

**AKENTEN APPIAH-MENKA UNIVERSITY OF SKILLS TRAINING AND
ENTREPRENEURIAL DEVELOPMENT**

**COMPARATIVE ANALYSIS OF THE PERFORMANCE OF BECE
GRADUATES FROM PUBLIC AND PRIVATE SCHOOLS AT THE SENIOR
HIGH SCHOOLS IN ATWIMA NWABIAGYA MUNICIPAL**

JOYCELYN BEDIAKO

2023

**AKENTEN APPIAH-MENKA UNIVERSITY OF SKILLS TRAINING AND
ENTREPRENEURIAL DEVELOPMENT**

**COMPARATIVE ANALYSIS OF THE PERFORMANCE OF BECE
GRADUATES FROM PUBLIC AND PRIVATE SCHOOLS AT THE SENIOR
HIGH SCHOOLS IN ATWIMA NWABIAGYA MUNICIPAL**

BY

JOYCELYN BEDIAKO

(7201770044)

A dissertation submitted to the School of Graduate Studies, Akenten Appiah-Menka University of Skills Training and Entrepreneurial Development in partial fulfillment of the requirements for the award of a Master of Arts degree in Educational Leadership.

JULY, 2023

DECLARATION

Candidate's Declaration

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

Candidate's Name: JOYCELYN BEDIAKO

Signature: Date:

Supervisor's Declaration

I hereby declare that the preparation of this dissertation was supervised in Accordance with guidelines of supervision of dissertation laid down by the Akenteng Appiah-Menka University of Skills Training and Entrepreneurial Development.

Supervisor's Name:

Signature: Date:

ABSTRACT

Every nation must have high-quality education to be prosperous. To be able to adapt into the rapidly changing society in which we live, citizens must get education of the highest caliber. The study was set to compare the performance of public and private school candidates in BECE in Atwima Nwabiagya Municipal in Ashanti region. The research employed a descriptive survey design. A sample size of 200 students were selected from two senior high schools within the study area for the study using simple random sampling method. This work employed the use of questionnaires and performances of students in BECE and at the SHS level as the main data collection method to obtain data for the study. The information obtained from both sources were analyzed using descriptive and inferential statistics. The findings of the study indicated that the performance of private school candidates was better than the performance of public school candidates in BECE, the performance of students from Public Junior High Schools was better than the performance of students from Private Junior High Schools at the senior high school level and the factors influencing the performance of students from public and private school at the senior high school level were teacher factors, student characteristics and home based factors. It was recommended that, there should be conscious efforts by all stakeholders in the educational sector to improve the conditions of the public basic schools towards academic performance and there should be provision of adequate resources in all public basic schools to enhance effective teaching and learning towards improving academic performance.

ACKNOWLEDGMENTS

Thanks be to God for all that he has accomplished. First and foremost, I want to thank the Almighty God for guiding me during the composition of this research paper.

I am incredibly grateful to my supervisor, Dr. Theresa D. Lawer, for her constructive criticism, perceptive advice, and valuable time she spent with me despite her busy schedule. I also acknowledge the enormous contributions made by all of my lecturers in the department of educational leadership to the successful completion of my one-year program. I also want to express my gratitude to the headmasters and employees of Nkawie SHTS and Toase SHS for their support and help throughout the study in a variety of ways.

Last but not least, I want to express my gratitude to my husband, Mr. Moses Amo, for his time and help in putting this work together as well as to my entire family for their moral and spiritual support and collaboration throughout my time of study.

DEDICATION

This work is dedicated in the first place to God Almighty for his wisdom and protection during my one year master's program. Additionally, my devoted husband, Moses Amo, and our children, Adom, Nhyira, Yaw, and Aseda are honored in this dedication.

TABLE OF CONTENT

TITLE PAGE	
DECLARATION	ii
ABSTRACT.....	iii
ACKNOWLEDGMENTS	iv
DEDICATION.....	v
TABLE OF CONTENT	vi
TITLE PAGE	vi
LIST OF TABLES.....	x
CHAPTER ONE	1
INTRODUCTION	1
1.0 Introduction.....	1
1.1 Background to the Study.....	1
1.2 Statement of Problem.....	3
1.3 Objectives of the Study	4
1.4 Research Questions	4
1.5 Significance of the Study	5
1.6 Scope of the Study.....	6
1.7 Limitations of the Study.....	6
1.8 Organization of Study	7
CHAPTER TWO	8
LITERATURE REVIEW	8

2.0 Introduction	8
2.1 The Concept of Basic Education in Ghana	8
2.2 Basic Education Certificate Examination (BECE) in Ghana	10
2.3 The Concept of Secondary Education in Ghana	11
2.4 Determinants of Quality Education.....	13
2.4.1 Teacher Quality and Academic Performance.....	13
2.4.2 Availability of Resources for Use in Schools	14
2.4.3 The Concept of Supervision.....	15
2.4.4 Teacher Motivation	16
2.4.5 Methods of Teaching.....	18
2.5 Factors Affecting the Academic Performance	22
2.5.1 Home Environment	23
2.5.2 Study Habits	24
2.5.3 Learning Skills	25
2.5.4 Academic Interaction	25
2.6 Challenges of Education in Ghana	26
CHAPTER THREE	31
METHODOLOGY	31
3.0 Introduction	31
3.1 Research Design.....	31

3.2 Population.....	33
3.3 Sampling Procedure	33
3.4 Instrumentation.....	34
3.5 Pre-Testing of Instruments	35
3.6 Validity and Reliability of the Instruments	36
3.7 Ethical Considerations.....	37
3.8 Data Collection Procedure	38
3.9 Data Processing and Analysis	38
CHAPTER FOUR.....	40
RESULTS AND DISCUSSIONS.....	40
4.0 Introduction.....	40
4.1 Demographic Characteristics of Respondents.....	40
4.2 The Performance of Public Private School Candidates in BECE.....	41
4.3 The Performance of Students from Public and Private Schools at the SHS Level .	43
4.4 Factors Influencing the Performance of Students at the SHS Level.....	46
CHAPTER FIVE	50
SUMMARY, CONCLUSION AND RECOMMENDATIONS.....	50
5.0 Introduction.....	50
5.1 Summary of Major Findings	50
5.2 Conclusion.....	51
5.3 Recommendation.....	51

REFERENCES	52
APPENDIX A.....	63
QUESTIONNAIRE FOR STUDENTS	63
APPENDIX B	64
BECE Aggregates of Respondents.....	64
Average Performance of the Four Core Subjects of Respondents at SHS.....	66

LIST OF TABLES

Table 1: Sample size	27
Table 2: Demographic characteristics of respondents	34
Table 3: Performance of Candidates in BECE	35
Table 4: Performance of Students from Public and Private School at the SHS	36
Table 5 Factors influencing the performance of students at the SHS level	40

CHAPTER ONE

INTRODUCTION

1.0 Introduction

The introduction and the framework for the investigation are presented in this chapter. It provides an overview of the study's history and discusses the theoretical framework. It also outlines the problem's definition and the knowledge gap that needs to be addressed for education to advance. It outlines the study's goals and purpose, outlining what the investigation hopes to accomplish in its final form. The research questions are also stated in the chapter, outlining what the study aims to discover or accomplish. Once more, it includes the significance of the study, which highlights the relevance of the study's findings, and the scope of the investigation, which establishes the study's boundaries. The chapter concludes by providing a general summary of the various chapters in the work.

1.1 Background to the Study

The independence of people's minds, as well as the advancement of social integration and economic success, are all bolstered by education, which is essential to any nation's growth (Smith, 2020). The main means by which essential knowledge, skills, attitudes, and values are acquired is through the educational system. The level of education offered in a country has a significant impact on its citizens' quality of life. Given this, Rogers, Taylor, and Tyack (2022) argue that citizens need the highest caliber education in order to integrate into the rapidly changing society in which we live.

Education is a dynamic process that includes conveying knowledge, creating interests and curiosity, instilling desirable attitudes and values, and developing

fundamental skills needed for human development (Smith, 2020). This is required in order for students to be competent and socially productive citizens. The school's particular responsibility is to teach knowledge and assist youngsters in the acquisition of skills for lifelong growth. Several factors influence students' academic achievement. The school environment can rightfully be stated to play a dominant role in student accomplishment. Children that attend a good school have a stronger impact on their academic achievement (Ramli, Zain, Zain, & Rahman, 2021).

The majority of measures of educational achievement are based on the outcomes of students' studies. In Ghana, basic school achievement is mostly judged by how well students perform in summative tests. The formal and mandatory exam for junior high school graduates in Ghana is the Basic Education Certificate Examination (BECE). To determine a student's eligibility for admission to senior high, vocational, and technical institutions, this exam is given to all junior high school graduates once a year. For all candidates, particularly those from public schools, poor academic performance at BECE is a big problem (Atuahene, Yusheng, Bentum-Micah, & Owusu-Ansah, 2019).

Manu (2020) asserts that there appears to be rising worry regarding the academic performance of junior high school students nationwide who enroll in senior high schools. In other words, there seems to be a performance discrepancy between junior high schools from private and public sectors on the Basic Education Certificate Examination (BECE). All parties involved in this matter are interested in it, thus it is crucial to track and evaluate Ghana's educational system, especially in public basic schools.

1.2 Statement of Problem

Many educational stakeholders have often raised concern about learners' low performance in public elementary schools. Candidates from private schools are thought to outperform those from public schools. A variety of issues have been identified as key reasons of poor academic performance. Private schools, according to Bonsu (2016), have more resources, students with higher socioeconomic status, and parents who are more concerned about their childrens' education. As a result, private schools perform better in the BECE than their equivalent public institutions.

Ankomah and Hope (2011) conducted research contrasting public and fundamental heads. Their findings show that students' achievement in public basic schools is lower than students' achievement in private elementary schools, as determined by the Basic Education Certificate Examinations and Criterion Reference Tests. The availability of resources for teaching and learning as well as teacher motivation are some of the theories put out to explain the achievement difference.

From an educational technology perspective, Yusuf and Afolabi (2010) conducted a study comparing the performance of Math and English language products from public and private schools. Their study examined the impact of a particular basic school education on junior high students' academic performance. To prepare learners for junior high school, the private basic schools used teaching materials. According to the report, students who attended private schools did better in English Language and Mathematics than their counterparts who attended public basic schools.

The argument has been in the educational system over the years that there has been disparities in the academic performance of students in public and private basic schools

(Atuahene et al., 2019). However, no scientific study has established their subsequent performance, notably at the senior high school level, in favour of students from private schools or otherwise. In senior high school, students from public and private institutions may have quite different academic outcomes. This is because the teaching and learning processes are now conducted under the same circumstances for all candidates. According to study (Ramli, et al., 2021; Harinarayanan & Pazhanivelu, 2018), there is a positive correlation between the school environment and academic accomplishment. Hence, the comparative analysis of the performance of BECE graduates from the public and private school at the senior high school level in the educational system.

1.3 Objectives of the Study

The purpose of the study is to compare the performance of public and private school candidates in BECE in Atwima Nwabiagya Municipal in Ashanti region. Specifically, the study was geared towards the following objectives:

1. Compare the performance of public and private school candidates in BECE
2. Compare the performance of students from public and private school at the senior high school level
3. Evaluate factors influencing the performance of students from public and private school at the senior high school level

1.4 Research Questions

1. What is the significant difference between the performance of Public and Private school candidates in BECE?

2. What is the significant difference between the performance of students from public and private schools at the senior high school level?
3. What are the factors influencing the performance of students from public and private schools at the senior high school level?

1.5 Significance of the Study

The comparison of the performance of public and private school candidates holds significant importance for various stakeholders in education. Students' performance from both public and private schools would in the BECE be assessed. This work would add to the body of information on the performance of public and private schools in BECE in the study area. There have been several studies on the discrepancies between the performance of public and private schools in the country in many areas. In effect, it can assist prospective parents in making an informed decision about the basic school that they want to enroll their children in.

Additionally, it would reveal how senior high school students from both public and private institutions perform. This would make it easier to gauge senior high school student achievement in both public and private schools. This work would contribute to the body of knowledge of scientific research that compares the academic achievement of students in public and private basic schools. As a result, various stakeholders in the educational system especially the Computerized School Selection and Placement System (CSSPS) can use it as part of the criteria for the selection of candidates for the senior high schools.

Besides, the study would provide policymakers with valuable data to assess the effectiveness of educational policies and systems, helping them make informed decisions

on reforms and resource allocation. Policymakers may also use performance data to hold schools accountable for their outcomes, ensuring that public funds are used efficiently and that students receive a quality education. Understanding disparities in performance can drive policies aimed at reducing educational inequities and promoting equal access to quality education.

Finally, this study would highlight effectiveness of teaching methods and strategies in both public and private schools, enabling educators to adopt and adapt best practices to improve student learning outcomes. The findings of the study can inform teacher training and professional development programs, helping educators enhance their skills and qualifications. Educators can refine curricula and teaching approaches based on performance comparisons, ensuring that they meet the needs of students.

1.6 Scope of the Study

Although, the study focus on comparative analysis of students' performance, it is limited to investigating the performance of public and private schools in BECE in the Atwima Nwabiagya Municipal in Ashanti region. Geographically, the study only covers some selected students in the senior high schools in the study area. The conceptual discussions are limited to comparing the academic performance of public and private school candidates if there may be some significant difference at the senior high level.

1.7 Limitations of the Study

The study was conducted in the Atwima Nwabiagya Municipal in the Ashanti region, which has about 43 districts with about 344 public senior high schools. However,

only the public senior high schools in one district, Atwima Nwabiagya Municipal was selected for the study. The findings therefore may not represent adequately what pertains in the districts in the entire Ashanti region.

1.8 Organization of Study

There are five chapters in this work. The introduction, which is covered in Chapter 1, includes the study's history, issue statement, purpose and objectives, research questions, significance of the study, scope, limitations, and study organization. The evaluation of the literature that is currently out there on the subject under research is covered in Chapter 2. The methodology is covered in detail in Chapter 3, along with the research design, demographic and study area descriptions, sample and sampling techniques, and research instrument. It also includes ethical considerations as well as the methods used for data collecting and analysis. The presentation, analysis, and discussions of the key findings are likewise the main topics of chapter four. The summary of the study's findings, conclusions, and suggestions are presented in chapter five.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

Reviews of similar works on the issue under investigation are provided in this chapter. The notion of basic education in Ghana, factors that determine basic education quality, and elements that influence students' academic achievement are the key topics covered.

2.1 The Concept of Basic Education in Ghana

A happy, healthy, and stable world are built on the foundation of education (Karthikeyan, 2015). By passing down inherited knowledge, cultural norms, and values, education fosters the growth of a person's entire personality. It also raises awareness of modern science, technology, and environmental protection. By encouraging tolerance and mutual understanding, fostering the development of self-reliance, and acting as a powerful tool for the eradication of poverty in nations all over the world, education sustains human social, economic, and cultural prosperity and creates the foundation for international cooperation (Chowdhury, 2016).

According to Karthikeyan (2015), despite widespread recognition of the importance of education, there are still more than 880 million people who are illiterate; 113 million children who do not attend school; and 150 million students who dropped out before the fifth grade or basic six. Women account for two-thirds of illiterates and out-of-school children, and there is a significant gender discrepancy in educational access in developing nations, but neither the quality nor quantity of education fully meets individual

and social demands. Given the foregoing, the worldwide community is now aiming for "Education for All" (EFA), with a special emphasis on expanding access to basic education. The basic learning requirements of people of all ages are addressed through formal, non-formal, and informal public and private activities, according to UNESCO (1994). It includes education for young people and adults in reading, general knowledge, and life skills as well as basic (or elementary) education for children. Early childhood education, basic schooling, junior high education, and informal education were all intended to be included in basic education.

Ghana's basic education structure has undergone various revisions. Currently, the educational system begins at the age of four (4) years and continues for two (2) years in kindergarten, six (6) years in basic school, and three (3) years in junior high school. Before starting senior high school, students take the Basic Education Certificate Examination (BECE) around the end of the term (Adu-Gyamfi, Donkoh, & Addo, 2016; Akyeampong, 2010). The first 11 years of school are free and required, as was previously stated. Children should be exposed to a wide range of ideas and skills in basic education, as well as attitudes that will help them deal creatively with their environment and motivate them to contribute to their nation (Adu-Gyamfi, Donkoh, & Addo, 2016).

The curriculum employed in basic schools is activity-based. Literacy, mathematics, science, computing, religious and moral education, physical education, creative arts, our world, our people, and history are all part of the basic school curriculum. Literacy, mathematics, physics, computing, religion and moral education, physical health and education, social studies, creative arts and design are all part of the junior high school curriculum (MoE, 2020).

Numerous empirical studies have shown the importance of education for, among other things, human capital and societal development. According to data from Ghana's third household survey, which was conducted in 1991–1992, families' likelihood of living in poverty reduces as the education level of the family head rises (GSS, 2018). This demonstrates how education can help people escape poverty. Opportunities for high-return activities are provided by education (Smith, 2020).

Basic education is important not just for human development that is, for giving each person the skills and knowledge needed to choose their own path in life and design a suitable way of living for themselves as members of society. In terms of encouraging the development of human resources for nation-building, it is crucial for the growth of developing nations. Basic education is crucial for fostering tolerance and acceptance of other cultures and peoples as well as for setting the foundation for cross-cultural cooperation (Karthikeyan, 2015).

2.2 Basic Education Certificate Examination (BECE) in Ghana

The Basic Education Certificate Examination (BECE) in Ghana is a pivotal examination that marks the completion of basic education for students in the country. It serves as a transition point from junior high school to senior high school or other educational pathways. The BECE is administered by the West African Examinations Council (WAEC) and is typically taken at the end of the third year of junior high school. The BECE is designed to assess students' knowledge and understanding of various subjects, including English Language, Mathematics, Social Studies, Integrated Science,

and three elective subjects. It is a comprehensive examination that tests students' abilities in different domains of knowledge and skills (Ghana Education Service, n.d.).

The BECE plays a critical role in determining students' eligibility for admission to senior high schools and technical and vocational institutions in Ghana. The results of the BECE are used for placement purposes, and students must achieve a certain standard to qualify for enrollment in senior high schools. The examination consists of both written and practical components, and it is known for its rigor and competitiveness. The BECE is an important factor in the educational system of Ghana, as it shapes students' educational trajectories and opportunities for further learning (Ghana Education Service, (n.d.).

2.3 The Concept of Secondary Education in Ghana

The historical development of secondary education in Ghana can be traced back to the colonial era when the British established the first secondary schools. These schools were designed to cater to the educational needs of the elite and were instrumental in providing the intellectual and administrative skills needed for colonial governance. Notable institutions established during this period include Mfantshipim School in Cape Coast and Achimota School in Accra (Addo, 2006).

After gaining independence from British colonial rule in 1957, Ghana underwent significant changes in its secondary education system. The government recognized the importance of expanding access to secondary education to meet the country's growing demands for skilled labor and professionals. This recognition led to the establishment of additional secondary schools and the revision of curriculum content to align with the needs of the newly independent nation.

In the years following independence, Ghana implemented a series of reforms to enhance the quality and accessibility of secondary education. These reforms included the expansion of technical and vocational education and the introduction of educational policies and legislative acts aimed at regulating and improving the secondary education system. Additionally, the government actively sought to improve teacher training and increase the number of trained educators in secondary schools (Ministry of Education, Ghana, 2019).

Access to secondary education in Ghana has historically faced challenges related to disparities among regions and demographics. Enrollment rates in secondary education vary across the country, with urban areas generally having higher participation rates compared to rural regions. This urban-rural divide has been attributed to differences in infrastructure, resource allocation, and socio-economic factors. Additionally, there are disparities between genders, as boys and girls may face different barriers to access.

One significant policy development aimed at improving access to secondary education in Ghana is the Free Senior High School (SHS) policy, which was introduced in 2017. Under this policy, the government of Ghana eliminated tuition and other fees for students in public SHS, thereby addressing financial barriers that previously prevented many students from attending secondary school. The policy has led to a substantial increase in enrollment rates and has made secondary education more accessible to a broader range of students, especially those from low-income families (Ampiah & Adu-Yeboah, 2019).

The curriculum and instructional methods in secondary education in Ghana are designed to provide students with a comprehensive and well-rounded education. The curriculum is structured to cover a range of subjects, including core areas such as English,

Mathematics, and Science. Students typically study a combination of humanities, social sciences, and vocational subjects to ensure a broad educational foundation.

While the curriculum aims to provide a diverse education, there are challenges related to the implementation of the curriculum. One notable challenge is the resource constraints faced by many schools, especially those in rural areas. Outdated teaching materials, limited access to technology, and inadequate infrastructure can hinder the effective delivery of the curriculum.

In addition, pedagogical approaches face challenges related to teacher-student ratios. Large class sizes, especially in public schools, can make it difficult for teachers to provide individualized attention to students, impacting the quality of instruction.

Curriculum reforms have been implemented to address some of these challenges. For example, there has been a transition from a 3-year to a 4-year duration for senior high school (SHS) education to allow for a more in-depth study of subjects and potentially improve the quality of education (Asante & Mamphey, 2018). However, disparities in resources and quality of education still persist between the urban and rural communities. This inequality in resources and quality is a significant concern within the Ghanaian education system.

2. 4 Determinants of Quality Education

2.4.1 Teacher Quality and Academic Performance

In order to meet the high requirements that are increasingly being emphasized in schools and educational institutions around the nation, teachers stand out as being essential. Researchers, practitioners, politicians, and the general public all agree that there is a great

need for high-quality teachers, but they disagree on the precise qualities and traits that make a successful teacher. There are a ton of policy statements about teacher preparation that have been released in the face of a wealth of ambiguous and contradictory data regarding the teacher qualities that actually contributed to desired educational outcomes (Darling-Hammond, Flook, Cook-Harvey, Barron, & Osher, 2020).

According to Darling-Hammond et al. (2020), teachers were essential in helping people fulfill their potential for personal growth and well-being, develop their abilities, and acquire the complex range of knowledge and skills that they would need as citizens and workers. Teachers serve as intermediaries between students preparing to enter the world and the ever changing world. The teaching profession is becoming more complex, and the demands on instructors are growing in line with the environment's transformation. It is the most significant academic factor influencing student achievement, per Atuahene, Yusheng, Bentum-Micah, and Owusu-Ansah (2019). Sanders and Sanders (2013) assert that teachers are the single most significant factor impacting students' achievement, and that their effects are both additive and cumulative.

2.4.2 Availability of Resources for Use in Schools

Higher academic success is greatly influenced by teaching and learning resources' availability, provision, and use. Resources that promoted teaching and learning were highly appreciated in private schools, according to Ankomah and Hope (2011). He reasoned that the above statement might account for the high level of academic achievement in this kind of institution. According to Rogers, Taylor, and Tyack's research from 2022, there is a strong correlation between students' academic achievement and their use of recommended textbooks.

According to Rogers, Taylor, and Tyack (2022), the availability of physical and material resources is essential for the success of any excellent educational activity. These studies showed that if classrooms, furniture, and teaching and learning materials (TLMs) are made available in adequate quantity and quality, educational achievement can be achieved. The amenities offered by the school are one of the most crucial elements impacting academic progress, claim Rogers, Taylor, and Tyack (2022). They added that there is a strong correlation between physical structure and academic success and that there should be a concentrated effort made to acquire and preserve these resources for better performance.

In a different study, Okongo, Ngao, Rop, and Nyongesa (2016) claimed that enhancing academic attainment was greatly aided by providing the appropriate personnel and material resources. He compared the effectiveness of public and private basic schools in this study. One of his findings was that schools that have the necessary resources for teaching and learning outperformed those that lacked those resources. Both the human and material resources needed for knowledge transfer were largely dependent on effective teaching and learning.

2.4.3 The Concept of Supervision

Public funding for education that results in certifications that show students have reached a certain level of knowledge and competence should be beneficial to society as a whole. Many people believed that monitoring might be used to guide people's actions toward achieving their goals. According to Ampofo, Onyango, and Ogola (2019),

supervision in education is considered as a way to guide instructions toward the accomplishment of educational objectives.

Numerous perspectives have been offered on the function of supervision in our educational system. While some saw it as a fault-finding tool, others thought that monitoring contributed to one's professional advancement. However, one thing remained consistent across all of these interpretations: whatever the purpose of supervision, it was always primarily intended to ensure that the teaching and learning process grew and developed. Anab (2018) asserts that supervision looked into the various behaviors and inactions that compelled changes to environments that promoted learning. He continued by saying that activities that supported the growth and learning of both the teacher and the students were primarily related with supervision. The word "supervision" was created from the more powerful word "inspection."

The introduction of supervision aimed to enhance teaching and learning. In order to provide the prerequisites for high student achievement and performance during the teaching and learning process, competent school management was required. According to Ampofo, Onyango, and Ogola (2019), the supervisory process was seen as the conduit connecting a person and the accomplishment of organizational goals.

2.4.4 Teacher Motivation

Teacher motivation is one of the most crucial issues to take into account in the context of education. Iliya and Ifeoma (2015) state that although there is disagreement about the precise advantages, studies indicate that increasing teacher motivation benefits both students and teachers. Teachers who had strong favorable opinions about teaching had

students who had a high sense of self-worth. Professors who are satisfied with their teaching effectiveness seem to be more effective in the eyes of the students. Teachers serve not only as educators but also as role models, which explains why the association exists. The advantages of teacher satisfaction for both instructors and students underline the importance of comprehending how teachers feel about their profession.

Despite the importance of studying teacher motivation, politicians don't seem to give it any thought. The majority of national education programs and reforms, according to Dapaa (2022), are currently centered on enhancing teacher competence and the working environment as well as encouraging greater school autonomy, all of which can increase teacher motivation. However, many reform initiatives focus on fundamentally altering instructional methods and increasing the responsibilities of teachers, ignoring or giving little attention to low pay and other unfavorable working conditions. The authors continue by stating that many Sub-Saharan African countries are forcing teachers to drastically alter their methods of instruction at a time when the majority of them are growing more and more demotivated. Teachers' already limited degree of self-determination is exacerbated by top-down policy creation and implementation with little involvement from teachers, and as a result, many educators feel compelled. As a result, educators are opposed to these reform initiatives (both actively and passively). Concerns about unacceptably high percentages of unmotivated teachers working in public school systems in many low-income developing nations appear to be growing as a result of a combination of poor morale and job satisfaction, insufficient incentives, and a lack of adequate controls and other behavioral sanctions.

2.4.5 Methods of Teaching

According to Alter and Coggshall (2009), teaching methods are routine procedures employed by teachers or instructors to provide a lesson to students so that they can acquire the expected knowledge in the subject of interest. To keep knowledge from becoming "inert ideas," all teaching strategies should be developed to advance understanding, foster good character traits, place an emphasis on problem-solving, bust myths, hone skills, and encourage students as they learn to make use of facts and information. Only a few teaching strategies will be addressed for the purposes of this study out of the many that exist.

Activity Method

The phases of infant cognitive development identified by Piaget can be linked to the activity approach. Piaget believed that young children naturally engage with objects in their environment in a variety of ways. Children exhibit various behaviors such as imitating, being curious about things and happenings, being creative, taking charge of playtime, collecting objects and classifying them according to their size, shape, color, and other characteristics. By putting the child at the center of the teaching and learning process and encouraging them to utilize objects on their own to discover ideas or facts, the activity method is a teaching approach.

An activity method, according to Limbu (2012), is a strategy employed by a teacher to emphasize their style of teaching by action, which involves rigorous student participation and produces effective learning experiences. It is a child-focused approach. The child actively engages in this tactic both cognitively and physically. This approach places an emphasis on learning by doing. Because it has been demonstrated that people learn more and retain information for longer when their senses are stimulated, learning by doing is

crucial for effective learning. With little to no teacher involvement, the child is compelled to engage with educational resources both inside and outside the classroom. All five of a learner's senses are used to aid in the learning process.

Method of the Lecture

Lectures are frequently given in a classroom environment. It is often referred to as the textbook method or the talk and chalk strategy. Little student involvement occurs in this teacher-centered learning approach. While students are seen as passive consumers of the knowledge instructors impart during the learning process, teachers are seen as the repository of all knowledge (Troussas, Krouska, & Sgouropoulou, 2020).

When it comes to imparting conceptual and systematic knowledge, carefully organized lectures may be the most successful teaching strategy (Charlton, 2006). The ability to convey a lot of information to a lot of people quickly is the main benefit of the lecture style, although it may be challenging to ensure that the information is retained (Troussas, Krouska, & Sgouropoulou, 2020). In the context of the current investigation, this approach has the lowest success rate for enhancing fundamental skills.

Method of Discussion

Critical thinking skills can be developed by instructors in basic schools by utilizing dialogues as a major teaching strategy (Troussas, Krouska, & Sgouropoulou, 2020). By showing gratitude for the students' contributions and pushing them to think more deeply and express their opinions more clearly, this strategy also helps the teacher build relationship with the students. A way to assess learning and delve deeper into the course's key concepts is through the numerous questions that are posed by both the teacher and the students (Saina, Kathuri, Rono, Kipsat, & Sulo, 2012).

Discussions in the classroom foster the development of interpersonal skills, teamwork, emotional intelligence, and critical thinking (Daluba, 2013; Falode, Adewale, Ilobeneke, Falode, Falode, & Robinson, 2015). In order to give students a thorough understanding of the potential causes, effects, and concepts at the fundamental level, it is recommended that this technique be used to develop these skills (Jessy & Charu, 2015).

Field Trip

According to Troussas, Krouska, and Sgouropoulou (2020), field trips are a common way to develop cooperation skills through outdoor training. Field trips to important sites, businesses, and other tourist attractions can be very helpful for giving students real-world exposure and practice of academic concepts. On the other hand, in order for students to participate fully on field trips, assignments, write-ups, and projects must be given to them (Adom, 2017).

On the other side, elementary school field trips may throw off the schedule and so call for appropriate timing, such as during mid-breaks and holidays. Field trips should be planned as an essential part of the curriculum rather than as a stand-alone activity because they are among the most challenging and expensive activities in the educational system (Kisiel, 2016).

Demonstration Technique

In the demonstration technique, the teacher does the task that the students are expected to complete at the end of the session by modeling it for them and outlining the step-by-step process (Olorundare & Oguntimehin, 2021). Along with an oral explanation, the demonstration may contain diagrams, charts, e-learning, and other illustrative resources (Saina, Kathuri, Rono, Kipsat, & Sulo, 2012). The audience watches the demonstration in

progress or afterward, pays attention to the explanation, and queries. Higher achievement rates are the result of the demonstration method's increased student attention and knowledge (Daluba, 2013).

Class projects

The project method is a cooperative teaching strategy where students work in groups under the direction of the teacher to develop and apply knowledge and skills to formulate and address real-world issues through an extended inquiry process (Bakare, Okebukola, & Ogunniyi, 2021). Because of this, class projects are student-centered, with the teacher explicitly outlining expectations, constraints, and objectives. The project teaching approach is based on the assumption that experiential learning, group discussion of concepts, and revisiting past experiences are the best ways to gain a deeper understanding of one's surroundings (Diise, Zakaria, & Mohammed, 2018). According to existing literature, learning is made more enjoyable through practical work done in class, and the goals of basic education have expanded beyond skill acquisition and competency to include personal development for various job preparations and beyond (Resilient Educator, 2020).

The problem-solving method is a student-centered approach to teaching in which students present problems, examine the contributing factors, come up with potential solutions, implement the solution(s), and assess the outcomes of the solution (Koç, 2021). PBL is a constructivist instructional approach that centers on a genuine issue (Koç, 2021). The approach promotes the growth of subject knowledge as well as critical thinking skills and approaches. Students are in charge of the stuff they study, but teachers frequently serve

as facilitators. A presentation of the solutions and an evaluation of the procedure used to solve the problem normally come at the end of this method.

2.5 Factors Affecting the Academic Performance

Institutions of higher learning have an interest in students' grades and graduation rates. The higher education sector has become increasingly interested in looking into factors related to how well university students do academically. The factors that affect university students' academic success have been the subject of numerous recent studies. According to Tani, Dalzell, Ehambaranthan, Murugasu, and Steele (2019), learning styles, gender, and race all affected students' academic achievement.

Jimenez-Sanchez, Murray, Goldrick-Rab, and Broton (2021) found that factors such as family income level, full-time attendance, grant assistance, and completion of upper-level high school courses had a statistically significant impact on first-generation college students' ability to continue in their studies. In order to determine the efficacy of student learning style and other university admission criteria in predicting student academic achievement and retention, Garcia and Ramirez (2021) conducted a study with first-year college students. The Act composite score, high school class rank, core GPA, and learning style were employed as predictors. The results showed that the best predictors of academic performance in the first year of college were core GPA and Act score.

In order to better understand the psychological, cognitive, and demographic aspects that influence the academic success of first-year Australian university students, Haftu, Hwang, Kim, and Noh (2021) undertook a prospective study. The results demonstrate that the most important predictor of university performance was found to be past academic

success. Integration into the university, self-efficacy, and duties to one's job all predicted college success. Research was done by Khan, Shah, and Ali (2021) to identify the factors affecting college students' performance. This study's main objective was to look at the variables that were related to students' performance in intermediate exams. This study came to the conclusion that the most significant elements impacting students' performance at private institutions were their attitudes about attending class, time set aside for studying, parents' financial status, mother's age, and mother's educational background. The academic performance and retention of students in higher education institutions are influenced by a number of factors. We discuss the main elements that guided our investigation. The section below uses recent literature to support the factors.

2.5.1 Home Environment

The examined literature indicates that the impact of a student's family or home environment on their academic progress is recognized. The psychological, emotional, social, and financial health of the students is significantly influenced by their homes. Because parents are the earliest socializing influences in a person's life, Smith (2020) thinks that the environment of the home affects the individual. This is so because a child's upbringing and environment affect how he responds to situations in life and how well he performs.

According to Mile and Emmons (2021), prolonged parental dispute impacts children emotionally, which might lead to low academic achievement. Karim, Hasan, and Islam (2021) discovered that parental participation and parenting style (nature and control) substantially influenced academic outcomes. According to Akbari and Hosseini (2021),

family financial assistance, encouragement, and follow-up have a good impact on students' performance as evaluated by their GPA.

2.5.2 Study Habits

Given that it is likely that students' grades are related to their study habits, students' study habits may be important to grade prediction. Students who don't practice good study habits, for instance, could get lower grades than students who do. The relationship between grades, teacher evaluations, and study habits is uncertain in terms of its significance (Atsiayasiah & Maiyo, 2015).

Study techniques and learning methodologies include time management, using information resources, taking notes in class, interacting with teachers, preparing for and taking tests, and a number of other learning strategies. According to the study, there is a significant connection between these learning habits and strategies and academic success in higher education (Akbari, & Hosseini, 2021). When compared to those who use others' study aids, those who create their own study aids invest more time in them. It is also feasible, as has been shown with note taking, that the process of creating study aids benefits the learner in gaining more meaningful knowledge by combining various pieces of information into new knowledge. We wondered if students who used study tools made by others rather than coming up with their own were losing out on the advantages of concept mapping and time-on-task (Khan, Shah, & Ali, 2021).

According to Shahzadi and Ahmad (2011), Estes and Richards (1985) developed a study habits survey for use with high school and college students. Three parts of homework and test scenarios were evaluated for their study skills index. Distractibility tests look at

how frequently students say they can't pay attention or focus on what they're doing. Measures of inquisitiveness look at how well students try to understand the material they are learning—do they look for key ideas or deeper significance? Compulsiveness tests assess how attentively students pay attention to details and how effectively they remember information.

2.5.3 Learning Skills

According to recent studies, student conduct and learning are crucial variables in students' academic performance and retention. To improve student academic success in learners, we must focus on interventions aimed at learning techniques, which shows the necessity for such programs to be developed (Akbari, & Hosseini, 2021). However, despite its theoretical importance and recurrence in global surveys, the effect of learning strategies on academic achievement has gotten far less research (Khan, Shah, & Ali, 2021). When the teacher is competent and the learning activities are adequately created and carried out, Darling-Hammond et al. (2020) shown that more time spent on learning activities resulted in more learning. We also found that concept mapping was helpful. Through the use of concept mapping, learners can connect new information to a framework of pertinent concepts they already understand.

2.5.4 Academic Interaction

According to research on academic engagement, actions such as guidance could boost students' involvement in their learning experiences. Strategic planning could be utilized in schools to create guidance programs based on shared accountability and centered on student success. A novel approach to advising is necessary, according to research on

successful educational outcomes and the various demands of today's student population. The research shows a connection between academic counseling, teacher-student interaction, and academic persistence on both a direct and indirect level. For instance, involvement improves learning and identifies successful institutions as having the capacity to include (Darling-Hammond et al., 2020).

These findings are important for counselors because they can encourage learners to stay in school and promote meaningful connection with them. When a large portion of the school community organizes, implements, and evaluates counselling services, guidance can become a systematic activity of the institution that enhances educational results. Another important factor in achieving high retention rates at a school is the extent to which students have supportive, close-knit relationships with their teachers on both a personal and professional level.

2.6 Challenges of Education in Ghana

Education in Ghana faces several significant challenges that impact the quality, access, and overall effectiveness of the system. These challenges include, but are not limited to:

2.6.1 Access Disparities

Access to education in Ghana has been a persistent challenge marked by significant disparities. These disparities are often influenced by socio-economic factors, geographical location, and gender. Rural areas in Ghana face a substantial shortage of schools, qualified teachers, and educational resources. As a result, children in these areas have limited access

to quality education, leading to a gap in educational outcomes between urban and rural populations (Anamuah-Mensah, 2007).

Furthermore, gender disparities are prevalent in Ghana's education system, with girls often facing barriers that hinder their access to education. Factors such as early marriage, teenage pregnancy, and cultural norms can restrict girls' participation in formal education. This has led to a gender gap in literacy rates and educational attainment, with boys having more opportunities for education than girls (UNESCO, 2021).

To address these disparities, the government of Ghana has implemented various policies and initiatives, such as the Free Senior High School policy, to improve access to education across the country. However, challenges remain in ensuring that quality education is accessible to all, regardless of socio-economic status, location, or gender (Ampiah & Adu-Yeboah, 2019).

2.6.2 Infrastructure and Resources

The Ghanaian education system faces significant challenges in terms of inadequate infrastructure and limited educational resources. Many schools in Ghana lack essential physical infrastructure, including classrooms, libraries, and laboratory facilities (Nyarko & Mensah, 2018). Overcrowding in classrooms is common, making it difficult to provide quality education and individualized attention to students. Insufficient infrastructure also hampers the provision of inclusive education, as it poses barriers to students with disabilities (Ministry of Education, Ghana, 2019).

In addition to infrastructure challenges, the availability and quality of educational resources in Ghana remain a concern. There is a shortage of textbooks, learning materials,

and teaching aids, which impacts the teaching and learning process. Furthermore, the lack of access to modern technology and the internet hinders the integration of digital tools into education, limiting students' exposure to technological advancements (Nunoo, 2015). Addressing these challenges requires substantial investment in educational infrastructure and the provision of adequate resources to support effective teaching and learning in Ghanaian schools.

2.6.3 Quality of Teachers

Ghanaian education is confronted by a significant challenge related to the shortage of qualified and experienced teachers (Mensa & Marfo, 2015). While there has been a commendable expansion of educational infrastructure, there remains a shortage of adequately trained and experienced teachers to meet the growing demand. This shortage is particularly acute in rural areas, where the attraction of qualified educators is limited due to factors such as inadequate housing and limited professional development opportunities (Akyeampong, 2018).

Moreover, the quality of education is often compromised when teachers who lack adequate training and experience are forced to fill positions due to the shortage of qualified staff. This situation not only affects the delivery of quality education but also has long-term implications for student learning outcomes (Ministry of Education, Ghana, 2019). Addressing the shortage of qualified and experienced teachers is a critical priority for the Ghanaian government and education stakeholders to ensure that all students receive the quality education they deserve.

2.6.4 Curriculum Relevance

The curriculum in Ghanaian schools has been criticized for its lack of alignment with the evolving needs of the job market and society (Djangmah, 2014). Traditional curricula may not adequately prepare students with the skills and knowledge required to meet the demands of a rapidly changing world. For instance, the emphasis on theoretical knowledge may not equip students with practical skills and competencies that are in demand by employers (Akyeampong & Tsikata, 2016).

This lack of relevance is particularly evident in the disconnection between the formal curriculum and the realities of the job market, which can lead to high levels of youth unemployment and underemployment. Addressing this challenge involves a comprehensive review and reform of the curriculum to ensure that it meets the changing needs of the workforce and society (Djangmah, 2014).

2.6.5 Assessment and Examination Systems

The effectiveness and fairness of assessment and examination systems, including the Basic Education Certificate Examination (BECE) and the West African Senior School Certificate Examination (WASSCE), are important but sometimes contentious aspects of education in Ghana (Adu-Yeboah & Ntow, 2014). These systems can impact the overall quality of education. The focus on high-stakes examinations, such as the Basic Education Certificate Examination (BECE) and the West African Senior School Certificate Examination (WASSCE), has led to a strong emphasis on rote memorization and teaching to the test. This approach often discourages critical thinking, creativity, and practical skills development (Addey & Abroquah, 2021).

Furthermore, there are concerns about the reliability and integrity of these examinations, with reports of leakage of examination papers and other forms of malpractice. These issues compromise the credibility of the examination systems and raise questions about the fairness of assessment for all students (Adu-Yeboah & Ntow, 2014). Reforming the assessment and examination systems in Ghana is essential to promote a more holistic and learner-centered approach that fosters the development of skills and competencies required for the 21st century.

2.6.6 Inequality in Resource Allocation

Inequality in resource allocation is a significant challenge within the Ghanaian education system. This issue is characterized by the unequal distribution of resources among schools and regions, leading to disparities in educational quality and outcomes. Schools in affluent urban areas tend to have access to more funding, better facilities, and a higher concentration of qualified teachers, while schools in rural and deprived areas often face resource constraints (Adom & Ampofo, 2016).

This inequality in resource allocation exacerbates the existing disparities in educational access and quality, with students in underprivileged areas facing a substantial disadvantage in terms of their learning opportunities. Addressing this challenge requires a more equitable distribution of resources to ensure that all schools, regardless of their location and socio-economic context, can provide quality education to their students (Nyarko & Mensah, 2018).

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This study compares the BECE results of students from public and private schools in Atwima Nwabiagya Municipal in the Ashanti region. The research design, demographic, sample, and sampling process, instruments utilized in the study, instrument pre-testing, instrument reliability and validity, data collection practices, ethical issues, and data analysis are all included in the methodology.

3.1 Research Design

The performance of BECE candidates from public and private schools in Atwima Nwabiagya Municipal in the Ashanti region was compared in this study using the descriptive survey design. Researchers can learn a lot about the current state of a phenomena by conducting a descriptive survey. Leedy and Ormrod (2015) argue that survey research is studying and acquiring data from or about groups of people in order to state their responses, with the ultimate goal of generalizing to the entire population.

By adopting descriptive survey, the researcher aimed at finding out whether there would be any difference in the performance of public and private school candidates in BECE in Atwima Nwabiagya Municipal in Ashanti area. Miles, Huberman, and Saldaña (2014) maintains that in a survey, the investigator picks a group of respondents, gathers information, and then assesses the information to answer the study questions. Thus, the comments from the participants helped to identify solutions to questions that were given.

According to Kim, Sefcik and Bradway (2017), a descriptive study design involves observing and summarizing a subject's behavior without making any changes to it. Fraenkel, Wallen and Hyun (2011) state that a descriptive survey design requires looking at and gathering information from a large population in order to address the intended research questions or hypotheses. It is conclusive in nature to use a descriptive survey design. This indicates that descriptive research collects measurable data that may be utilized for data analysis to draw statistical conclusions about the population. It gives the researcher the chance to gain important insight into the current state of a phenomenon. Descriptive survey designs also focus more on data collection than factor manipulation (Siedlecki, 2020).

Per the aims of the study, descriptive design was capable of offering a more thorough picture of the subject under inquiry through validation and justification of findings from respondents (Creswell & Clark, 2011). Again, the choice of the design is justifiable based on the fact that it includes obtaining data from members of the population in order to identify its present status with one or more variables (Asenahabi, 2019). The design assisted the researcher to plan and perform the study in a way that helped to attain the intended outcomes. Thus, improving the possibilities of getting information that could be related to the true situation on the ground (Burns & Grove, 2001). However, descriptive survey designs may provide untrustworthy results since they dig into personal subjects about which people may not be totally honest (Siedlecki, 2020). Despite these constraints, the design was found suitable for the investigation.

3.2 Population

In research, a population is an aggregate of products or people from which data relevant to the study will be collected. The sample (or population sample) is the portion of the population from which data will be collected. A sample is essentially defined as a subset of a population chosen for observation and study. According to Jamieson and Saunders (2020), the basic goal of research is to identify universally applicable concepts. As a result, studying an entire community and then arriving at simply generalizations would be impractical. Because sampling allows for the drawing of distinctions or generalizations based on careful observation of variables with a relatively small fraction of the population. Thus, sampling can be described as the process of randomly picking members of a group with common traits to represent the complete population for the purpose of research. All 2020 BECE graduates from public and private basic schools in Senior High School in Atwima Nwabiagya Municipal in the Ashanti region were studied.

3.3 Sampling Procedure

Any research's quality is based on the suitability of the sampling strategy employed in addition to the technique and equipment used (Cohen, Manion, & Morrison, 2011). The study population, often referred to as the "target population" or "accessible population," was used to choose the sample (Creswell, 2012). The more representative the sample, the larger it must be. Smaller samples are less indicative of the population as a whole, which makes the data they produce less trustworthy (Kaplan, Chambers & Glasgow, 2014). A multi-stage sampling strategy was used in this investigation. Purposive sampling of SHS 2 students was used in the first stage. This was due to the fact that these students have been

at the school for at least one year and they may have had some level of experience in their new environment from their basic school environment.

The second stage required using a simple random sampling approach to choose study participants, so that any of the SHS 2 students had an equal chance of being chosen from the population. The class list of the SHS 2 students in the two schools were used to generate random numbers. Then, every sixth student was selected until the total sample size was obtained. This aided in selecting respondents who were typical of the general population (Creswell, 2012).

A sample size of roughly 10-30% of the population is adequate for quantitative research, according to Asamoah-Gyimah and Duodu (2007). The study used a sample size of 293 students, or 10% of the population. The population's random numbers were generated using the number of students in each school (SHS 2). As shown in Table 3.1, students were picked at random from each stratum using the Asamoah-Gyimah and Duodu (2007) model.

Table 1: Sample Size

School	Population	Sample size
Nkawie SHTS	899	135
Toase SHS	1052	158
Total	1,951	293

Source: Field Data, 2022

3.4 Instrumentation

The researcher used a questionnaire as the basic data collection instrument in an attempt to elicit relevant information for the study. The researcher cited Cohen, Manion, and Morrison (2011) definition of the questionnaire as a more reliable survey instrument,

while its anonymity encourages more honesty. The researcher created questionnaires based on the literature for respondents to complete. The questionnaire for the respondents was made up of closed-ended questions to help the researcher get as much material as possible from the respondents. According to Fraenkel, Wallen and Hyun (2011), closed-ended items provide regulated or directed responses for meaningful responses toward accomplishing the defined objectives. Close-ended items, they claim, improve uniformity of response across respondents, are quicker and faster to tabulate, and are more popular with respondents. Closed-ended items were given options so that respondents may select those that applicable in their schools.

3.5 Pre-Testing of Instruments

At one of the schools in the research area, the instrument underwent a pilot test. Because they possessed characteristics in common with the study's basic respondents, this school's students were chosen. It was justified to use them to pre-test the instrument as a consequence. A 10% sample size was utilized by Hassan, Schattner and Mazza (2006) to select 20 students from the Atwima Nwabiagya Municipal to participate. The pilot testing of the instrument aided in ensuring that the final instrument had the least amount of ambiguity possible. It also helped in testing the coding system and estimating the amount of time needed to respond (Cohen, Manion & Morrison, 2011).

The phrasing of the questionnaire was of fundamental importance, and the pre-testing of the instrument was crucial to its effectiveness. A pilot test of the instrument has multiple functions, notably to strengthen the reliability, validity, and practicability of the questionnaire (Cohen, Manion & Morrison, 2011). Before employing the instrument for

the main study, a pre-test was conducted on it to determine its suitability. This was done in order to find survey items that respondents might not have fully understood or interpreted as intended. Once more, it was done to ensure that instructions and questions about the items were clear and free of ambiguous and misleading materials.

3.6 Validity and Reliability of the Instruments

The degree to which study data and data gathering techniques are deemed accurate, sincere, and relevant determines the concept of validity. In reality, the degree of evidence that can be produced to prove that an instrument assesses the characteristics covered by the proposed research determines the validity of the instrument (Haradhan, 2017). They emphasized that in order to guarantee validity, one must make sure that the test measures what it is intended to measure for the particular set of people and context, and that the interpretations made using the test results are accurate.

The correlation coefficient for the Cronbach's alpha ranges from 0 to 1. The more closely a test's reliability coefficient value approaches 1, the more trustworthy the test is; conversely, the more closely it approaches 0, the less trustworthy the test is (Peters, 2014). The Statistical Package for Social Sciences (SPSS Version 20) was used to clean, code, and analyze the data after it had been collected. For the purpose of calculating the dependability coefficient, Cronbach's Alpha was computed. Fraenkel, Wallen and Hyun (2011) claim that a reliability coefficient of 0.7 or higher is suitable. Therefore, every variable passed the dependability test.

My supervisor and other professionals from the Department of Educational Leadership examined each question on the questionnaire to determine the validity of the

instrument and its applicability to the study's goals. Supervisors and other specialists were given extra sheets of paper to add to the questionnaire in order to provide feedback on the clarity, errors, shortcomings, ambiguities, and problems with all sections of the instrument's items. As a result of these remarks, prior to the actual data collection, statements that were hazy, false, or redundant were changed for clarity.

3.7 Ethical Considerations

Respect for participants' rights and consideration of moral problems are essential in social research. Several ethical issues were taken into account when conducting this study. The study addressed some ethical issues, such as informed consent, anonymity, and secrecy. With informed consent, potential participants have the choice of participating in the study or not. It emphasizes how important it is for participants to understand the motives, goals, and potential effects of their involvement (Seidman, 2006). Before the volunteers were included in the study, the study's objectives were thoroughly discussed with them.

The study gave a lot of weight to the anonymity of study respondents. Saunders, Kitzinger and Kitzinger (2015) noted that anonymity is a significant ethical issue in research since it gives participants the chance to have their identities concealed. For the sake of upholding the moral principle of anonymity, no names nor any other personally identifying information from respondents was collected. This was done to avoid any potential victimization of respondents whose remarks other stakeholders might find offensive.

Regarding confidentiality, great effort was taken to ensure that participant responses remained private. The guarantee made to participants was that their feedback would remain anonymous, that no one they knew would have access to it, and that no one's names would be recorded in the study. Most importantly, in order to avoid academic dishonesty, information that was quoted from earlier research and books was properly acknowledged through both citation and referencing.

3.8 Data Collection Procedure

A research permit was obtained from the Atwima Nwabiagya Municipal after obtaining a letter from Department of Educational Leadership. The set of questionnaires were administered to students randomly selected within the sample size. Respondents were given ample time to complete the questionnaire. This helped respondents to conveniently and appropriately respond to the various questions. It took about two weeks to finish the administration and the collection of the data. The intention for giving out set of questionnaires was to obtain the views and opinions as to the objective of the study. In order to assess the success of students from public and private basic schools in senior high schools, additional data on BECE aggregates and respondents' end-of-year outcomes were gathered and analyzed.

3.9 Data Processing and Analysis

After data has been gathered, the data will be processed and managed by coding the data, editing the data where appropriate, entering the data into the appropriate software Statistical Product for Service Solutions version 20 to generate results. This study will use

quantitative method to analyse the data. Because it was appropriate for a meaningful interpretation, findings, and recommendations of data, descriptive statistics were used to analyze the background information (Cresswell, 2012). The descriptive statistics (means, standard deviation, and frequency counts) were used to analyze and discuss the quantitative data from the survey. The mean analysis made it easier to understand the typical responses given by respondents to the study's questions. The standard deviation showed whether or not the respondent's responses were distributed or clustered near the mean score, while the mean provided a summary of the responses from the students. The range of the standard deviation is 0 to 1. The responses of the respondents were thought to be homogenous (similar responses) if the standard deviation was quite small (within 0). On the other hand, it was thought that the respondents' responses were diverse (different responses) where the standard deviation was rather high (within 1).

The study also used STATA software to conduct inferential statistics using linear regression to investigate the factors affecting senior high school students' performance from both public and private schools. According to Hinton et al. (2004), the linear regression approach was better suitable for examining the variables affecting senior high school students from both public and private schools.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.0 Introduction

The outcomes for the various study objectives are analyzed and discussed in this section. The Statistical Package for Social Science (SPSS) version 20 and STATA 14 were used to analyze the data, with the results shown in tables. Additionally, descriptive and regression statistics were used to assess the data. The findings were divided into four constructs: respondent demographics, BECE performance of candidates from public and private schools, senior high school performance of students from public and private schools, and factors affecting senior high school performance of students from public and private schools.

4.1 Demographic Characteristics of Respondents

Table 2 presents the demographic characteristics of respondents. The data showed that the respondent were dominated by boarding students as (73%) were from public JHS and (63%) were from private JHS. Again, majority of the respondents from public JHS (57%) and (65%) from private JHS were males. Also, majority of the respondents from public JHS (54%) were between 18-20years and (50%) from private JHS were between 15-17years. Besides, majority of the respondents from public JHS (76%) and (61%) from private JHS were living with both parents. In addition, majority of the parents of respondents from public JHS (45%) had secondary school education while (27%) of the parents of respondents from private JHS had basic school education. Finally, majority of

the respondents from public JHS (47%) and (44%) from private JHS were in the private formal sector of employment.

Table 2: Demographic characteristics of respondents

Variables	Public		Private	
	Frequency	Percent	Frequency	Percent
Type of student				
Day	27	27.0	37	37.0
Boarding	73	73.0	63	63.0
Sex				
Male	57	57.0	65	65.0
Female	43	43.0	35	35.0
Age				
Less than 15years	4	4.0	2	2.0
15-17years	33	33.0	50	50.0
18-20years	54	54.0	37	37.0
21-23years	5	5.0	7	7.0
24years and above	4	4.0	4	4.0
Whom are you living with				
Both parents	76	76.0	61	61.0
Father	4	4.0	6	6.0
Mother	14	14.0	22	22.0
Guardian	6	6.0	11	11.0
Parent/guardian education				
No formal education	14	14.0	18	18.0
Basic education	16	16.0	37	37.0
Secondary education	45	45.0	36	36.0
Tertiary education	25	25.0	9	9.0
Employment of your parent/guardian				
Informal	35	35.0	33	33.0
Private formal	47	47.0	44	44.0
Public formal	18	18.0	23	23.0

Source: Field Data, 2023

4.2 The Performance of Public Private School Candidates in BECE

The comparative statistical figures are also shown in Table 3. The t-statistic value was 2.2370 which indicates that there was significant difference between the performance of public school candidates and private school candidates in BECE. The performance of

private school candidates was better than the performance of public school candidates. In effect, the performance of private school candidates in BECE was higher by 2% than the performance of public school candidates.

Candidates from private schools are thought to perform better than their colleagues from public schools. Poor academic results have a variety of root causes, many of which have been identified. According to Bonsu (2016), students in private schools have access to better resources, parents with higher socioeconomic statuses, and parents who are more interested in their children's education. Due to this, private schools outperform their public school counterparts in BECE on a comparative basis.

One of the key factors contributing to this discrepancy is the difference in resources between private and public schools. Private schools often have access to more extensive resources, including better infrastructure, up-to-date learning materials, and well-trained teachers. These resources can lead to a more conducive learning environment and potentially better educational outcomes. In contrast, public schools, especially in underfunded or rural areas, may struggle with limited resources, which can affect the quality of education (Nyarko & Mensah, 2018).

Private schools tend to have smaller class sizes, which allows for more individualized attention for each student. This student-teacher ratio can facilitate personalized instruction and help students better understand complex topics. In public schools, overcrowded classrooms are not uncommon, making it challenging for teachers to provide the same level of attention to each student.

Parents who can afford to send their children to private schools are often more actively engaged in their child's education. This parental involvement can positively

influence a student's academic performance. Public schools, especially in disadvantaged communities, may face challenges related to parental engagement. Students in private schools often come from families with higher socio-economic backgrounds, and they may have greater motivation and aspirations for academic success. This motivation can drive them to perform better in examinations and assessments compared to their counterparts in public schools (Mensa & Marfo, 2015).

Table 3: Performance of Candidates in BECE

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
public	100	23.2	.5801428	5.801428	22.04887	24.35113
private	100	21.25	.6506213	6.506213	19.95903	22.54097
combined	200	22.225	.4402168	6.225606	21.35691	23.09309
diff		1.95	.8717074		.2309778	3.669022
diff = mean(public) - mean(private)					t = 2.2370	
Ho: diff = 0				degrees of freedom = 198		
Ha: diff < 0			Ha: diff != 0		Ha: diff > 0	
Pr(T < t) = 0.9868			Pr(T > t) = 0.0264		Pr(T > t) = 0.0132	

Source: Field Data, 2023

4.3 The Performance of Students from Public and Private Schools at the SHS Level

Table 4 also displays the statistical comparison data. The performance of students from public junior high schools and students from private junior high schools differed significantly at the senior high school level, according to the t-statistic value of 2.8236. The performance of junior high school students from public schools was superior to that of junior high school students from private schools. In actuality, at the senior high school level, students from public junior high schools performed 3% better than those from private junior high schools.

Higher quality teaching and learning resources are more readily available, provided, and used, which significantly improves academic performance. According to

Ankomah and Hope (2011), private schools place a high value on teaching and learning resources. He implied that the aforementioned claim might be the reason for the high academic achievement in this kind of school. The use of recommended textbooks and students' academic progress are strongly correlated (Taylor & Tyack, 2022).

This assertion was made in a related study by Okongo, Ngao, Rop, and Nyongesa (2016), who also discovered that supplying the appropriate people and material resources had a significant positive impact on academic success. He conducted this study by evaluating basic school performance in both public and private institutions. His research revealed among other things that, schools with adequate resources outperformed those without adequate resources in terms of student achievement. The capability of its human resources and the material resources required for the transfer of knowledge were crucial for effective teaching and learning.

Also, this can related to the developmental and transitional aspects of students as they progress from junior high to senior high school. Students undergo significant cognitive and emotional development during their adolescent years. It is plausible that public school students, having spent their junior high school years in a public system, may better adapt to the pedagogical approaches and expectations of senior high school in the same system (Mensa & Marfo, 2015).

The curriculum in junior high school, regardless of whether it is in the public or private sector, is often aligned with the national educational standards and the Ghana Education Service (GES) guidelines. This alignment may contribute to a smooth transition for public school students. In contrast, private schools may have curricular differences,

which could require students to adjust more when transitioning to a public senior high school (Nyarko & Mensah, 2018).

While private schools typically attract students from higher socioeconomic backgrounds, public junior high schools often serve a more diverse student population. Students from public schools may develop resilience, adaptability, and social skills that are beneficial in senior high school. These socio-emotional factors can influence academic performance (Mensa & Marfo, 2015).

The quality of teachers in public junior high schools should not be underestimated. Some public schools employ skilled and dedicated educators who are committed to their students' success. The continuity of instruction from junior high to senior high school by these teachers may contribute to the superior performance of public school students (Nyarko & Mensah, 2018).

The context in which students learn and adapt to their surroundings can also affect their performance. Private school students may encounter different learning environments, philosophies, and expectations that could pose challenges when transitioning to the public senior high school setting (Mensa & Marfo, 2015).

Table 4: Performance of Students from Public and Private School at the SHS

Variable	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Interval]	
public	100	56.05	1.149649	11.49649	53.76885	58.33115
private	100	51.41	1.174226	11.74226	49.08008	53.73992
combined	200	53.73	.8359303	11.82184	52.08158	55.37842
diff		4.64	1.64332		1.399345	7.880655

diff = mean(public) - mean(private) t = 2.8236
 Ho: diff = 0 degrees of freedom = 198
 Ha: diff < 0 Ha: diff != 0 Ha: diff > 0
 Pr(T < t) = 0.9974 Pr(|T| > |t|) = 0.0052 Pr(T > t) = 0.0026

Source: Field Data, 2023

4.4 Factors Influencing the Performance of Students at the SHS Level

At the senior high school level, the factors affecting the performance of students from public and private schools showed how the performance of students was influenced. The performance of senior high school students from both public and private schools was influenced by the characteristics listed in Table 5. According to Table 5, $R^2 = 0.4781$, which indicates that there was an approximately 48% positive relationship between the factors influencing the performance of students from public and private schools at the senior high school level, and $Adj R^2 = 0.3979$, which indicates that the variation in the factors influencing the performance of students from public and private schools at the senior high school level can be explained by the variation in the performance of students from both public and private schools. The range of the estimates' error indicates a significant degree of correlation between the variables' measures of variability (0.03 to 0.12).

At the senior high school level, assessments of the regression model's relevance between the variables affecting the performance of students in public and private schools were done. From Table 5, it can be inferred that the regression is statistically significant since $F(11, 88) = 2.96$, $p = 0.0012$. The outcome demonstrates that there is a positive and substantial association between the variables affecting senior high school students from both public and private schools in terms of performance.

As shown in Table 5, the calculated regression model accounts for 77.05% of the variation in the factors impacting the performance of students from public and private schools at the senior high school level. The teacher factors, student characteristics, and home-based factors were the explanatory variables that were statistically significant in determining the performance of students from public and private schools at the senior high

school level. Sex, age, parent, parent education, parent employment, kind of school, and school characteristics, however, were not significant. The likelihood of the performance of students from public and private schools at the senior high school level was positively impacted by all the significant variables. While the other variables were at a 5% significance level, home-based factors were significant at 1%. The significant variables also matched what they had anticipated.

According to Table 5, the estimated marginal effect of students' home-based characteristics is .2824239. Accordingly, for every unit rise in favorable Home-based characteristics of students, the probability of students from public and private schools performing similarly at the senior high school level is higher by 28.2%. Additionally, a marginal effect of 0.2099809 for student characteristics was found in the results. This suggests that, when all other factors are equal, the probability of academic success among students from public and private schools at the senior high school level will rise by 21% for every unit increase in ideal student attributes. Finally, the findings revealed a marginal effect for teacher variables of 0.1853137. This suggests that for every unit improvement in an effective teacher's contribution to students' academic achievement, the likelihood of their performance at the senior high school level will rise by 19%.

The psychological, emotional, social, and financial well-being of students is significantly influenced by their homes. Smith (2015) asserts that because parents are a person's earliest socialization influences, the state of the house affects the person. This is true because a child's environment and upbringing have an impact on how well he performs and how he responds to obstacles in life. Study habits of students may be important to the prediction of grades because it is likely that a student's grades may be tied to those habits.

As a result, students with poor study habits may receive lower grades than their peers. According to Atsiayasiahi and Maiyo (2015), the association between study habits, teacher evaluations, and grades may or may not be significant.

Darling-Hammond et al.'s research (2020) found that if the teacher is skilled and the learning activities are thoughtfully planned and carried out, children learn more when they spend longer time on them. The idea of concept mapping was another one that acted as our road map. Learners can link new material to a framework of relevant concepts they already understand by using concept mapping.

According to Darling-Hammond et al. (2020), teachers play a critical role in enabling students to reach their full potential in terms of personal development and wellbeing as well as in acquiring the wide variety of information and skills they will require as both citizens and workers. Teachers serve as a bridge between students who are about to enter a quickly changing world and their environment. The demands on teachers are growing as the world is always changing and the teaching profession is becoming more complex. In fact, it was deemed by Atuahene, Yusheng, Bentum-Micah, and Owusu-Ansah (2019) to be the most significant educational element influencing student accomplishment. The impacts of teachers on student accomplishment are additive and cumulative, according to Sanders and Sanders (2013), who asserted that teachers are the single most significant factor determining student achievement.

Table 5: Factors Influencing the Performance of students at the SHS Level

Student performance	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
Type of student	.0554241	.1266587	0.44	0.662	-.1944308	.3052789
Type of basic school	.1214886	.1174301	1.03	0.302	-.1101615	.3531386
gender	-.1229311	.1206899	-1.02	0.310	-.3610115	.1151493
age	-.007606	.0350242	-0.22	0.828	-.0766969	.0614848
parent	-.0267016	.0571935	-0.47	0.641	-.139525	.0861218
Parent education	.0190506	.0660638	0.29	0.773	-.111271	.1493722
Type of employment	.0191334	.0798933	0.24	0.811	-.1384691	.1767359
School factors	-.0804663	.07907	-1.02	0.310	-.2364447	.075512
Teacher factors	.1853137	.0993471	1.87	0.054	-.0106647	.3812921
Student characteristics	.2099809	.1122251	1.87	0.053	-.0114014	.4313632
Home based factors	.2824239	.0910941	3.10	0.002	.102726	.4621219
_cons	-.2108509	.9874265	-0.21	0.831	-2.15871	1.737009

Number of obs = 200 F(11, 88) = 2.96 Prob> F = 0.0012

R-squared = 0.4781 Adj R-squared = 0.3979 Root MSE = .77048

Source: Field Data, 2023

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This research compared the performance of public and private school candidates in BECE in Atwima Nwabiagya Municipal in Ashanti region. The study employed quantitative research method utilizing survey design in investigating the problem. A total of 200 responses were collected from two senior high schools and analyzed using descriptive statistics. In addition, inferential statistics was carried out utilizing linear regression model to establish the relationship between performance of public and private school candidates at the SHS.

5.1 Summary of Major Findings

The results of the analysis as they relate to the objectives of the study are described as follows:

- The performance of private school candidates was better than the performance of public school candidates in BECE.
- The performance of students from Public Junior High Schools was better than the performance of students from Private Junior High Schools at the senior high school level.
- The factors influencing the performance of students from public and private school at the senior high school level were teacher factors, student characteristics and home based factors.

5.2 Conclusion

The study set out to compare the performance of public and private JHS school candidates at the senior high school level in Atwima Nwabiagya Municipal in Ashanti region. The performance of private school candidates was better than the performance of public school candidates in BECE. This can be attributed to ideal home-based factors and quality characteristics of student towards academic performance.

However, the performance of students from Public Junior High Schools was better than the performance of students from Private Junior High Schools at the senior high school level. The reason can be attributed to conducive environment at the SHS level including availability of adequate in the teaching and learning process to improve quality teaching which enhances academic performance.

The factors influencing the performance of students from public and private school at the senior high school level were teacher-factors, student characteristics and home-based factors. It is therefore necessary for all stakeholders in the educational sector to contribute their quota in improving these factors towards academic performance.

5.3 Recommendation

- Parents should be encouraged to conducive home-based support their children in school.
- There should be conscious efforts by all stakeholders in the educational sector to improve the conditions of the public basic schools towards academic performance.
- All stakeholders in the educational sector should work together in improving the factors that influence academic performance.

REFERENCES

- Addey, J. M., & Abroquah, B. M. (2021). High-Stakes Examinations and Academic Stress: A Case Study of Senior High School Students in Ghana. *International Journal of Research and Reports in Education*, 3(2), 25-36.
- Addo, B. O. (2006). Education in Ghana: A historical overview. In M. H. Sommer (Ed.), *Education in West Africa* (pp. 123-144). Brill.
- Adom, G. (2017). Contemporary Techniques or Innovations in Teaching Agricultural Science at Secondary School Level, Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.
- Adu-Gyamfi, S. Donkoh, W. J. & Addo, A. A. (2016). Educational Reforms in Ghana: Past and Present. *Journal of Education and Human Development*, 5(3), 158-172
- Adu-Yeboah, C., & Ntow, K. A. (2014). Perceptions and Attitudes of Stakeholders towards Senior High School Assessment and Examinations in Ghana. *European Journal of Research in Social Sciences*, 2(2), 86-95.
- Akbari, M., & Hosseini, S. M. (2021). Investigating the impact of family support on academic performance of Iranian students. *Educational Research and Reviews*, 16(4), 179-187. <https://doi.org/10.5897/ERR2020.4116>
- Akyeampong, K. (2010). Educational Expansion and Access in Ghana: A Review of 50 Years of Challenge and Progress, Research Monograph No. 33 (April, 2010).
- Akyeampong, K. (2018). The Challenge of Teacher Supply in Sub-Saharan Africa: While Recruitment May Be Higher Than in Other Regions, the Supply of New Teachers

- in Sub-Saharan Africa Is Not Keeping Pace with the Number of New Students. Africa Learning Barometer, 4.
- Akyeampong, K., & Tsikata, D. (2016). The role of education in facilitating social inclusion in Ghana. *International Journal of Educational Development*, 51, 98-110.
- Alyahyan, E., Düştegör, D. (2020). Predicting academic success in higher education: literature review and best practices. *International Journal of Educational Technology in Higher Education*, 17(3) <https://doi.org/10.1186/s41239-020-0177-7>
- Ampiah, J. G., & Adu-Yeboah, C. (2019). Trends in access to senior high schools in Ghana. In G. N. de Graft-Johnson & J. O. Ayer (Eds.), *Globalization, Education and Development: Insights from Ghana* (pp. 123-142). Palgrave Macmillan.
- Ampofo, S. Y., Onyango, G. A. & Ogola, M. (2019). Influence of School Heads' Direct Supervision on Teacher Role Performance in Public Senior High Schools, Central Region, Ghana. *IAFOR Journal of Education*, 7(2), 9-26
- Anab, B. A. (2018). Promoting Quality Education through Effective Teacher Supervision In Public Junior High Schools In The Tamale Metropolis. (Masters Dissertation, University of Development Studies)
- Anamuah-Mensah, J. (2007). *Education in Ghana: The Quality Challenge*. UNESCO.
- Ankomah, Y. A., & Hope, W. C. (2011). A comparison of public and private basic school heads. *Journal of Educational Management*, 11(1), 42-51
- Asamoah-Gyimah, K. & Duodu, F. (2007). *Introduction to research methods in education*. Winneba: Institute for Educational Development and Extension, University of Education Winneba.

- Asante, S. K. B., & Mamphey, F. G. (2018). Secondary education in Ghana: A case of the 3-year and 4-year duration. *African Education Review*, 15(2), 107-123.
- Asenahabi, B. M. (2019). Basics of Research Design: A Guide to selecting appropriate research design. *International Journal of Contemporary Applied Researches*, 6(5), 76-89
- Atsiayasiahi, E. & Maiyo, J. K. (2015). Study of the relationship between study habits and academic achievement of students: A case of Spicer Higher Secondary School, India. *International Journal of Educational Administration and Policy Studies*, 7(7), 134-141
- Atuahene, S., Yusheng, K., Bentum-Micah, G. & Owusu-Ansah, P. (2019). The Assessment of the Performance of Public Basic Schools and Private Basic Schools, Ghana. *Global Journal of Human-Social Science: Linguistics & Education*, 19(6), 31-46
- Bakare, B., Okebukola, P., & Ogunniyi, M. (2021). The project method in teaching and learning: A review of literature. *Journal of Education and Practice*, 12(3), 114-120. <https://iiste.org/Journals/index.php/JEP/article/view/55291>
- Bannan-Ritland, B. (2014). The Role of Design in Research: The Integrative Learning Design Framework. *Educational Researcher*, 32(1), 21–24
- Bonsu, H. D. (2016). A Comparative Analysis of Academic Performance of Public And Private Junior High Schools In The Basic Education Certificate in Sekondi/Takoradi. *European Journal of Basic and Applied Sciences*, 3(1), 21-32

- Chowdhury, M. (2016). Emphasizing Morals, Values, Ethics, and Character Education In Science Education And Science Teaching. *The Malaysian Online Journal of Educational Science*, 4(2), 1-16
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research Methods in Education* (7th ed.). London: Routledge.
- Creswell, J. W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. (4th ed.). Boston: Pearson Education, Inc.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative and mixed methods approach*. (3rded.). Thousand Oaks, California: Sage Publications Ltd.
- Creswell, J. W., & Clark, P. V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage
- Daluba, N. E. (2013). Effect of demonstration method of teaching on students' achievement in agricultural science. *World Journal of Education*, 3(6), 1–7, <https://educationaltechnology.net/problem-based-learning-pbl/>.
- Dapaa, F. (2022). Ghana Launches National Strategic Plan for Economic Transformation. *African Business Magazine*. Retrieved from <https://africanbusinessmagazine.com/region/west-africa/ghana/ghana-launches-national-strategic-plan-for-economic-transformation/>
- Darling-Hammond, L., Flook, L. , Cook-Harvey, C., Barron, B. & Osher, D.(2020)Implications for educational practice of the science of learning and development,*Applied Developmental Science*, 24(2),97-140,DOI: [10.1080/10888691.2018.1537791](https://doi.org/10.1080/10888691.2018.1537791)

- Diise, A. I., Zakaria, H. & Mohammed, A. A. (2018). Effectiveness of project method of teaching on agricultural knowledge and skills acquisition among agricultural science students of Awe Senior High School in the Upper East Region, Ghana. *World Journal of Educational Research and Reviews*, 4(1), 62–75.
- Djangmah, J. S. (2014). Curriculum reform in Ghana's pre-tertiary educational system: Challenges and prospects. *International Journal of Educational Development*, 37, 19-26.
- Falode, O. C., Adewale, I. A., Ilobeneke, S. C., Falode, M. E. & Robinson, A. O. (2015). Effects of discussion instructional strategy on achievement and retention of secondary school students in human geography in Minna, Nigeria, *Journal of Scientific and Engineering Research*, 2(4), 78–84,
- Fraenkel, J. R, Wallen, N. E. & Hyun, H. (2011). How to Design and Evaluate Research in Education. Edition: 8a ed. Publisher: McGraw-Hill Education
- Garcia, T., & Ramirez, L. A. (2021). Predictors of academic performance and retention of college freshmen: An exploratory study. *Journal of College Student Retention: Research, Theory & Practice*, 23(1), 118-135.
<https://doi.org/10.1177/1521025120942464>
- Ghana Education Service. (n.d.). Basic Education Certificate Examination (BECE).
<https://www.ges.gov.gh/learning-assessment/bece>
- GSS (2018). Ghana Living standards survey Round 7: Poverty Trends in Ghana 2005-2017. Accra: Ghana Statistical service

- Haftu, H., Hwang, J., Kim, Y., & Noh, H. (2021). Predictors of academic performance of first-year college students: A prospective study. *Higher Education Research & Development*, 40(1), 161-176. <https://doi.org/10.1080/07294360.2020.1774332>
- Haradhan, M. (2017). Two Criteria for Good Measurements in Research: Validity and Reliability. *Annals of Spiru Haret University*, 17(3): 58-82
- Hassan, Z. A., Schattner, P., & Mazza, D. (2006). Doing A Pilot Study: Why Is It Essential?. *Malaysian family physician : the official journal of the Academy of Family Physicians of Malaysia*, 1(2-3), 70–73.
- Hinton, P. R., Brownlow, C., McMurray, I. & Cozens, B. (2004). *SPSS Explained*. New York, NY: Routledge Inc
- Iliya, A. &Ifeoma, L. G. (2015). Assessment of Teacher Motivation Approaches in the Less Developed Countries. *Journal of Education and Practice*, 6(22), 10-17
- Jamieson, L. M. & Saunders, M. V. (2020). Contextual Framework for Developing Research Competence: Piloting a Validated Classroom Model. *Journal of the Scholarship of Teaching and Learning*, 20(3), .1-19.
- Jessy, D. & Charu, H. (2015). Using social media for educational purposes: approaches and challenges,” in Proceedings of the 2015 International Educational Conference 2015 Learning Technologies in Education at Jamia Millia Islamia, New Delhi, India,
- Jimenez-Sanchez, E., Murray, C. B., Goldrick-Rab, S., & Broton, K. M. (2021). Understanding how family income, enrollment intensity, and financial aid influence college persistence for first-generation students. *Journal of Higher Education*, 92(1), 1-28. <https://doi.org/10.1080/00221546.2020.1757112>

- Kaplan, R. M., Chambers, D. A., & Glasgow, R. E. (2014). Big data and large sample size: a cautionary note on the potential for bias. *Clinical and translational science*, 7(4), 342–346. <https://doi.org/10.1111/cts.12178>
- Karim, A. K. M. R., Hasan, M. M., & Islam, M. T. (2021). Parenting style, parental involvement, and academic outcomes among high school students in Bangladesh. *Journal of Family Studies*, 5, 1-17.
<https://doi.org/10.1080/13229400.2021.1932793>
- Karthikeyan, P. (2015). Need of Basic Education. *Shanlax International Journal of Education*, 4(1), 1-10
- Khan, M. A., Shah, I. A., & Ali, A. (2021). Investigating factors influencing academic performance of college students: Evidence from intermediate examination. *Journal of Education and Learning*, 10(3), 127-140.
<https://doi.org/10.5539/jel.v10n3p127>
- Kim, H., Sefcik, J. S., & Bradway, C. (2017). Characteristics of Qualitative Descriptive Studies: A Systematic Review. *Research in nursing & health*, 40(1), 23–42.
<https://doi.org/10.1002/nur.21768>
- Kisiel, J. F. (2016). The importance of field trips in education. *Journal of Experiential Education*, 39(1), 58-68. <https://doi.org/10.1177/1053825915621721>
- Koç, M. (2021). The effectiveness of problem-based learning on the academic achievement of students: A meta-analysis study. *Educational Sciences: Theory and Practice*, 21(2), 211-235. <https://doi.org/10.12738/estp.2021.2.022>
- Leedy, P. D. & Ormrod, J. E. (2015). *Practical Research Planning and Design*. Eleventh Edition. Harlow, England: Pearson Education Limited

- Limbu, M. (2012). Teaching writing in the cloud: Networked writing communities in the culturally and linguistically diverse classrooms. *Journal of Global Literacies, Technologies, and Emerging Pedagogies*, 1(1), 1-20.
- Manu, Y. S. (2020). Factors That Account For Differences in Academic Performance of Public and Private Junior High Schools in BECE in the Tain District of the Bono Region-Ghana. (Masters Dissertation, University for Development Studies)
- Martin, E., Arias-Martinez, R., Marchesi, A. and Perez, E.M. (2008). Variables that Predict Academic Achievement in the Spanish Compulsory Secondary Educational System: A Longitudinal, Multi-Level Analysis. *The Spanish Journal of Psychology*, 11(2), 400-413.
- Mensa, M., & Marfo, E. F. (2015). The quality of secondary education in Ghana: Students' and teachers' perspectives. *International Journal of Educational Development*, 41, 98-107.
- Mensa, M., & Marfo, E. F. (2015). The quality of secondary education in Ghana: Students' and teachers' perspectives. *International Journal of Educational Development*, 41, 98-107.
- Mensa, M., & Marfo, E. F. (2015). The quality of secondary education in Ghana: Students' and teachers' perspectives. *International Journal of Educational Development*, 41, 98-107.
- Miles, J., & Emmons, H. (2021). The relationship between parental disagreement and children's academic performance: The mediating role of emotional distress. *Journal of Child and Family Studies*, 30(4), 1004-1014.
<https://doi.org/10.1007/s10826-020-01874-3>

- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). Los Angeles: Sage.
- Ministry of Education (2020). *National Pre-Tertiary Learning Assessment Framework*. Accra: National Council for Curriculum and Assessment.
- Ministry of Education, Ghana. (2019). *Education Sector Performance Report*. Accra, Ghana.
- Ministry of Education, Ghana. (2019). *Education Strategic Plan 2018-2030*. [https://www.moe.gov.gh/files/EDSTRAP%20%20\(1\)%20%20\(1\).pdf](https://www.moe.gov.gh/files/EDSTRAP%20%20(1)%20%20(1).pdf)
- Ministry of Education, Ghana. (2019). *Education Strategic Plan 2018-2030*. [https://www.moe.gov.gh/files/EDSTRAP%20%20\(1\)%20%20\(1\).pdf](https://www.moe.gov.gh/files/EDSTRAP%20%20(1)%20%20(1).pdf)
- Nunoo, E. K. (2015). The Role of ICT in Basic and Secondary Education in Ghana. *International Journal of Education and Development using Information and Communication Technology*, 11(1), 52-63.
- Nyarko, K., & Mensah, J. (2018). Quality of education in public secondary schools in Ghana: A survey of stakeholders' perspectives. *International Journal of Educational Research and Development*, 3(2), 1-17.
- Nyarko, K., & Mensah, J. (2018). Quality of education in public secondary schools in Ghana: A survey of stakeholders' perspectives. *International Journal of Educational Research and Development*, 3(2), 1-17.
- Okongo, R. B., Ngao, G., Rop, N. K. & Nyongesa, W. J. (2016). Effect of Availability of Teaching and Learning Resources on the Implementation of Inclusive Education in Pre-School Centers in Nyamira North Sub-County, Nyamira County, Kenya. *Journal of Education and Practice*, 6(35), 132-141

- Olorundare, A. S., & Oguntimehin, A. O. (2021). Demonstration method of teaching: Enhancing students' cognitive learning outcomes in science education. *Cogent Education*, 8(1), 1910547. <https://doi.org/10.1080/2331186X.2021.1910547>
- Peters, G. J. Y (2014). The alpha and the omega of scale reliability and validity. *The European Psychologist*, 16(2), 56-68
- Ramli, A., Zain, R. M., Zain, M. Z. M. & Rahman, A. A. A. (2021). *Environmental Factors and Academic Performance: The Mediating Effect of Quality of Life*. Switzerland: Springer
- Rogers, J. R., Taylor, J. E., & Tyack, D. (2022). The impact of teacher resources on student achievement: Evidence from a randomized controlled trial in elementary schools. *Journal of Educational Psychology*, 114(1), 42-56. <https://doi.org/10.1037/edu0000645>
- Saina, E. K., Kathuri, N. J., Rono, P. K., Kipsat, M. J. & Sulo, T. (2012). *Food Security in Kenya: the Impact of Building Rural Farmers' Capacity through Agricultural Education in Secondary School*, Department of Agricultural Economics and Resource Management, University of Nairobi, Nairobi, Kenya, 2012, <http://www.afma.ke.org>.
- Sanders, A. F., & Sanders, A. (2013). *Elements of human performance: Reaction processes and attention in human skill*. New York: Psychology Press.
- Saunders, B., Kitzinger, J., & Kitzinger, C. (2015). Anonymising interview data: challenges and compromise in practice. *Qualitative research : QR*, 15(5), 616–632. <https://doi.org/10.1177/1468794114550439>

- Seidman, I. (2006). *Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences*. Third Edition. New York: Teachers College Press
- Shahzadi, E. & Ahmad, Z. (2011). A Study on Academic Performance of University Students. Proc. 8th International Conference on Recent Advances in Statistics Lahore, Pakistan – February 8-9, 2011, 255-268
- Siedlecki S. L. (2020). Understanding Descriptive Research Designs and Methods. *Clinical nurse specialist CNS*, 34(1), 8–12.
<https://doi.org/10.1097/NUR.0000000000000493>
- Smith, J. (2015). The role of parents in child development. *Journal of Family Studies*, 21(13), 134-148
- Smith, J. (2020). The Importance of Education in National Development. *Journal of Education and Development*, 34(2), 45-58
- Tani, K. Dalzell, E., Ehambaranathan, N., Murugasu, S. & Steele, A. (2019). Evaluation of factors affecting students' performance in tertiary education. *Journal of Pedagogical Research*, 3(2), 1-10
- Troussas, C., Krouska, A. & Sgouropoulou, C. (2020). Collaboration and fuzzy-modeled personalization for mobile gamebased learning in higher education. *Computers & Education*, 144, 1-23.
- UNESCO. (2021). Education in Ghana. <https://en.unesco.org/countries/ghana/education>
- Yusuf, M. O., & Afolabi, A. O. (2010). Effects of Computer Assisted Instruction (CAI) on Secondary School Students' Performance in Biology. *Turkish Online Journal of Educational Technology-TOJET*, 9(1), 62-69.

APPENDIX A

QUESTIONNAIRE FOR STUDENTS

The researcher **JOYCELYN BEDIAKO** is a Master of Arts in Educational Leadership student of the Akenten Appiah-Minka University of Skill Training and Entrepreneurial Development. She is conducting an academic research on the topic: **COMPARATIVE ANALYSIS OF THE PERFORMANCE OF BECE GRADUATES FORM PUBLIC AND PRIVATE SCHOOLS AT THE SENIOR HIGH SCHOOLS IN ATWIMA NWABIAGYA MUNICIPAL**. The work is purely for academic purpose and all data gathered would be treated as such. Therefore, your cooperation and assistance would be much appreciated to make the study a success. All information furnished will therefore be treated with utmost confidentiality and anonymity.

SECTION A: DEMOGRAPHIC CHARACTERISTICS

Please answer the following questions by ticking (✓) where necessary.

1. Type of student Day () Boarding ()
2. What type of basic school did you complete your BECE?
Public () Private ()
3. Sex: Male () Female ()
4. How old are you?
5. Whom are you living with
Both parents () father () mother () guardian ()
6. What is the level of your parent/guardian education?
No formal education () Basic education () Secondary education ()
Tertiary education ()
7. What is the type of employment of your parent/guardian?
Informal () Private formal () Public formal ()
8. What is your parent/guardian occupation?
9. How do you rate your own performance?
Poor () Good () Excellent ()

SECTION B: FACTORS INFLUENCING THE PERFORMANCE OF STUDENTS

Indicate your level of agreement on factors influencing the performance of students on a scale of 1-5, (1-Strongly Disagree; 2-Disagree; 3-Neutral; 4-Agree and 5-Strongly Agree). Please tick (✓) the appropriate box

No.	Statement	1	2	3	4	5
	School Factors					
	There are adequate teaching & learning materials in this school					
	Textbooks are available					
	Availability of trained teachers					
	There are inadequate classrooms					
	Adequate furniture are available					
	Resourced laboratories are available					
	Teacher Factors					
	Teachers are always punctual					
	Teachers attend school regularly					
	Teachers lack mastery of the subject matter					
	Teachers always complete syllabuses for the classes					
	Teachers in this school are hard working					
	Teachers' lessons are always interesting					
	Teachers always give prompt feedback					
	Students Characteristics					
	I am always punctual					
	I attend school regularly					
	I don't have interest in my subjects					
	I enjoy my teachers' lessons					
	I always study my books after school					
	I always complete my exercises and assignment					
	Home-based Factors					
	My parents always provide me with breakfast before I go to school					
	My parents provide me with supplementary readers at home					
	My parents do not provide me with basic school needs					
	My parents are interested in my schooling					
	My parents attend PTA meetings					
	My parent visit me in school regularly					

APPENDIX B

BECE Aggregates of Respondents

PUBLIC	PRIVATE
29	16

24	12
24	22
20	25

19	13
18	20
17	18
21	20
21	22
29	13
16	17
26	14
19	27
25	21
21	16
24	28
29	21
24	13
24	20
20	23
19	25
18	40
17	18
21	16
21	12
29	22
16	25
26	13
19	20
25	18
21	20
24	22
29	13
24	17
24	14
20	27
19	21
18	16
17	28
21	21
21	13
29	21
16	23
26	25
19	40

25	18
21	17
24	14
18	27
17	25
39	35
36	24
26	19
29	20
32	33
37	26
37	27
30	21
25	10
14	20
15	12
23	17
27	15
29	26
15	30
30	27
26	26
26	30
24	37
17	35
22	23
23	15
26	19
21	17
35	26
34	21
25	24
36	25
35	25
21	20
32	31
29	41
23	17
27	22
24	21
16	20

14	22
17	26
17	20
16	20
16	21
19	20
19	14
21	17
22	20
25	13
19	17
17	17
18	16
20	13

60	48
56	48
32	46
52	77
40	34
33	53
44	55
74	41
60	55
61	46
47	71
27	40
70	45
51	66
50	41
41	44
40	59
74	38
41	45
74	44
46	45
48	44
48	53
38	54
38	62
52	40
52	51
51	50
47	46
55	64
66	58
53	51
49	51
70	51
59	54
62	71
76	38
59	68
43	55
52	54
68	57
50	56
65	57

Average Performance of the Four

Core Subjects of Respondents at SHS

PUBLIC	PRIVATE
56	35
43	33
61	35
57	34
55	34
27	72
51	34
59	62
78	35
79	62
75	33
67	35
59	34
44	56
65	62
50	65
55	62
64	46
64	48
70	34
68	48
42	68

55	51
47	73
55	77
66	51
53	62
49	39
70	37
59	42
62	36
76	64
59	58
43	40
52	51
68	51
50	54
65	71
55	38
47	68
55	55
66	54
53	57
49	56
70	57
59	51
62	73
76	77
59	51
43	62
52	39
68	37
50	51
65	55
55	54
70	57
59	39