This implies that students' academic performance tends to be lower in environments that are not conducive to learning. The correlation is statistically significant ($p < 0.001$).

Inadequate/No Teaching Resources and Materials (TRMs) and BECE School

Performance: There is a strong negative correlation of -0.577 between inadequate/no TRMs and BECE school performance. This indicates that schools lacking sufficient teaching and learning resources may experience lower academic performance. The correlation is statistically significant ($p < 0.001$).

Students' Regular Attendance and BECE School Performance: There is a moderate positive correlation of 0.532 between students' regular attendance and BECE school performance. This implies that students who consistently attend school tend to have better BECE performance. The correlation is statistically significant ($p = 0.032$).

Engagement of Students in Economic Activities and BECE School Performance: There is a strong negative correlation of -0.525 between students' engagement in economic activities and BECE school performance. This suggests that students who are extensively engaged in economic activities may experience lower academic performance. The correlation is statistically significant ($p < 0.001$).

Student Truancy and BECE School Performance: There is a strong negative correlation of -0.678 between student truancy and BECE school performance. This implies that students who frequently skip school tend to have lower academic performance. The correlation is statistically significant ($p < 0.001$).

The multiple correlation coefficient for the whole municipality is 0.80, which indicates that the relationship between the dependent and independent variables is positive, with a statistic ranging from a negative one (-1) to a positive one (+1). On the other hand, at the individual category school level, the multiple correlation coefficient of the private school is 0.76, whereas the relationship between the dependent and independent variables of the public-school category is 0.82.

The coefficient of determination, R^2 , is 63.42%. This implies that the independent variables

explain close to 63% of the variation in the dependent variable (BECE Performance), with the Adjusted R-Square being 0.61. The variations in the dependent variable can only be explained by 57.36% of the dependent variables for the private school but explain up to 68.01% of the variation in the public schools. The implication is that, for the public school, the independent variable can explain up to 82%, whereas it only explains 75%, meaning that in the private school, other factors account for the high performance beyond the identified variables used in this study.



Table 17: Municipal Performance

SUMMARY OUTPUT

<i>Regression Statistics</i>								
Multiple R		0.79						
R Square		0.63						
Adjusted R Square		0.61						
Standard Error		14.05						
Observations		58						

ANOVA								
	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	3	18505.51	6168.50	24.21	0.0003			
Residual	54	10671.89	197.63					
Total	57	29177.4						

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	84.95	16.33	5.20	0	52.22	117.68	52.22	117.68
Parents level of education	26.59	4.46	5.96	0	17.65	35.54	17.65	35.54
Non-conductive learning environment	-18.95	4.32	-4.38	0.0001	-27.65	-10.28	-27.61	-10.28
Inadequate material resources	-9.56	4.33	-2.21	0.0317	-18.25	-0.87	-18.25	-0.87

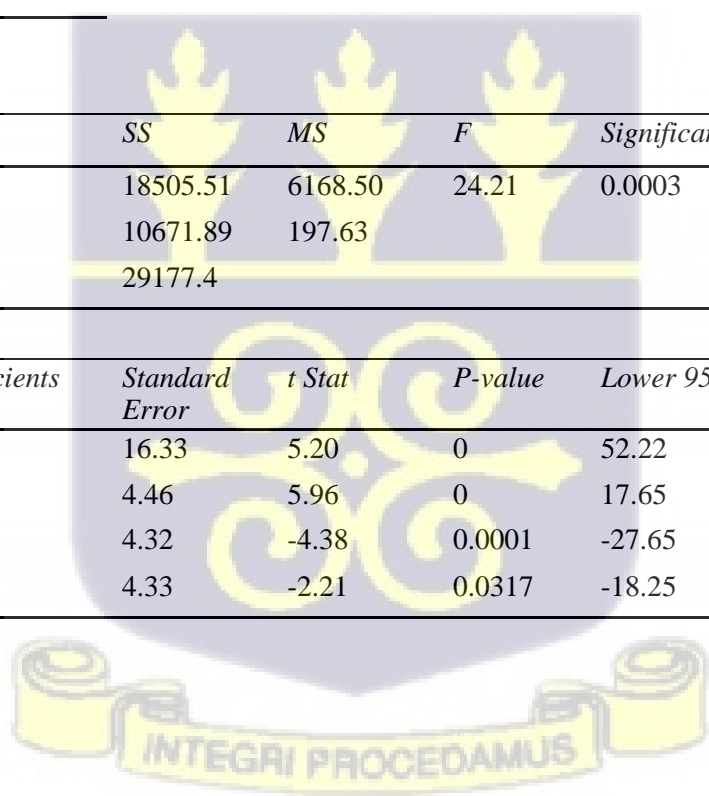


Table 18: Public school performance

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.82
R Square	0.68
Adjusted R Square	0.65
Standard Error	14.42
Observations	35

ANOVA

	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	13706.22	4568.74	21.97	0.0001
Residual	31	6447.32	207.98		
Total	34	20153.54			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	91.49	24.33	3.76	0.0007	41.87	141.10	41.87	141.10
Parents level of education	24.77	5.99	4.14	0.0002	12.56	36.98	12.56	36.98
Non conducive learning environment	-22.89	5.80	-3.95	0.0004	-34.73	-11.05	-34.73	-11.05
Inadequate material resources	-11.67	5.54	-2.10	0.0435	-22.97	-0.36	-22.97	-0.36

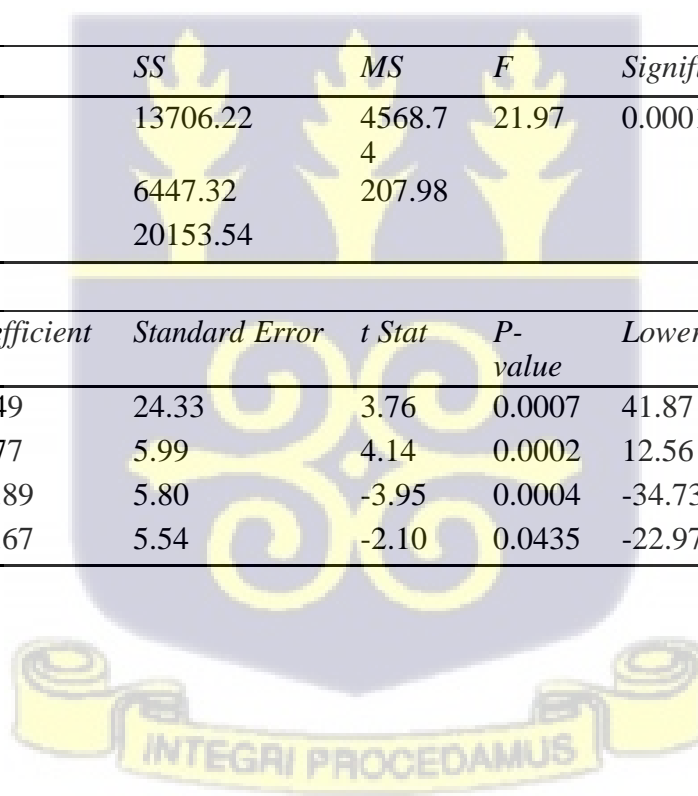


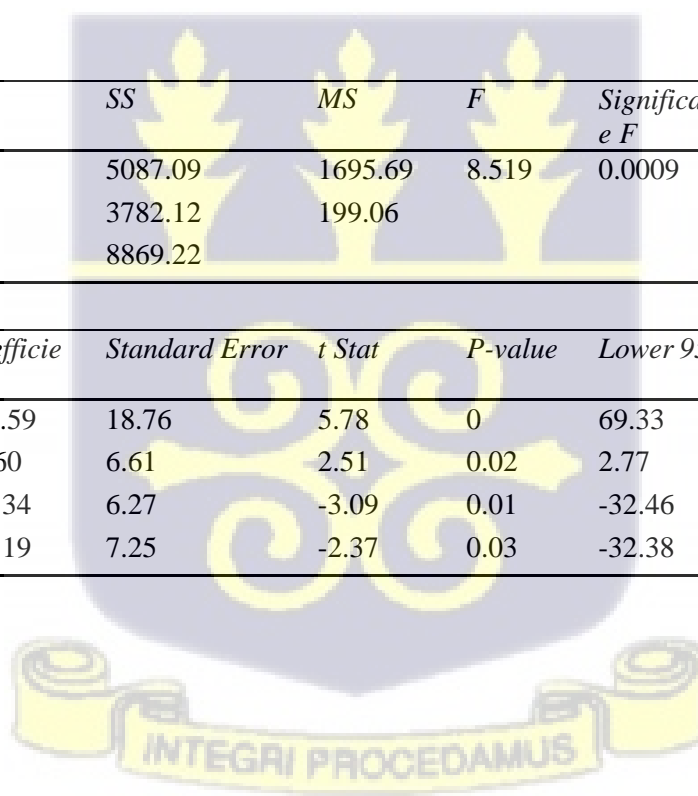
Table 19: Private school performance

SUMMARY OUTPUT

<i>Regression Statistics</i>								
Multiple R		0.76						
R Square		0.57						
Adjusted R Square		0.51						
Standard Error		14.11						
Observations		23						

<i>ANOVA</i>								
	<i>Df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>			
Regression	3	5087.09	1695.69	8.519	0.0009			
Residual	19	3782.12	199.06					
Total	22	8869.22						

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	108.59	18.76	5.78	0	69.33	147.84	69.33	147.84
Parents level of education	16.60	6.61	2.51	0.02	2.77	30.43	2.77	30.43
Non conducive learning environment	-19.34	6.27	-3.09	0.01	-32.46	-6.22	-32.45	-6.21
Inadequate material resources	-17.19	7.25	-2.37	0.03	-32.38	-2.02	-32.38	-2.02



CHAPTER SIX

6.0 Discussion, Conclusions and Recommendations

6.1 Introduction

The pursuit of quality education has always been at the forefront of educational policies and practices worldwide. In the context of the Nsawam Municipality in Ghana, this chapter presents a comprehensive analysis of the academic performance disparities between public and private Junior High Schools (JHS) from 2010 to 2019. Drawing on extensive research and data, the chapter delves into the factors contributing to these discrepancies and proposes recommendations to enhance education delivery for both school sectors.

Education stands as a cornerstone of societal development, empowering individuals and shaping nations. In the Nsawam Municipality, the quest for quality education is a paramount concern, and this chapter sheds light on the intricate dynamics shaping academic achievements within the public and private school domains. The performance variations between these two school types have profound implications for educational policies, resource allocation, and the overall advancement of educational outcomes.

The chapter is structured to provide a comprehensive understanding of the academic performance disparities observed between public and private schools. It begins by examining the academic achievements from 2010 to 2019, highlighting the average performance trends and presenting a foundation for subsequent discussions. Building upon this foundation, the chapter explores the multifaceted factors contributing to the observed differences in academic outcomes. These factors encompass teaching methodologies, access to learning resources, attendance rates, and reading proficiency levels among students.

Beyond understanding the root causes of academic disparities, the chapter delves into the intricate

relationship between teacher motivation and student achievements. It probes into the influence of motivation on teaching practices and, consequently, the impact on students' overall performance.

Access to Core Subject Textbooks and Library Facilities: The availability of core subject textbooks significantly impacts academic performance, with private schools generally having better access than public schools. This finding underscores the importance of resource allocation in enhancing learning outcomes. However, the lack of access to library facilities for both public and private schools is worrying, as it deprives students of valuable resources for independent learning and research.

Students' Attendance and Participation: Regular attendance and active participation in class are crucial for academic success. The high rate of absenteeism and truancy in public schools, attributed to socio-economic factors such as the need for students to engage in economic activities, negatively impacts academic performance. Efforts to address truancy should involve collaboration between schools, parents, and local authorities to create incentives for regular attendance and provide support to vulnerable students.

Engagement in Economic Activities (Child Labor): The prevalence of child labor among students, particularly in public schools, poses a significant barrier to academic achievement. Children engaged in economic activities often experience fatigue and miss school, leading to poor performance. Addressing this issue requires multi-sectoral interventions aimed at reducing poverty, improving access to education, and enforcing child labor laws.

Learning Environment and Facilities: The quality of the learning environment, including infrastructure, visual aids, and teaching resources, influences student performance. Private schools tend to have better-equipped facilities and a conducive learning environment compared to public schools. Improving infrastructure and providing adequate teaching resources in public schools is essential for narrowing the performance gap between the two sectors.

Quality of Teachers: While public schools generally have more trained teachers compared to private

schools, the latter often outperform the former academically. This suggests that factors beyond teacher qualification, such as teaching experience and instructional practices, play a significant role in student achievement. Professional development opportunities for teachers should be prioritized to enhance teaching effectiveness and student learning outcomes.

Pupil-Teacher Ratio (PTR): The pupil-teacher ratio is higher in public schools compared to private schools, limiting the individualized attention that teachers can provide to students. Reducing PTRs in public schools through teacher recruitment and deployment strategies is crucial for improving learning outcomes and enhancing teacher-student interactions.

The Role of Headteachers: Headteachers play a crucial role in shaping the educational experience and academic performance of students. While their years of experience may have a positive impact in public schools, the influence is less pronounced in private schools. Providing leadership training and support to headteachers, particularly in public schools, can enhance their effectiveness in improving student outcomes.

In response to the findings, the chapter culminates with a set of pragmatic policy recommendations aimed at enhancing the quality of education in both public and private schools. These recommendations are meticulously crafted to address resource gaps, optimize teacher motivation, and improve overall learning environments. Each recommendation is underpinned by a solid rationale derived from the research analysis and aligned with the global pursuit of quality education.

Through an amalgamation of data-driven insights, scholarly research, and practical solutions, this chapter endeavours to contribute to the ongoing discourse on educational reform in Ghana. By confronting the disparities in academic performance head-on and proposing actionable recommendations, the chapter seeks to pave the way for a more equitable, empowering, and effective educational landscape in the Nsawam Municipality.

In the subsequent sections, this chapter will intricately dissect the factors that underlie academic

performance differences between public and private schools, analyse the intricate relationship between teacher motivation and student achievements, and conclude with a set of strategic recommendations designed to reshape the educational trajectory in pursuit of excellence for all students.

6.1.1 Difference in Public and Private School Performance in the Nsawam Municipality

The analysis of average academic performance from 2010 to 2019 among JHS graduates reveals a significant discrepancy in achievements between private and public schools within the Nsawam municipality. Notably, private schools exhibited higher academic achievements, with an average performance of 84.23, while their public counterparts achieved an average performance of 76.13. This suggests that private schools consistently outperformed public schools in BECE results during this period.

Various factors contribute to these academic disparities. Private schools demonstrate greater consistency in classroom exercises compared to public schools, possibly due to more internal supervision. Additionally, most private school students have access to four designated core textbooks for JHS, a privilege less common among public school students. This access to learning resources in private schools contributes to enhanced education quality.

The frequency of attendance also differentiates public and private schools. Private school students have high attendance rates (five out of five days), whereas public school attendance is notably lower. This attendance gap may influence overall academic outcomes.

Moreover, a substantial number of students in public schools lack fluent reading skills before entering JHS, which contrasts with the scenario in private schools. This discrepancy may be attributed to limited access to libraries within the Municipality. Thus, improving library access is crucial for enhancing educational outcomes.

6.1.2 The implications for policymakers are clear: public schools require increased educational resources, including textbooks, teaching materials, and library facilities, to achieve equitable learning

outcomes. Bridging the gap in educational resources can contribute to realizing the goal of free compulsory universal basic education in Ghana and promoting equal educational opportunities.

6.1.3 Influence of Teacher Motivation on Pupils' Academic Achievements

The data indicates that both private and public-school teachers lack motivation beyond their monthly salaries, leading to overall dissatisfaction. However, private school teachers report better access to teaching materials, reflecting greater intrinsic satisfaction. This intrinsic motivation might positively impact students' academic achievements. Although this study couldn't establish a direct statistical link between teacher motivation and student performance, Schieb and Karabenick (2011) suggest that teacher motivation influences classroom instruction, ultimately affecting student achievements.

To address this, policymakers should prioritize creating conducive working environments for teachers, including competitive salaries, bonuses, and well-equipped facilities. Such efforts can positively impact teaching quality and consequently enhance students' academic achievements.

6.2 Policy Recommendations

To enhance quality education delivery in public and private schools in the Nsawam Municipality and beyond, the following policy recommendations are suggested:

6.2.1 Provision of Resources: The government must urgently provide schools with necessary teaching and learning resources, including classrooms, libraries, textbooks, computers, and teaching aids. These resources are essential for effective learning and improved academic performance.

6.2.2 Increased Instructional Time: Focus should be placed on extending instructional time, particularly at the Junior High School level, to meet quality standards and ensure enhanced teacher supervision.

6.2.3 Enhance Access to Educational Resources: Governments and education stakeholders should prioritize the provision of core subject textbooks and library facilities in both public and private schools to support students' learning needs.

6.2.4 Address Truancy and Child Labor: Interventions aimed at reducing truancy and child labor should be implemented, including awareness campaigns, social support programs, and enforcement of child labour laws.

6.2.5 Improve Learning Environments: Investments should be made to improve infrastructure, visual aids, and teaching resources in public schools to create a conducive learning environment that fosters academic achievement.

6.2.6 Invest in Teacher Training: Continuous professional development programs should be provided to teachers to enhance their pedagogical skills, instructional practices, and classroom management techniques.

6.2.7 Reduce Pupil-Teacher Ratios: Efforts should be made to reduce PTRs in public schools through teacher recruitment, deployment, and retention strategies to improve teacher-student interactions and academic performance.

6.2.8 Support School Leadership: Headteachers should receive leadership training and ongoing support to enhance their effectiveness in promoting student achievement and fostering a positive school culture.

6.2.9 Enhanced Supervision and Accountability: The Ghana Education Service (GES) should intensify supervision through metropolitan directorates and circuit supervisors to enhance accountability among teachers. Headteachers should ensure regular exercises for pupils after lessons to improve their learning and academic achievements.

In conclusion, these recommendations collectively strive to enhance the quality of education across both public and private schools in the Nsawam Municipality. By addressing resource disparities, teacher motivation, and effective supervision, policymakers can significantly contribute to narrowing the academic achievement gap and fostering a more equitable educational landscape.

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APPENDIX A

7.0 QUESTIONNAIRES

7.1 A Questionnaire for public and private JHS Graduates

This questionnaire is designed to solicit your views concerning the BECE outcomes of basic education in the Nsawam Municipal. 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 []

Name of your JHS:

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

Parent/Guardian's level of education:

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

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.

Did you attend kindergarten? Yes [] / No []

Did your JHS provide a library for your studies? Yes [] / No []

How will you rate your Mathematical abilities at primary school?

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

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

How many pupils were in your class at the JHS? Choose one among the following:

Less than 30 [] 35 [] 40 [] 45 [] 50above []

Were you able to have your own English and Mathematics textbooks at primary six? Yes [] /No []

How frequent were you in class in JHS?

One day out of five Three days out of five All Five days

How often did your JHS teachers give you class exercises and homework?

Everyday Every week Every month Rarely given

Were you able to have your textbooks in all the four core subjects? That is English, Mathematics, Integrated Science and Social Studies? Yes / No

Did you get extra tuition after school at the JHS three? Yes / No

Who was taking care of your schooling at the JHS?

Father Only Mother Only Both Father and Mother Guardian Other please specify.....

How will you describe the care offered to you by your parent/guardian at the JHS? Excellent Very good Good Average

What are some of the extra activities that your parent/guardian used to involve you after school in JHS?
.....

What was your major challenge of learning at the JHS?

What range of aggregate did you make at the Basic Education Certificate Examination? Choose one among the following:

Aggregate 6 to 9 Aggregate 10 to 15 Aggregate 16 to 20

21 to 30 30 above

Indicate the grades you obtained in the following Core subjects at your BECE:

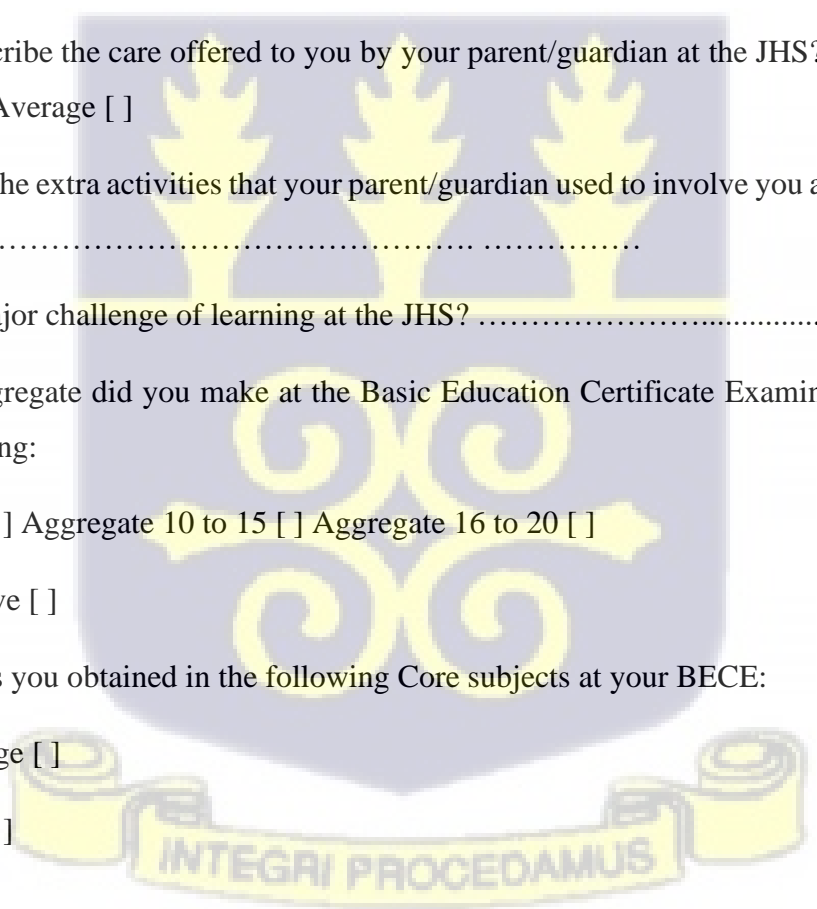
a. English Language

b. Social Studies

c. Mathematics

d. Integrated Science

What was your total aggregate at the BECE?



. Have you gotten placement to SHS? Yes / No

Did you get your first choice of the program? Yes / No

Who is responsible for your shortcomings at the BECE among the following?

My school head My Teachers My Parents Myself

7.2 An Interview Guide for Parents/Guardians

This schedule is designed to solicit your views concerning the BECE outcomes of basic education in the Nsawam Municipal. 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

Name of Your Child JHS:

Category of Child's JHS: Public / Private

Religious affiliation:

Christian Moslem Traditional Other , please state.....

Level of education: None Primary MSLC/JHS Secondary Higher Education

Level of Monthly Income: Less than GH¢ 50 GH¢75 GH¢100 above GH¢100

Kindly provide answers to the following questions as accurately as possible.

1. How many children do you have?

2. Are your children all in school? Yes / No

3. How many children do you have in the following levels in the educational system?

Kindergarten Primary JHS Secondary Tertiary

Choose one among the following responses:

I always gave my ward money to school

I gave my ward food and money to school

I gave my ward money only if I have for school

My ward earns his/her own income

4. Teachers in my ward's JHS constantly invited parents to deliberate on the children's academic performance?

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

5. I was not able to provide all the needs for my child at the JHS?

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

6. The Parent Teacher Association (PTA) of my ward JHS was **not** effective?

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

7. How often did you participate in Parent Teacher Association (PTA) meetings?

Three times a year [] Twice a year [] Once every year [] Never Participated []

8. What activities did you assign to your ward after school at the JHS?

.....

9. Were you able to put up any measure for your child to learn at home after school?

Yes [] / No []

10. If your answer to question ten(10) is ' yes,' indicate some of the measures you put in place to enhance your child's academic achievement:

.....

11. Were you helping your child or getting somebody to help him/her do his/her homework? Yes [] / No []

12. Did you interact with the teachers in respect to knowing how your ward was faring in school? Yes [] / No []

13. Were you able to provide all the core textbooks for your ward? That is English, Mathematics, Integrated Science and Social Studies, Yes [] / No []

14. If you are to blame a single person(s) for poor BECE outcomes, who will that be and why?

15. Are you satisfied with the aggregate your child had at the Basic Education Certificate Examination (BECE)? Yes [] / No []

16. If your answer to question 16 is 'no,' what do you think went wrong?

17. What, in your opinion, will help future candidates to get good results in the Basic Education Certificate Examination (BECE)?

18. What will you do differently if your child were to seat again for the BECE?

Thank you for your attention.



7.3 An Interview Guide for Teachers Teaching Core Subjects in Private and Public JHS

This design is meant to solicit your views concerning the BECE outcomes in the Nsawam Municipal. 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 []

Name of Your JHS:

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

Marital status: single [] married [] divorced [] separated []

Level of Education:

WASSE/SSSE/GCE O'level [] Teacher Cert 'A' [] Diploma/HND []

First Degree [] Postgraduate []

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. Choose among the following categories of responses? I have all the teaching and learning resources in my subject. I strongly agree [] I agree [] I disagree [] I strongly disagree []
5. How many years have you been teaching your current subject? []
6. How many minutes are allocated to a period in your lesson? []
7. How many periods do you teach in a week? []
8. How many exercises do you give your pupils in a week? []
9. There is full cooperation between parents and the teachers in running the school. I strongly agree [] I agree [] I disagree [] I strongly disagree []
10. Are you satisfied with the current level of pupils' performance in your subject? Yes [] / No []
11. If the answer to the question 10 above is 'no,' what in your opinion accounts for the low academic performance of pupils in your subject?

.....

12. Which of these terms best describe your head-teacher?

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

14. The circuit supervisor(s) is too regular to this school

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

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

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

16. Your school is enjoying a cordial relationship with the school community.....

17. I strongly agree [] I agree [] I disagree [] I strongly disagree []

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

19. Very active [] Active [] Inactive [] Very inactive []

20. If you are to blame for the low performance of pupils in BECE in Ta-male, whom will you blame first and why?

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 is your opinion should the government/parents do, apart from the salary increase, 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

The head provides teaching and learning resources for learning.

Visits classroom during the period of teaching and learning

Check pupils' note and exercise books.

Checks teachers weekly lesson notes regularly

27. Most of my students' parents approached the school to ascertain how their wards are faring in class.....

28. I strongly agree [] I agree [] I disagree [] I strongly disagree []

29. What measures are you taking to reverse the poor performance, if any, in the subsequent Basic Education Certificate Examination in your subject?
30. Futures teachers are likely to enjoy more than the current ones.....
31. I strongly agree [] I agree [] I disagree [] I strongly disagree []
32. If you were given a chance to choose another profession, would you choose to teach? Yes [] / No []. If 'no,' why?
33. What are some of the challenges you face as a teacher in both your professional life and as an individual?

****Thank You for Your Time****

7.4 Interview Guide for JHS Head-teachers/ Proprietors

This schedule is designed to solicit your views concerning the BECE outcomes in the Nsawam Municipal. 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 []

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 headed your current school? []
4. Were you given special training before assuming your headship role?

Yes [] / No []

5. What is your opinion constitutes quality education?
.....

6. What specific leadership styles are you putting in place to ensure quality education attainment in your school?

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

Yes [] / No []

8. If your answer to the 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 []

13. The major problem I have with my teachers is

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

14. Parents support me a lot in running the school

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

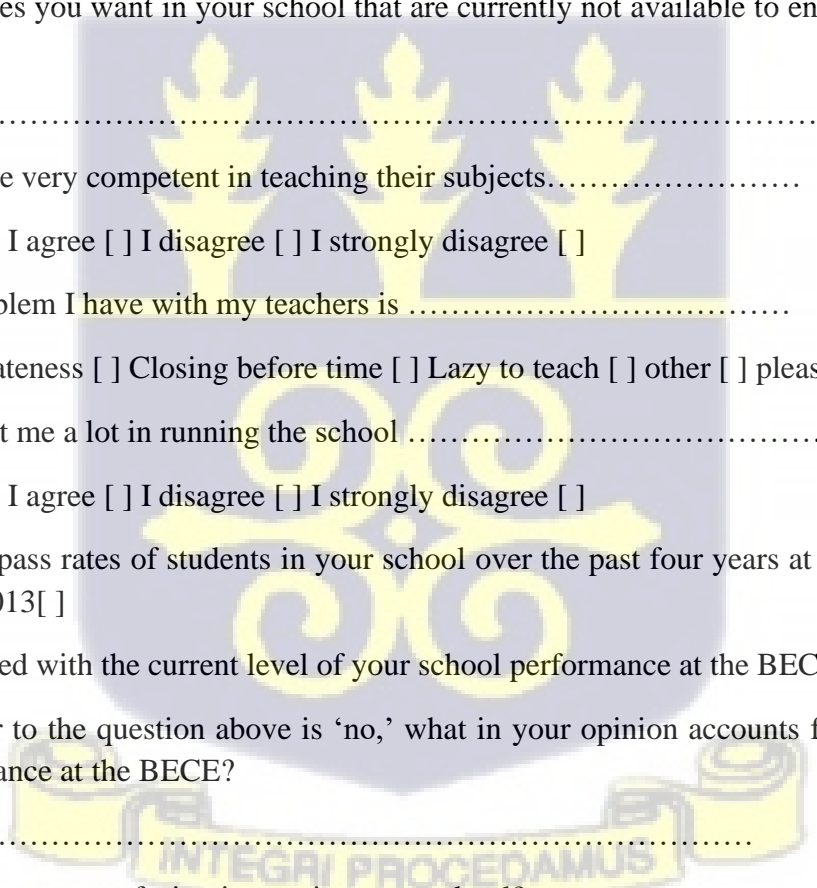
15. What was the pass rates of students in your school over the past four years at the BECE: 2010 []
2011 [] 2012 [] 2013 []

16. Are you satisfied with the current level of your school performance at the BECE? Yes [] / No []

17. If your answer to the 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 style do you use to enhance children academic performance in your school?
.....



20. What were the fees charged for the past four years in your school?

2010 GH¢ [] 2011 GH¢ [] 2012GH¢ [] 2013GH []

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

Attendance rate of pupils: 2010[] 2011[] 2012[] 2013[]

Attendance rate of teachers: 2010[] 2011[] 2012[] 2013[]

Enrolment rate: 2010[] 2011[] 2012[] 2013[]

Dropout rate: 2010[] 2011[] 2012[] 2013[] 108

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

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

22. What are some of the achievements you have acquired in managing your school?

.....

23. How frequently do you supervise your teachers' activities in class per week?

.....

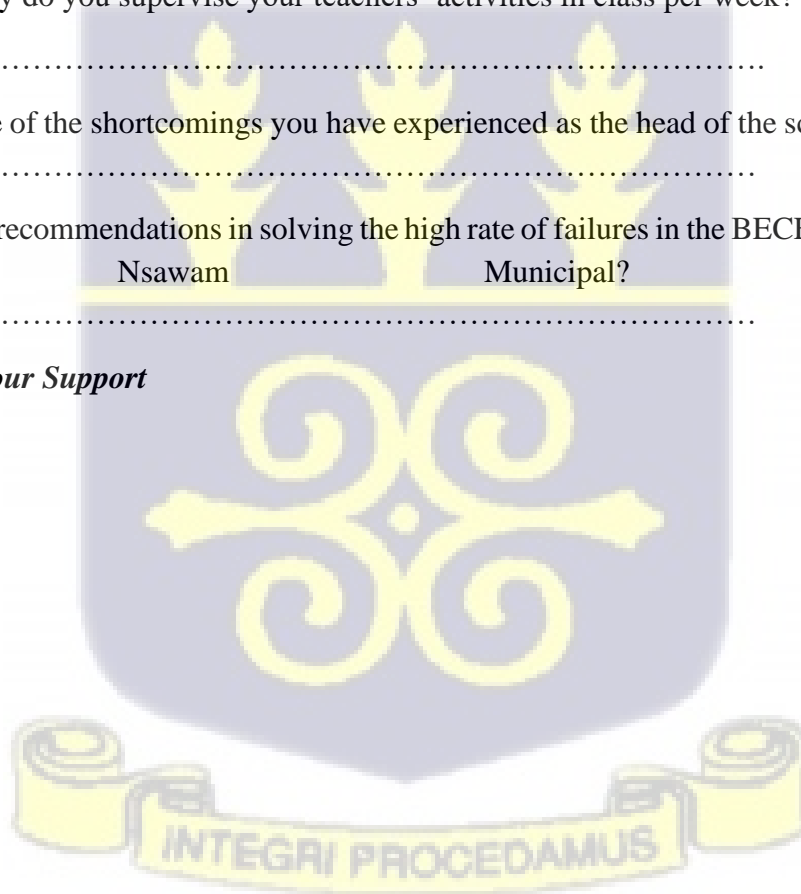
24. What are some of the shortcomings you have experienced as the head of the school over the years?

.....

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

.....

Thank You for Your Support



APPENDIX B

8.0 REGRESSION ANALYSIS

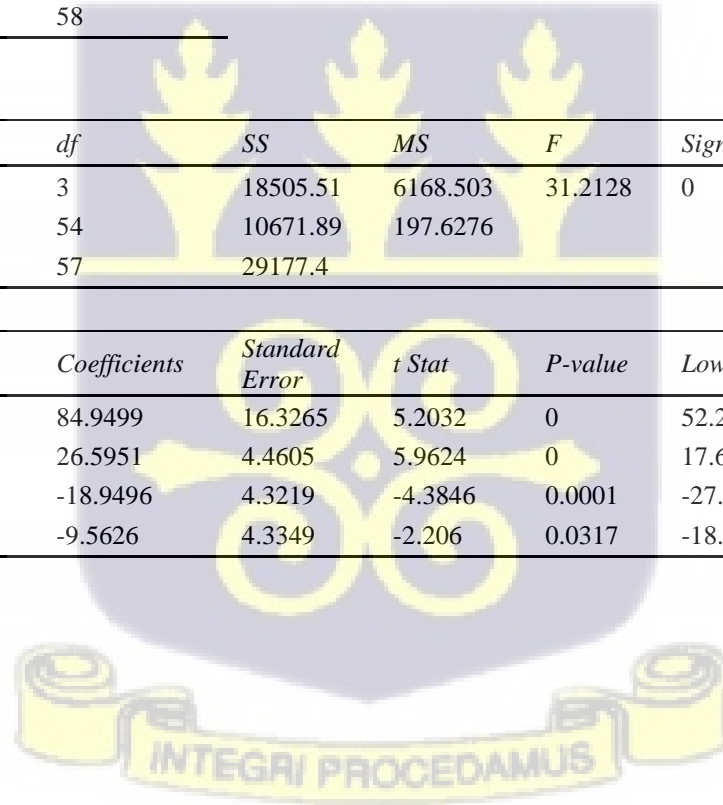
MUNICIPAL PERFORMANCE ANALYSIS

SUMMARY OUTPUT

<i>Regression Statistics</i>								
Multiple R			0.7964					
R Square			0.6342					
Adjusted R Square			0.6139					
Standard Error			14.058					
Observations			58					

<i>ANOVA</i>					
	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	18505.51	6168.503	31.2128	0
Residual	54	10671.89	197.6276		
Total	57	29177.4			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	84.9499	16.3265	5.2032	0	52.2173	117.6826	52.2173	117.6826
parents_level_of_education	26.5951	4.4605	5.9624	0	17.6524	35.5378	17.6524	35.5378
Non_conductive_learning_envirnement	-18.9496	4.3219	-4.3846	0.0001	-27.6145	-10.2847	-27.6145	-10.2847
inadequate_material_resources	-9.5626	4.3349	-2.206	0.0317	-18.2535	-0.8717	-18.2535	-0.8717



PUBLIC SCHOOL PERFORMANCE

SUMMARY OUTPUT

Regression Statistics

Multiple R	0.8247
R Square	0.6801
Adjusted R Square	0.6491
Standard Error	14.4214
Observations	35

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	13706.22	4568.741	21.9674	0.0001
Residual	31	6447.32	207.9781		
Total	34	20153.54			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	91.487	24.3267	3.7607	0.0007	41.8724	141.1018	41.8724	141.1018
parents_level_of_education	24.7724	5.9869	4.1377	0.0002	12.5621	36.9829	12.5621	36.9829
Non_conductive_learning_envirnement	-22.8901	5.803	-3.9445	0.0004	-34.7255	-11.0547	-34.7255	-11.0547
inadequate_material_resources	-11.6655	5.5425	-2.1047	0.0435	-22.9695	-0.3616	-22.9695	-0.3616



PRIVATE SCHOOL PERFORMANCE

SUMMARY OUTPUT

<i>Regression Statistics</i>	
Multiple R	0.7573
R Square	0.5736
Adjusted R Square	0.5062
Standard Error	14.1088
Observations	23

ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	3	5087.094	1695.698	8.5186	0.0009
Residual	19	3782.124	199.0592		
Total	22	8869.217			

	<i>Coefficients</i>	<i>Standard Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	108.5877	18.7561	5.7895	0	69.3307	147.8446	69.3307	147.8446
parents_level_of_education	16.6019	6.6078	2.5125	0.0212	2.7717	30.4321	2.7717	30.4321
Non_conductive_learning_envirnement	-19.3372	6.2673	-3.0854	0.0061	-32.4548	-6.2196	-32.4548	-6.2196
inadequate_material_resources	-17.1995	7.2527	-2.3715	0.0284	-32.3795	-2.0195	-32.3795	-2.0195



