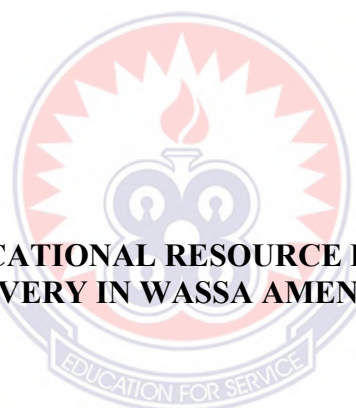


UNIVERSITY OF EDUCATION, WINNEBA



**EFFECTS OF EDUCATIONAL RESOURCE DEPRIVATION ON BASIC
EDUCATION DELIVERY IN WASSA AMENFI EAST MUNICIPALITY**



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MASTER OF PHILOSOPHY

2024

UNIVERSITY OF EDUCATION, WINNEBA



**EFFECTS OF EDUCATIONAL RESOURCE DEPRIVATION ON BASIC
EDUCATION DELIVERY IN WASSA AMENFI EAST MUNICIPALITY**



**A thesis submitted to the School of Graduate Studies in
partial fulfillment of the requirements for the award of
the degree of Master of Philosophy
(Educational Administration and Management)**

**Department of Educational Administration and Management
School of Education and Life-Long Learning
UNIVERSITY OF EDUCATION, WINNEBA**

DECEMBER, 2024

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DECLARATION

Student's Declaration

I, Alexander Baidoo, declare that this thesis, with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

Signature:

Date:



Supervisors' Declaration

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Education, Winneba.

Supervisor's Name: Prof. Kwame Odei-Tettey

Signature:

Date:

DEDICATION

To my twins Adina and Aldriana Oforiwaa Amoakooa Baidoo



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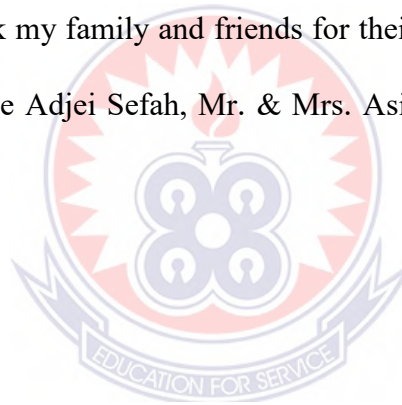
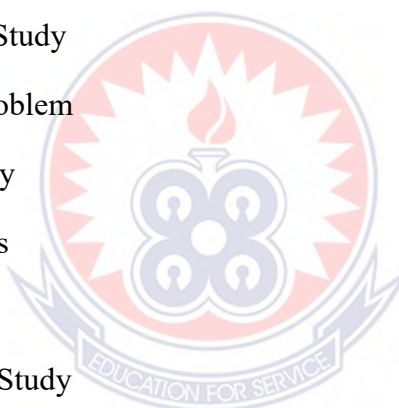


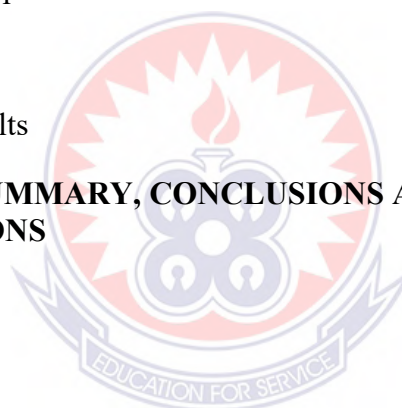
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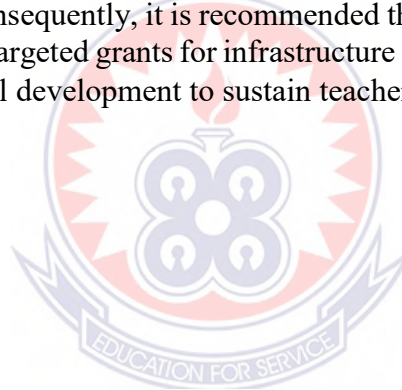
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ABSTRACT

This study examined the effects of deprivation on the quality of basic education delivery in the Wassa Amenfi East Municipality. The research was anchored on the Input-Process-Output (IPO) Theory and Human Capital Theory. Employing a quantitative approach and a descriptive survey design, the study targeted a population of 381 teachers across 37 schools in four selected circuits. A sample size of 196 respondents was determined using the Yamane (1967) formula, with participants selected through proportionate stratified and simple random sampling techniques. Data were collected using a close-ended questionnaire on a 4-point Likert scale and analyzed with IBM SPSS (v.27) and Microsoft Excel (2021) using frequencies, means, standard deviations, and Pearson Correlation. The findings revealed that public basic schools in the municipality are significantly deprived in terms of infrastructure, teacher availability, and teaching-learning materials. While these deprivation levels had a marginal impact on individual teacher delivery, the study found a strong negative correlation between deprivation and student outcomes; specifically, as deprivation increases, both academic performance and pupil attendance rates significantly decrease. It was concluded that while teachers remain resilient, the physical and material deprivation of schools creates a barrier to student success that requires urgent policy intervention to ensure equitable education delivery. Consequently, it is recommended that the Ghana Education Service (GES) should provide targeted grants for infrastructure in deprived areas and implement continuous professional development to sustain teacher motivation.



CHAPTER

INTRODUCTION

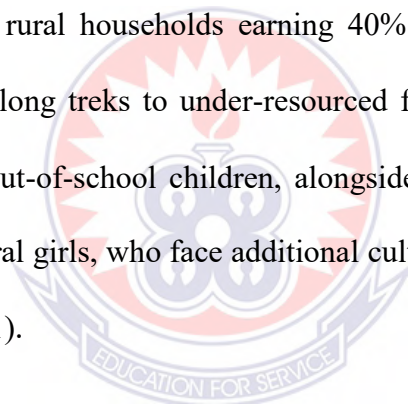
1.1 Background to the Study

A functional education system not only equips individuals with skills but also serves as a primary route out of poverty and social exclusion for marginalized rural populations. Research consistently highlights that quality teaching and effective learning are severely compromised in the vast majority of Ghanaian basic schools, particularly those in deprived rural settings (Leslie, 2013). This deprivation manifests in multiple forms: crumbling or absent infrastructure, chronic teacher shortages, inadequate teaching and learning resources (TLRs), and geographic isolation that deters attendance. Such conditions create a vicious cycle where poor learning outcomes perpetuate economic stagnation, making rural basic education a persistent national challenge.

Internationally, the right to free and compulsory basic education has been enshrined since the 1948 Universal Declaration of Human Rights (Article 26), gaining renewed momentum through the 1990 Jomtien Declaration and the 2000 Dakar Framework for Action. The past decade has intensified global focus via Sustainable Development Goal 4 (SDG 4), targeting universal access to quality education by 2030. Despite these commitments, progress remains uneven. Sub-Saharan Africa accounts for the world's highest out-of-school population: UNESCO Global Education Monitoring Reports (2016-2020) indicate that nearly 98 million children and youth aged 6-17 are excluded from schooling. Key drivers include entrenched poverty, gender disparities, armed conflicts, and inadequate infrastructure. Girls bear a disproportionate burden, comprising 9 million of the excluded versus 10 million boys globally, with the vast

majority of affected girls residing in this region (UNICEF, 2015, p. 37; UNESCO, 2019).

In Ghana, successive governments have rolled out ambitious reforms to bridge these gaps, including the 1992 Free Compulsory Universal Basic Education (FCUBE) policy, capitation grants since 2005, and the Free Senior High School (SHS) program launched in 2017. These initiatives boosted national enrollment from 68% in 2000 to over 90% by 2022. However, rural basic education lags critically: pupil-textbook ratios often exceed 5:1, teacher vacancy rates in deprived districts hover at 30%, and many schools lack basic sanitation or electricity (Ghana Education Outcomes Project, 2022). Poverty exacerbates this, with rural households earning 40% less than urban ones, forcing children into labor or long treks to under-resourced facilities. Consequently, Ghana counts over 400,000 out-of-school children, alongside dropout rates averaging 20% with highest among rural girls, who face additional cultural and safety barriers (Africa Education Watch, 2021).



Wassa Amenfi East Municipality in Ghana's Western Region exemplifies this rural deprivation crisis. Home to over 150 basic schools serving 25,000+ pupils, more than 70% operate without permanent structures, many under trees, in dilapidated sheds, or makeshift summer huts exposed to weather extremes (see Appendix D). TLR storage is nonexistent in most, leading to lost or damaged materials, while teacher deployment favors urban circuits, leaving rural ones understaffed. Gold mining activities, a key local industry, compound issues through environmental pollution (e.g., mercury contamination affecting water sources) and economic displacement, further eroding enrollment and performance. Attendance patterns underscore the toll: 90% of rural

pupils walk 3+ km daily to school, with younger children (4-6 years) attending at just 81% versus 85% for older ones (13-15 years). These factors culminate in abysmal learning outcomes, high absenteeism, and dropout spikes, particularly post-primary (Ghana Education Outcomes Project, 2022; District Education Directorate Report, 2023).

This layered deprivation spanning inputs (resources), processes (teaching), and outputs (outcomes) represents a glaring practice gap. While urban and peri-urban schools advance under national reforms, rural hard-to-reach areas like Wassa Amenfi East stagnate, with few Ghanaian studies systematically quantifying deprivation's multifaceted effects on basic education delivery. Prior Ghanaian studies have largely documented observable outcomes of deprivation without systematically unpacking the causal mechanisms through which deprivation affects teaching and learning. For instance, Dzidza, Jackson, Normanyo, Walsh, and Ikejiaku (2018) found that expanded access policies in Ghana increased enrolment across regions, but they also reported persistent poverty and uneven learning outcomes, particularly in deprived districts, without empirically linking household poverty, school resources, and classroom processes. Similarly, Amakyi and Ampah-Mensah (2016) established a significant gap between existing and expected quality provisions in basic schools, concluding that improvements in access were not matched by adequate infrastructure and instructional resources; however, their study did not examine how these deficiencies translated into classroom practices or pupil learning outcomes.

At the community level, Akansale Ayele (2018) demonstrated a statistically significant relationship between child poverty and school participation in the Upper West Region, noting that poverty constrained attendance and access to learning materials, but the

study focused primarily on socio-economic conditions and did not analyse school-based processes such as teaching quality or school management. Earlier work by the Ministry of Education (2018) and related sector performance reports similarly highlight rural-urban disparities in teacher deployment, infrastructure, and pupil performance, yet these reports remain largely descriptive and aggregate, offering limited insight into how multiple dimensions of deprivation interact within specific districts.

Consequently, while existing research confirms that deprivation correlates with poor educational outcomes, it rarely disaggregates deprivation into input, process, and output dimensions within localized rural contexts. This limitation creates a critical evidence gap, particularly for hard-to-reach districts such as Wassa Amenfi East, where understanding how resource shortages, instructional constraints, and attendance patterns jointly shape learning outcomes is essential for informed policy and intervention design.

1.2 Statement of the Problem

Despite ongoing reforms, Ghana's basic education system continues to suffer from unequal access and lifelong learning gaps at all levels. Since 2009, the Government has consistently missed targets for equitable access and quality participation outlined in the Education Strategic Plan (ESP 2010-2020), despite clearly defined policy objectives. Most concerning are the declining trends at basic education, where approximately 40% of BECE candidates score poorly each year. Evidence clearly links these low performers to low-income backgrounds attending under-resourced public JHS characterized by inadequate trained teachers, textbooks, uncongenial learning environments, and weak supervision in early years (Africa Education Watch, 2021).

Numerous studies across Africa, Sub-Saharan Africa, and Ghana consistently confirm that deprivation has a negative and sustained impact on the delivery of quality basic education. At the continental level, UNESCO (2022) and the World Bank (2021) report that schools serving poor and rural communities experience persistent shortages of trained teachers, learning materials, and basic infrastructure, resulting in weak instructional delivery and low learning outcomes despite expanded access. In Sub-Saharan Africa, empirical studies show that resource-constrained schools prioritise enrolment compliance over instructional quality, leading to overcrowded classrooms, reduced instructional time, and limited learner support (OECD, 2020; UNICEF, 2021).

Within Ghana, similar patterns are well documented. Amakyi and Ampah-Mensah (2016) found that while access to basic education has improved, deprived schools continue to lack essential facilities and instructional resources, significantly undermining teaching effectiveness and learning quality. Dzidza et al. (2018) further demonstrated that poverty reduction outcomes linked to education reforms remain uneven, with deprived districts lagging behind due to weak school resources and poor learning conditions. At the household and community level, Akansale Ayele (2018) established that child poverty directly constrains school attendance, access to learning materials, and academic engagement in rural Ghana, reinforcing low educational quality. Collectively, these studies reveal that in less privileged communities, chronic resource shortages shift educational focus from meaningful teaching and learning to mere system survival, thereby compromising the quality of basic education delivery.

However, critical gaps distinguish this study from prior research. Previous studies were conducted elsewhere, and not in Wassa Amenfi East Municipality missing its unique challenges like illegal mining pollution and extreme geographic isolation that intensify

deprivation. While earlier works positioned deprivation as the independent variable against academic performance or learning outcomes as the sole dependent measure of quality education, this study expands the concept across four key determinants aligned with the research questions: pupils' school attendance, teachers' teaching effectiveness, pupils' academic performance, and overall delivery barriers. This holistic approach better captures deprivation's comprehensive impact beyond just test scores.

Methodologically, most prior research relied on qualitative designs using interviews, focus groups, and case studies, whereas this study employs a quantitative approach with structured Likert-scale questionnaires administered to teachers and pupils, analyzed via SPSS for robust, generalizable findings. The contextual reality of Wassa Amenfi East further sets it apart: insufficient resources cause widespread teacher refusals, creating 30% vacancy rates versus national averages, unlike the "ideal" conditions assumed in previous samples with good attendance, solid achievement, and positive student attitudes.

In Wassa Amenfi East, 90% of pupils walk 3+ kilometers daily to school with only 81% attendance for younger children aged 4-6 years, chronic teacher absenteeism, and schools operating without basic infrastructure. This study's participants genuinely reflect these hardships making the findings directly applicable to similar hard-to-reach Ghanaian contexts.

These gaps leave Wassa Amenfi East unexamined and basic education delivery under-theorized in its specific mining-affected rural context. Without this comprehensive quantitative analysis of deprivation's multi-dimensional effects across attendance, teaching effectiveness, academic performance, and systemic barriers, national equity

goals under the new ESP (2018-2030) remain unattainable, perpetuating rural exclusion.

1.3 Purpose of the Study

This study examines the effects of deprivation in infrastructure, teachers, and teaching/learning resources on basic education delivery in public basic schools of Wassa Amenfi East Municipality.

1.4 Research Objectives

The specific objectives are to:

1. Assess the state of deprivation in infrastructure, teaching/learning materials, and teacher availability in public basic schools in Wassa Amenfi East Municipality.
2. Examine the effect of deprivation on teachers' teaching effectiveness in public basic schools in Wassa Amenfi East Municipality.
3. Determine the effect of deprivation on pupils' academic performance in public basic schools in Wassa Amenfi East Municipality.
4. Investigate the influence of deprivation on pupils' school attendance in public basic schools in Wassa Amenfi East Municipality.

1.4 Research Questions

The study is guided by these research questions:

1. What is the state of deprivation regarding infrastructure, teaching/learning materials, and teachers in public basic schools in Wassa Amenfi East Municipality?
2. What is the effect of deprivation on teachers' teaching effectiveness in public basic schools in Wassa Amenfi East Municipality?

3. What is the effect of deprivation on pupils' academic performance in public basic schools in Wassa Amenfi East Municipality?
4. What is the effect of deprivation on pupils' school attendance in public basic schools in Wassa Amenfi East Municipality?

1.5 Significance of the Study

This study holds substantial value for diverse stakeholders tackling Ghana's rural education equity challenges. At the policy level, it equips the Ministry of Education and Ghana Education Service with concrete, quantitative evidence documenting deprivation's specific effects in a mining-impacted rural municipality like Wassa Amenfi East. These findings will directly inform resource prioritization within the Education Strategic Plan (2018-2030), strengthening Free Compulsory Universal Basic Education implementation through targeted infrastructure investments, teacher retention incentives, and hard-to-reach area strategies.

For district-level decision-making, the Wassa Amenfi East Education Directorate gains a comprehensive baseline assessment of deprivation across infrastructure, personnel, and teaching/learning resources, alongside measured impacts on attendance patterns, teaching effectiveness, and academic outcomes. This data supports practical interventions such as circuit supervisor training, community partnerships with mining companies, and evidence-based budget allocations to close performance gaps.

In practice, teachers and school heads acquire empirical insights linking resource shortages to their daily effectiveness and pupil results, empowering advocacy for textbooks, classrooms, and facilities while highlighting the stakes of inaction. Parents and community members gain clarity on how deprivation undermines their children's

attendance and achievement, motivating active monitoring roles and support for school improvement initiatives.

Theoretically, results test and potentially expand Input-Process-Output frameworks in severely deprived settings, where contextual factors like mining pollution and teacher posting refusals introduce unique mediating influences on traditional education system dynamics.

1.6 Operational Definition of Terms

Deprivation: The chronic shortage of essential educational inputs in public basic schools, specifically measured as: (1) inadequate physical infrastructure (classroom space <40 sq ft/pupil, lack of sanitation/storage), (2) teacher shortages (vacancy rates $>20\%$, pupil-teacher ratio $>50:1$), and (3) insufficient teaching/learning resources (pupil-textbook ratio $>5:1$, no functional library/computer access).

Basic Education Delivery: The effective provision of primary education (KG-P6) encompassing three measurable outcomes: pupil school attendance (average daily attendance rate), teacher teaching effectiveness (perceived instructional quality via 6-point Likert scale), and pupil academic performance (BECE pass rates or equivalent standardized scores).

Teaching Effectiveness: Teachers' ability to deliver quality instruction, operationally defined through a 30-item, 6-point Likert questionnaire measuring lesson preparation, classroom management, use of teaching aids, assessment practices, and pupil engagement (Cronbach's alpha >0.8 expected).

Pupil School Attendance: The proportion of enrolled pupils physically present during school hours, measured as average daily attendance rates across sampled schools (target: >85% benchmark).

Infrastructure: Physical school facilities including classrooms, teacher housing, sanitation, water supply, and furniture, assessed via school head checklists against Ghana Education Service minimum standards.

1.7 Limitations of the Study

This study has three primary limitations. First, its cross-sectional quantitative design captures deprivation effects at a single point (2023 data collection), potentially missing seasonal variations in attendance or longer-term academic trends observable through longitudinal analysis.

Second, reliance on self-reported questionnaire data from teachers and pupils introduces social desirability bias, where respondents may overstate teaching effectiveness or attendance to align with professional expectations. While anonymity protocols and triangulation with school records mitigate this, some subjectivity remains.

Third, the geographic scope is limited to Wassa Amenfi East Municipality's public basic schools, constraining generalizability to other Ghanaian rural contexts with different deprivation profiles (e.g., northern drought areas vs. coastal fishing communities). However, the quantitative methodology and standardized deprivation measures support application to similar mining-affected rural districts. These limitations are acknowledged, with methodological rigor (pilot-tested instruments,

SPSS analysis, multi-source data) employed to maximize validity within the study's practical constraints.

1.6 Delimitation of the Study

According to Creswell (2012), a scope of a study is the boundaries that are set by the researcher in order to control the range of a study. Geographically, the study was delimited basic schools in 4 circuits in the Wassa Amenfi East Municipality of the Western Region in Ghana. The study was delimited to only public basic schools in the selected circuits. Also, only deprivation regarding teachers and teaching learning resources were examined.

1.7 Organisation of the Study

The study comprises of five chapters. The first chapter deals with the background to the study, statement of the problem, objectives for the study, the research questions, significance of the study, scope of the study, limitations of the study and the organization of the study. Chapter Two discusses the review of related literature. Chapter Three presented the methodology. Chapter Four looks at the presentation of findings, analysis of results and discussion of the results obtained from the study. Chapter Five deals with the key summary, conclusion and recommendations of the study.

CHAPTER TWO

LITERATURE REVIEW

2.0 Overview

This chapter systematically reviews literature essential to understanding deprivation effects on basic education delivery in Wassa Amenfi East Municipality. It begins with key concepts defining deprivation across infrastructure, teacher availability, and teaching/learning materials. The theoretical framework then examines two relevant theories directly supporting the study's resource-constraint analysis.

The empirical review follows, organized by the four research questions: state of deprivation in public basic schools, its association with teaching quality, academic performance, and pupil attendance. A conceptual framework integrates these variables, positioned after empirical evidence per standard practice. The chapter concludes with a summary identifying specific literature gaps this study addresses, providing justification for the Wassa Amenfi East focus.

2.1 Theoretical Framework

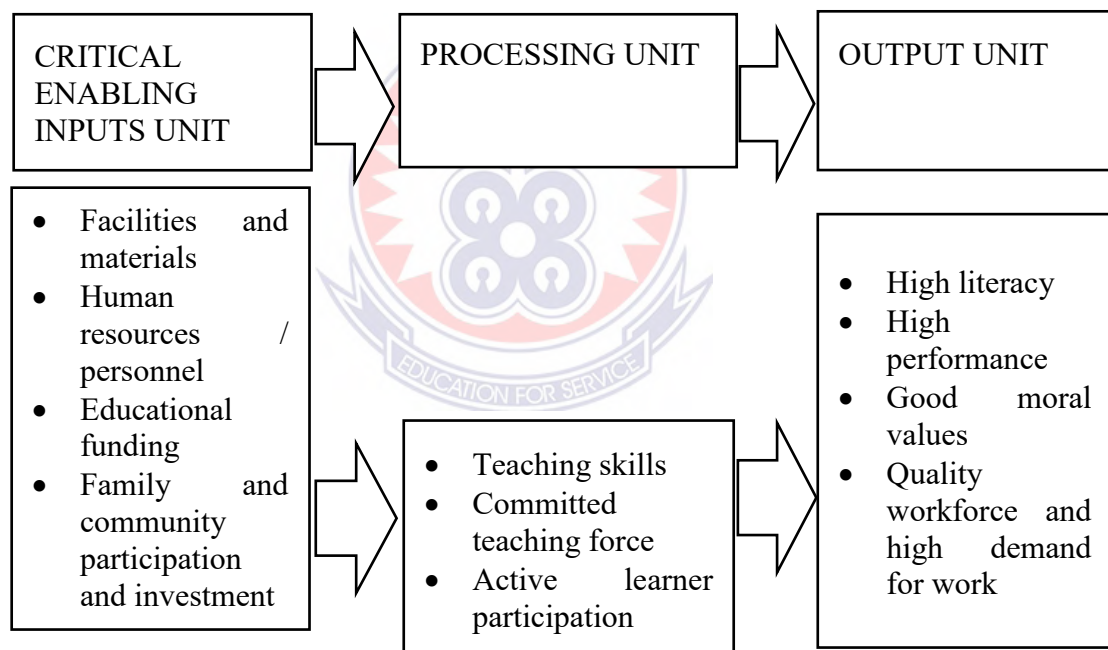
This research used two theories: Input-process-output system theory by Schultz, Human capital theory (1971) and Alfred Adler's theory of System of Individual Psychology (1956). Haque and Rehman (2014) employed these theories in their studies. The Input-Process-Output (IPO) systems theory and Human Capital Theory provide appropriate frameworks for examining how organizational inputs are transformed through internal processes into measurable outputs. These theories are widely used to analyze how resources, human capabilities, and institutional practices influence performance outcomes in organizations, including educational systems (Becker, 2020;

Moore, 1990). The theories envisage that when adequate educational resources are invested with efficient teaching and learning processes, high educational outcomes will be produced. The input-processes-output and the human capital theories are crucial and appropriate for this study because the study also focuses on investment in education for human capital development. Also, the study examines the basic infrastructure of the schools, as the inputs of which the human capital (availability of teachers) is part of the inputs and the output of education in the area thus the quality of education in the area been proxied by academic performance and the human development of the area, hence the suitability of the theories to the study.

2.1.1 Input-Processes-Output Theory

The inputs-processes-outputs theory states that an organized institution or an enterprise does not exist in vacuum but a dependent on the external environment for resources for its function therefore, the inputs and processes are directly proportional to the outputs (Haque & Rehman 2014). The inputs-processes-output links resources investment and utilization of instructional time to the achievements of education of children. Education is an investment and therefore, parents, teachers, government and NGOs must invest resources on children's education. The perspective of this theory of production is that in every organization, inputs of resources such as human capital, finance, technology, time and other material resources from the environment and the processing are what determine the quantity and quality of productivity or outcome. In other words, the various components or subsystems are interwoven in a very complex manner that everything in the organization depends on everything. The various multiple-dimensional of quality education are interdependence and interlocking.

Haque and Rehman (2014) also explained that the organization as a system is composed of interconnected and mutually dependent sub-systems and these sub-systems are also composed of different components which work differently to ensure the survival of the organization. The authors identified five basic interconnected components in this theory. These include: individual, formal and informal organization, pattern of behaviour, role comprehension of the individual and physical environment of organization. The input-process-output system theory is depicted in a rectangular form consisting of three interconnected units. These include the input unit, the processing unit and the output unit.



Source: Adopted from Weirich (1993)

Figure 1: Input-Process-Output System Theory

From Figure 1, the first unit of the theoretical framework is the critical enabling input unit. The critical enabling inputs are the resources available to achieve the goals of education. The critical enabling inputs are emanated from the environment. The environment encompasses the government, the family, NGOs and society. The

government, family, NGOs and the society have the responsibility for providing educational resources such as infrastructural facilities, finances, teachers, incentives and instructional materials. These resources constitute the most fundamental starting point of providing quality education for all in any school in any society including schools in WASSA Amenfi East Municipality. Therefore, shortages of these resources will diminish access to quality education.

The second unit of theoretical framework is the transformation or processing unit. The processing unit is the engine of production and entails all actions and steps taken to achieve the educational goals. In this unit, the critical enabling inputs of resources received from the environment are processed into finished goods. The teacher who is seen as the processor in the production unit uses the inputs such as the instructional materials, time and students to transform them into desirable goods. The teachers and learners are key elements in education and must therefore come in with certain expertise and qualities to ensure effective teaching and learning.

To this end, teacher must have and exhibit high proficiency, professionalism and commitment. Thus, the teacher who is the processor must have the teaching skills more of child-centered, optimum understanding and mastery of subject matter content of the curriculum. In a similar way, the learner must be healthy, show readiness and also expend more effort on learner tasks. The third level which is the last unit is the output unit. The output unit shows the outcomes of the products. The outputs of quality education include indicators such as acquisition of knowledge skills and values, high literacy, quality workforce and high demand for work. The outcomes from the system inform investors whether they are making gains or losses from education.

a. Strengths of inputs-processes-output theory

One of the strengths of the inputs-processes-output system theory is that it informs stakeholders to put more investment in education. Putting more investment in education has direct relationship with quality learning outcomes. The theory provides framework for policymakers to make policies that ensure adequate investment and effective teaching and learning processes in education.

b. Weaknesses of inputs-processes-output theory

The input-processes-output theory fails to inform how the inputs, processes and output are interconnected and how one stage translates to another. From a systems theory perspective, the assumption that knowledge, attitudes, and behaviours are purely outputs is problematic. Scholars argue that these elements can function simultaneously as **inputs**, **processes**, and **outcomes**, since prior knowledge and attitudes shape organizational processes, while ongoing behaviours influence how inputs are transformed into outputs (Katz & Kahn, 1978; Senge, 2006). The input-processes-outputs theory also fails to capture the emerging consensus about teams as complex and adaptive systems. The inputs-processes-outputs framework is deficient for summarizing recent research and constrains thinking teams. The inputs-processes-outputs framework is not sufficient for characterizing teams. The mediational factors that intervene and transmit the influence of inputs to outputs are not processes but emergent cognitive and affective states. The theory also limits research by implying a single-cycle linear path from inputs through outputs and tends to suggest a linear progression of main effect influences proceeding from one category to the next.

2.1.2 Human Capital Theory

The human capital theory is a framework that basically examines the relationships between education, economic growth and social well-being. Schultz (cited in Madzimure and Mbedzi, 2021) defines human capital theory as knowledge and skills people obtained as capital through the process of education. Olaniyan and Okemakinde (2008) explained that the human capital theory basically considers education as key and also as form of investment to enhance people lives economically. The development of any society largely depends on how the people are educated and how resources are invested in education of the people. The theory posits that expenditure on education, job training and health are capital investments that will produce economic and social returns at the individual and national levels. Education and training are assumed to lead to greater productivity, which also translated into economic returns such as wages and increased in GDP. Supporting the relevant of human capital theory Zainul-Deen (2011) noted that educated persons have strong linkages with other factors of production such as capital, land and entrepreneur to increase productivity in society.

This view aligns with the human capital perspective that investment in education enhances national productivity and economic growth. Empirical studies have shown that educated populations contribute more effectively to labour productivity, innovation, and sustainable development, thereby making education a critical driver of national development (Olaniyan & Okemakinde, 2008; Becker, 2020; UNESCO, 2021). Babalola (2003) argues that the reason behind investment in human capital is based on three key factors: these include: (a) the new generation must be given the appropriate parts of the knowledge, skills and values which have already been accumulated by the previous generations; (b) new generation should be taught how

existing knowledge and skills should be used to develop new products, to introduce new processes and production methods and special services and (c) people must be encouraged to develop complete new ideas, products, processes and methods through creative approaches.

a. Strengths of human capital theory

The major strength of human capital theory is that it aids policymakers and researchers to examine, evaluate and or assess the relationship between education and training as inputs and economic and social benefits as outputs. Olaniyan and Okemakinde (2008) noted that the human capital theory framework also suggests that the increase in the investment on individuals' education or schooling goes with higher wages, GDP growth, lower crime rates and better health outcomes.

The human capital theory framework also helps policymakers to understand the amounts and characteristics of quality education and training that are needed for achieving good outcomes of quality education such as high literacy rate, high demand workforce, economic growth and participation in civic roles.

Another strength of human capital theory is that it provides a useful lens and awareness for individuals to invest more in their education. It guides individuals, families and government to be aware that pursuing education at any level involves costs and benefits.

b. Weaknesses of human capital theory

The major weakness of human capital theory is that it assumes that acquiring education automatically increases the salaries and wages of individuals. However, it fails to

provide an insight into the processes through which education and training lead to high wages.

Another weakness of human capital theory is that the application of the framework at the upper or the national does not address educational challenges because different communities have different perspectives, needs and challenges. This nationalistic application is wrong as different communities and districts have different educational challenges. The methods of achieving quality education are not universal because urban areas may require different strategies as compare to sub-urban and villages which the theory fails to address.

2.1.3 System of Individual Psychology Theory

Another theory the researcher anchored this work on was Alfred Adler's theory 1956 of individual psychology, which was developed into a practical method by American physician and educator Rudolf Dreikurs for understanding the causes of children's misbehavior and fostering cooperative behavior without the use of rewards or punishment. Preadolescents were his main focus, and he postulated that feelings of social insignificance were to blame for some of their problematic conduct. He outlined the four "mistaken goals" that such children would pursue and offered advice on how parents and teachers should respond. He believed that the school environment was an extension of the home and the initial social setting in which education takes place. As a result, his strategies for discouraging bad behaviour and encouraging good behaviour may be applied in both situations. The training facilities Dreikurs and his associates developed to educate counselors on how to deal with young people's social issues carry on Dreikurs' legacy.

Numerous people have given Dreikurs credit for “elaborating, building, and working out in a clear, systematic, and logical form, the basic ideas of Individual Psychology.” Some believed he also contributed to the development of the initial theory, while most agree that his biggest contribution was in the application and practice of individual psychology. He is best recognized for his adaptation of Adler’s ideas for use by parents and teachers, as well as for his simplicity of those ideas. He co-authored *Children: The Challenge* with Vicki Soltz in 1964, and *A Parent’s Guide to Child Discipline* with Loren Grey in 1968. Encouragement, according to Adler and Dreikurs, is crucial for fostering positive behaviour and interpersonal connections. Their fundamental premise was that human conduct is not solely the product of uncontrollable external factors or predestined by biology. The pursuit of meaning in a social context, they contended, leads to conduct. According to Dreikurs, “expectations affect results, and the fear of making mistakes causes mistakes. Anyone who can affect people’s expectations can influence their behaviour. As a result, encouraging people and providing them with assistance has a direct impact on their behaviour. Consequently, parenting style should be taken into account when determining how well a child learns.

Adlerian Parent Education seeks to empower kids with the knowledge and bravery to navigate society’s many pitfalls and perils while also equipping them with the tools to handle difficulties in life constructively and positively. It helps parents by giving them resources to lessen and manage the stress of parenting and to bring up kids with bravery and compassion (Dreikurs & others, 1982).

Dreikurs asserts that every action is motivated. He developed *The Four Goals of Misbehaviour*, which are frequently recognized as the most helpful resources for

comprehending children's behaviour, as well as efficient methods for revealing these to a misbehaving youngster. The greatest achievement of Dreikurs may have been the development and application of the system of logical and natural consequences. According to Dreikurs, human misbehaviour results from a failure to satiate one's fundamental desire to belong to and contribute to a social group. The child then shifts to one of four mistaken goals: getting noticed, becoming powerful, getting even, or avoiding failure. The primary concern of Dreikurs' idea was preadolescent misconduct. He argued that these pupils' "acting out" will be motivated by these four fundamentals "mistaken goals." Their behaviour is primarily motivated by a need for attention. They shift to seeking power (e.g., they may refuse to finish a paper) if they do not get the attention they desire from their behaviours (whether good or bad, such as performing well on a paper or throwing a tantrum). If their fight for control is unsuccessful, they seek retaliation. Numerous strategies to stop these habits are listed by Dreikurs in 1968. The first step is for teachers to recognize the incorrect goal, note their own response to the inappropriate behavior, and watch how the pupils respond. Second, a teacher should address the flawed objective by outlining it and discussing the flawed assumptions that underlie it. Students are given the chance to reflect on and alter their conduct by doing this. Thirdly, Dreikurs emphasized the importance of avoiding power struggles with students. Students' desires for power can also be deflected by teachers by involving them in decision-making or giving them instructions. One strategy is to withhold your authority. This is what we mean by "democratic teaching."

Dreikurs also favored taking preventative action to avoid retaliation. The teacher is told to set up situations where the students can demonstrate their skills and traits and finally

gain approval. Last but not least, teachers should encourage and support students who display shortcomings by praising their efforts, no matter how modest. He wanted the students to feel like worthwhile classmates, thus his main goal was for them to learn decent collaboration skills without obtaining prizes or punishments.

2.5.4 Integration of Theoretical Frameworks for the Study

Although the Input-Process-Output (IPO) System Theory, Human Capital Theory, and System of Individual Psychology Theory originate from different theoretical traditions, they converge to provide a comprehensive framework for understanding quality education in the Wassa Amenfi East Municipality. Each theory explains a distinct but interrelated dimension of the educational process, and together they offer a holistic interpretation of how educational outcomes are produced.

The Input-Process-Output System Theory provides the overarching structural framework for the study by conceptualising education as a system that transforms inputs into outputs through specific processes. Within this framework, educational resources such as teachers, instructional materials, time, infrastructure, and learner characteristics constitute the critical inputs drawn from the environment, while teaching and learning activities represent the processes that transform these inputs into educational outcomes such as knowledge acquisition, skills development, and values formation.

Human Capital Theory complements the IPO framework by explaining the significance of these inputs, particularly human resources, as investments that yield long-term social and economic returns. The theory justifies the focus on investment in teachers'

competencies, learners' skills, and educational resources by emphasising that expenditure on education enhances productivity, workforce quality, and social well-being. In this study, human capital theory strengthens the input component of the IPO model by highlighting why adequate investment in education is essential for achieving quality educational outcomes.

The System of Individual Psychology Theory further enriches the framework by illuminating the psychological and behavioural processes through which educational inputs are transformed into outputs. The theory explains how learners' motivation, sense of belonging, behaviour, and teachers' encouragement influence teaching and learning processes within the school environment. This perspective addresses the internal dynamics of the processing stage of the IPO system by accounting for individual attitudes, expectations, and interactions that mediate the relationship between inputs and outputs.

Collectively, the integration of these theories enables the study to examine quality education from a system, economic, and psychological perspective. While the IPO System Theory provides the structural pathway linking resources, processes, and outcomes, Human Capital Theory justifies investment in educational inputs, and the System of Individual Psychology Theory explains the behavioural and motivational mechanisms that influence learning processes. The convergence of these theories therefore provides a robust theoretical foundation for analysing the factors influencing quality education in Wassa Amenfi East Municipality.

2.2 Concept of School Infrastructure

The school infrastructure is one of the factors that help in the development of educational program delivery (Lanham, 2010). School infrastructures should have an environment which is conducive and which meets the educational requirements in terms of accommodation of the students' wellbeing and also, they should be the integral component that provide effective teaching and learning process. According to Eduard (2006), there is a real linkage which should be found with in learning environment mostly by age status in terms of students' outcomes which is recognized as students learning results. The condition of the school buildings and provision of effective education within the condition of historical change of the school, provide unique opportunities understanding how and why developing school infrastructures conditions and effective educational achievement (Lanham, 2010).

School infrastructure extends beyond the physical classroom to include key environmental and functional features that directly influence teaching and learning. These include classroom attributes such as temperature regulation, natural lighting, acoustics, and ventilation, as well as essential utilities like electricity, potable water, and the general condition of school buildings. Infrastructure further encompasses specialized facilities such as libraries, computer laboratories, science laboratories, playing fields, and the availability of textbooks and instructional materials (Cuesta, Glewwe, & Krause, 2015). In a related perspective, Olagboye (2004) conceptualized school infrastructure as the foundational systems, structures, and facilities that enable schools to effectively carry out their educational mission and operational functions.

The learning environment created by the availability and quality of these infrastructural resources plays a critical role in promoting effective teaching and meaningful learning. Well-resourced school environments allow learners to actively engage with their surroundings as part of the learning process, thereby enhancing comprehension and skill acquisition. Consequently, the provision of adequate facilities, appropriate tools, and qualified personnel across all levels of education contributes significantly to improving the relevance, quality, and applicability of learners' acquired skills (Lumuli, 2009). However, access to adequate school infrastructure remains uneven across contexts. Evidence indicates that schools serving low-income and rural communities often experience persistent underinvestment in infrastructure, resulting in poorer learning conditions compared to their urban counterparts (Filardo et al., 2021; Vincent et al., 2022).

However, there are typically no infrastructural issues in urban areas. Because of the various forms of infrastructure that schools have, they thrive. For this reason, school infrastructure is one area that the government of Ghana and other education stakeholders aim to enhance when they want to improve any aspect of the school system. For example, if the government wants to guarantee that a school does well in scientific-related courses, it will provide well-equipped science labs to make science easier to learn, which will have an impact on performance. The main facilities present in Ghanaian schools are outlined together with their relevance to the current investigation.

Teachers, students, school infrastructures curriculum were considered as input variables while students' academic performance was considered as output variables

(McGwen, 1990). He also stated various problems of students' academic performance such as student grade in national examination, school exam results and student competence. Researchers identified the most frequent forms that can affect the students' academic performance are inadequate classrooms, libraries and laboratories which can also be adopted by school location, involvement of parents and socio-economic status of the school.

Osahon (2010) defined the school infrastructures as physical structures which are known as shelter for educational activities including classrooms, laboratories, workshop, teachers and administration offices, toilets, reading rooms, dispensaries, libraries, dining halls and assembly halls. Ogunsaju and Oyedeji (2012), defined school infrastructures as the school buildings in which they also said that school infrastructures embrace permanent structures that includes laboratories, classrooms and libraries. Abraham (2003), said that all physical structures with in the school can also be used by the school community. All physical infrastructures in the school are grouped in the category of school plants (Ehiemetalor, 2011). This implies that the school physical plants should be evaluated accordingly in fact there is lack students' standard skills needed to perform what they have learnt.

The primary issue in educational management is the absence of policy rules pertaining to the development of school infrastructure. Some educational institutions lack sufficient classrooms, staff offices, labs and workshops, libraries, and study spaces, whereas others have these resources in sufficient amounts. Therefore, it is crucial for national, regional, and local governments to prioritize the development and enforcement of minimum standards for school infrastructure, staffing, and learning

resources to ensure equitable and quality basic education delivery across all schools, particularly in deprived and hard-to-reach areas (UNESCO, 2021; World Bank, 2020).

Research conducted over the years has demonstrated that the type and quality of school infrastructures can have an impact on classroom management, school discipline, and the learning environment in addition to having an impact on academic performance (Dike, 2012). It is important to stress the importance of having a well-organized classroom since it fosters successful learning. In order to do this, schools should have well-designed infrastructure that facilitates effective learning by creating a welcoming environment in the classroom, setting up the space appropriately, and providing sufficient supervision.

Therefore, classroom arrangement has a direct bearing on students' learning and performance. OECD (2018) opines that classroom control, discipline, teacher's self-control, orderliness, obedience and power of cooperation in the schools discipline are among the factors for the attainment of the end results in the teaching and learning process. He therefore, concluded that the learning environment should have a good physical surrounding and physical facilities, which encourage the pupils to concentrate on their studies. It was noted that where classroom is badly located with poor ventilation or lighting sub-standard, pupils may develop negative attitude towards their studies (Dike, 2012). It is believed that where physical and teaching facilities are provided and are particularly adequate, teaching and learning are expected to be faster and more permanent because of the feeling of the satisfaction of the conducive learning atmosphere provided.

School climate plays a significant role in shaping both teachers' and pupils' work behaviour and overall performance in schools. A positive school climate, characterized by supportive physical and psychosocial conditions, enhances teacher commitment and promotes effective learning among pupils (Phillips, 2017). For learning to take place effectively, pupils must be taught under favourable conditions, supported by adequate teaching and learning materials that create a conducive instructional environment (Edun, 2015).

Conversely, the absence or inadequacy of school infrastructure contributes to teacher job dissatisfaction, which often results in low morale and increased attrition. In Ghana, empirical evidence shows that many newly posted teachers express strong reluctance to accept or remain in rural postings due to poor living and working conditions. These include the lack of basic amenities such as potable water, electricity, motorable roads, adequate classroom facilities, and essential teaching furniture (Akyeampong & Bennell, 2007; World Bank, 2020).

Beyond the availability of basic facilities, the physical quality of school buildings also affects teachers' wellbeing and educational outcomes. Studies have shown that poor indoor environmental conditions are common in many schools and are associated with health challenges often described as "sick building syndrome." Such conditions contribute to increased student absenteeism, reduced academic performance, and adverse health effects among teachers (Earthman, 2004; Schneider, 2002). Research conducted in the United States, for instance, revealed that a significant proportion of teachers reported poor indoor air quality in their schools, a condition linked to respiratory problems, fatigue, and decreased instructional effectiveness (Schneider,

2002). These findings underscore the importance of adequate and well-maintained school infrastructure in sustaining teacher satisfaction, learner attendance, and overall quality of education delivery.

2.2.1 The State of Basic Infrastructure in Schools

School infrastructure refers to the physical facilities and material resources that support teaching and learning, including classrooms, offices, libraries, laboratories, sanitation facilities, furniture, electricity, and water supply. In recent educational research, infrastructure is increasingly recognised as a critical component of effective school systems and a foundational requirement for quality education (UNESCO, 2021). The availability and condition of school infrastructure influence not only instructional delivery but also the motivation, well-being, and productivity of both teachers and learners.

Adequate school infrastructure contributes to a conducive learning environment by enhancing comfort, safety, and organisation within the school setting. Studies indicate that well-maintained facilities improve learners' concentration, reduce absenteeism, and promote positive attitudes toward schooling, while also enabling teachers to perform their instructional duties effectively (World Bank, 2020; Barrett et al., 2019). Conversely, poorly maintained infrastructure often leads to overcrowding, health risks, and disruptions to teaching and learning processes.

Investment in school infrastructure requires deliberate allocation and efficient use of financial resources. Access to adequate funding has been identified as a key determinant of infrastructure development and maintenance in schools, particularly in low- and middle-income contexts (UNESCO, 2021). Governments, communities, and

development partners therefore play a central role in ensuring that schools are equipped with the physical resources necessary to support effective teaching and learning.

Infrastructure also serves as a catalyst for broader social and educational development. In educational systems, infrastructure supports the functioning of other critical elements such as curriculum delivery, school organisation, and teacher effectiveness. Recent studies emphasise that infrastructure does not operate in isolation but interacts with instructional quality and school management to influence educational outcomes (OECD, 2020). Where infrastructure is inadequate, learners often exhibit reduced interest and engagement, which negatively affects participation and academic performance.

2.2.2 School Infrastructure and Quality of Education

School infrastructure plays a crucial role in determining the quality of education. Educational facilities such as classrooms, laboratories, libraries, and sanitation facilities form the physical environment in which teaching and learning occur. Research consistently shows that high-quality infrastructure supports effective instruction, enhances learner engagement, and improves educational outcomes (Barrett et al., 2019; OECD, 2020).

Evidence from both developed and developing countries indicates that inadequate infrastructure disproportionately affects schools in rural and disadvantaged communities. Learners in poorly equipped schools often experience overcrowded classrooms, lack of instructional resources, and unsafe learning conditions, which contribute to low academic achievement and increased dropout rates (World Bank,

2020; UNESCO, 2022). These disparities reinforce educational inequality and limit learners' opportunities for academic success.

Improved school infrastructure has been linked to increased student attendance, reduced dropout rates, and better learning outcomes. Studies suggest that when schools provide safe, well-ventilated, and adequately resourced learning environments, students are more likely to remain in school and actively participate in learning activities (Barrett et al., 2019; UNESCO, 2021). Infrastructure quality also influences parental perceptions of schools, which can affect enrolment decisions and community support for education.

Schools serve as a second home for learners, where they spend a substantial portion of their daily lives. A comfortable, safe, and supportive school environment therefore enhances learners' sense of belonging and motivation to learn. Creating and maintaining such environments is essential for sustaining learners' interest in schooling and supporting the successful completion of their educational cycles (OECD, 2020).

2.2.3 Principles for the Management of School Infrastructure

Effective management of school infrastructure is essential for ensuring that educational facilities adequately support teaching and learning. Contemporary literature conceptualises school infrastructure as a system composed of interrelated components that require coordinated planning, utilisation, and maintenance to function optimally (OECD, 2020). In this sense, school infrastructure management extends beyond construction to include strategic planning, monitoring, and continuous improvement of facilities in line with educational goals.

A fundamental principle of school infrastructure management is alignment with the philosophy, objectives, and values of education and the community it serves. School buildings, land, and equipment should reflect shared educational aspirations and cultural expectations, while also responding to learners' developmental needs (UNESCO, 2021). Participatory planning involving education authorities, school leaders, and technical experts is therefore critical to ensuring that infrastructure development is contextually appropriate and sustainable.

Another key principle is learner-centred design. Infrastructure should be adapted to support learners' academic, social, and physical development by providing safe, inclusive, and flexible spaces that accommodate diverse learning styles and abilities (UNICEF, 2020). This includes ensuring adequate classroom space, accessibility for learners with disabilities, and facilities that promote health, safety, and well-being.

Effective utilisation and maintenance of school infrastructure also depend on the managerial competence of school leaders. School heads and administrators must possess the capacity to assess infrastructure needs, allocate resources efficiently, and ensure that facilities and equipment are used for their intended purposes (World Bank, 2020). Preventive maintenance, regular inspections, and appropriate use of facilities are necessary to prolong the lifespan of infrastructure and reduce long-term costs.

In addition, infrastructure management should prioritise safety, hygiene, and environmental sustainability. Well-maintained buildings, sanitation facilities, and surrounding school environments contribute to a healthy and secure learning atmosphere, which positively influences learner attendance and engagement (UNESCO, 2022). Collectively, these principles underscore the importance of

systematic and professional management of school infrastructure as a prerequisite for quality education.

2.2.4 Importance of School Infrastructure in Education

School infrastructure plays a critical role in shaping the quality of teaching and learning processes. Physical facilities such as classrooms, libraries, laboratories, staff accommodation, and sanitation facilities create the learning environment within which educational activities take place. Research consistently demonstrates that adequate and well-maintained infrastructure enhances instructional effectiveness, learner motivation, and academic performance (Barrett et al., 2019; OECD, 2020).

Teacher housing and staff facilities, particularly in rural and underserved areas, have been shown to improve teacher retention, punctuality, and availability for remedial and co-curricular activities, thereby positively influencing learner outcomes (World Bank, 2020). Similarly, functional sanitation facilities, access to clean water, and proper waste management contribute to a hygienic school environment, which reduces health-related absenteeism and supports sustained student participation in learning (UNICEF, 2020; UNESCO, 2021).

The nature, size, and condition of school infrastructure also influence curriculum delivery and classroom organisation. Adequate classroom space and availability of instructional materials determine class size, teaching strategies, and learner interaction. In particular, science education relies heavily on access to laboratories and specialised equipment, without which practical learning cannot be effectively implemented (UNESCO, 2022).

School infrastructure further shapes parental and community perceptions of educational quality. Well-equipped and well-maintained schools are more likely to attract enrolment, community support, and stakeholder confidence, while poorly maintained facilities often signal low-quality provision and discourage attendance (OECD, 2020). Effective school administration therefore depends partly on the availability and management of infrastructure that supports organisational goals.

Basic education provides the foundation for lifelong learning and socio-economic development. To deliver quality basic education, schools require adequate buildings, furniture, libraries, laboratories, instructional materials, and information and communication technology (ICT) resources (World Bank, 2021). Modern educational systems increasingly emphasise flexible, innovative learning spaces that support collaboration, creativity, and learner-centred pedagogy.

Schools operate as open systems that interact continuously with their external environments. They receive human and material inputs, transform them through teaching and learning processes, and produce educational outcomes that serve societal needs. The quality of these outcomes is closely linked to the quality of infrastructure deployed in the educational process (UNESCO, 2021). Empirical studies continue to show a strong relationship between the physical learning environment and learners' academic achievement, engagement, and retention.

In summary, school infrastructure constitutes a vital component of the educational system. Adequate, well-managed, and contextually appropriate infrastructure enhances teaching effectiveness, learner motivation, equity, and overall educational quality.

2.2.5 Challenges of School Infrastructure for Learning in the 21st Century

School infrastructure plays an increasingly critical role in supporting learning in the 21st century, as contemporary education systems require facilities that accommodate technological integration, learner-centred pedagogy, and inclusive education. Modern learning environments are expected to support digital literacy, collaborative learning, and flexible instructional strategies, making infrastructure availability and functionality more important than ever (OECD, 2020; UNESCO, 2021).

One of the major challenges facing schools is inadequate and outdated infrastructure that fails to align with modern teaching and learning requirements. Many schools, particularly in rural and low-income communities, lack essential facilities such as libraries, science laboratories, computer laboratories, and reliable electricity and internet connectivity. This digital and infrastructural gap limits the effective implementation of technology-enhanced learning and reduces learners' preparedness for the demands of the 21st-century knowledge economy (World Bank, 2021; UNESCO, 2022).

Another challenge relates to overcrowded classrooms and poor physical learning conditions. High student-classroom ratios, inadequate furniture, poor lighting, ventilation, and unsafe buildings negatively affect learners' concentration, health, and academic engagement. Research indicates that such conditions reduce instructional effectiveness and contribute to lower academic achievement and increased absenteeism (Barrett et al., 2019; OECD, 2020).

The effectiveness of school infrastructure also depends on how it is utilised and maintained. Inadequate maintenance culture, limited managerial capacity, and

insufficient funding often result in rapid deterioration of facilities. Without effective infrastructure management systems, schools struggle to sustain functional learning environments, even when facilities are initially provided (World Bank, 2020).

In the 21st century, infrastructure challenges are further compounded by the need for resilience and adaptability. Schools are increasingly expected to respond to emergencies, health crises, and climate-related risks, yet many lack facilities that ensure safety, sanitation, and continuity of learning. These challenges underscore the need for sustained investment and strategic planning to ensure that school infrastructure supports contemporary educational goals.

2.2.6 School Infrastructure and Students' Academic Performance

School infrastructure significantly influences students' academic performance by shaping the physical, social, and psychological conditions under which learning occurs. Facilities such as classrooms, libraries, laboratories, playgrounds, and co-curricular spaces provide opportunities for both academic and holistic development. Research shows that access to well-designed learning spaces enhances student engagement, motivation, and achievement (OECD, 2020; UNESCO, 2021).

Co-curricular infrastructure, including sports facilities, music rooms, and creative spaces, supports the development of learners' social, emotional, and physical skills, which are closely linked to academic success. Balanced integration of curricular and co-curricular activities has been found to improve learners' cognitive development, discipline, and overall school performance (Darling-Hammond et al., 2020).

Inadequate infrastructure, particularly overcrowded classrooms and poorly maintained buildings, has been associated with reduced academic performance and learner motivation. Overcrowding limits teacher-student interaction and constrains effective classroom management, while deteriorating facilities negatively affect learners' sense of belonging and commitment to schooling (Barrett et al., 2019; World Bank, 2021).

School libraries and laboratories play a central role in enhancing academic achievement by providing learners with access to information, practical learning experiences, and opportunities for independent inquiry. Studies indicate that students in schools with functional libraries and science laboratories demonstrate higher academic performance and improved critical thinking skills compared to those without such facilities (UNESCO, 2022; OECD, 2020).

From a systems perspective, schools function as open systems that transform human and material inputs into educational outputs. The quality of students produced by schools is therefore closely linked to the quality of infrastructure available during the learning process. When infrastructure is inadequate, the effectiveness of teaching and learning processes is compromised, resulting in suboptimal academic outcomes (World Bank, 2020).

Students' perceptions of school infrastructure also influence how facilities are utilised and maintained. Learners who view school facilities as supportive learning environments are more likely to respect, protect, and make effective use of them, thereby extending their lifespan and enhancing teaching and learning processes. Positive learner perceptions of infrastructure thus indirectly contribute to improved academic performance.

In summary, school infrastructure is a critical determinant of students' academic performance. Adequate, well-maintained, and learner-responsive facilities support effective instruction, foster learner motivation, and promote improved educational outcomes in contemporary education systems.

2.3 Meaning of Education

Education is broadly understood as a deliberate and systematic process through which individuals acquire knowledge, skills, values, and attitudes necessary for personal development and effective participation in society. Contemporary perspectives view education as both an individual and societal investment that promotes human development, social cohesion, and economic growth (UNESCO, 2021). Through education, individuals develop cognitive, social, and technical competencies that enable them to respond to societal needs and contribute meaningfully to national development.

Education is widely recognised as a key driver of socio-economic, scientific, and technological advancement. Empirical evidence shows that countries that invest consistently in education tend to experience higher productivity, innovation, and improved standards of living (World Bank, 2021). Quality education, in particular, requires adequate learning resources and supportive environments to translate educational access into meaningful learning outcomes.

Education can be categorised into formal and non-formal systems. Formal education refers to the structured, hierarchically organised system that spans from basic education to tertiary institutions and leads to recognised academic qualifications. This form of education operates within established curricula, assessment frameworks, and certification systems (UNESCO, 2022). Non-formal education, on the other hand,

consists of organised learning activities that occur outside the formal school system and are designed to meet the specific learning needs of particular groups, including adults and out-of-school youth. Non-formal education plays a critical role in skills development, vocational training, and lifelong learning, particularly in developing contexts where access to formal education may be limited (OECD, 2020).

Although non-formal education does not typically lead to formal certification, it significantly enhances individuals' employability, productivity, and self-reliance. By equipping learners with practical and vocational skills, non-formal education contributes to improved livelihoods and poverty reduction, thereby complementing the formal education system (UNESCO, 2021).

2.3.1 Importance of Education

Education is one of the most powerful instruments for reducing poverty and promoting sustainable economic and social development. It enhances human capital by improving individuals' skills, productivity, and capacity to participate effectively in the labour market, which in turn contributes to economic growth and improved living standards (World Bank, 2021).

Investment in education is widely regarded as a critical prerequisite for long-term national development. Studies indicate that increased educational attainment is associated with higher earnings, improved employment prospects, and greater economic resilience, particularly in developing economies (OECD, 2020; UNESCO, 2022). Education also contributes to non-economic outcomes such as improved health, reduced crime, and increased civic participation, further reinforcing its role in development.

Global evidence consistently demonstrates that higher levels of education are linked to improved labour market outcomes. Individuals with higher educational attainment are more likely to be employed, earn higher incomes, and experience greater job security than those with lower levels of education (World Bank, 2021). In Sub-Saharan Africa, returns to education remain relatively high, underscoring the importance of sustained investment in basic and secondary education to reduce poverty and inequality (UNESCO, 2022).

Education also plays a crucial role in fostering social capital, trust, and civic engagement. Educated populations are more likely to participate in democratic processes, support social cohesion, and contribute to community development initiatives (OECD, 2020). As both a private and public good, education generates individual benefits while producing broader social and economic externalities that support national development.

In developing countries such as Ghana, access to quality education remains a central concern for poverty reduction and socio-economic transformation. Ensuring equitable access to education, particularly in rural and underserved communities, is essential for improving livelihoods and achieving inclusive development. Contemporary research continues to affirm that educational improvement at the local level strengthens national development prospects and enhances long-term economic growth (World Bank, 2021; UNESCO, 2022).

2.3.2 Quality Education

The concept of quality education has been widely debated in educational research due to its multidimensional and context-dependent nature. Contemporary scholars view

quality education not merely as access to schooling but as the extent to which educational systems enable learners to acquire relevant knowledge, skills, values, and competencies necessary for personal development and societal participation (Schindler et al., 2018; UNESCO, 2021).

Quality education is increasingly understood as a function of several interrelated components, including teaching effectiveness, learning resources, curriculum relevance, learner engagement, assessment practices, and the broader policy and institutional environment. Recent frameworks emphasise that quality emerges from the interaction between teachers, learners, and educational materials within well-managed and adequately resourced learning environments (OECD, 2020; UNESCO, 2022). This systems-oriented perspective highlights that no single factor independently guarantees quality; rather, quality education results from the alignment of inputs, processes, and outcomes.

Empirical studies identify key determinants of quality education, such as teacher competence and motivation, learner-centred pedagogical approaches, availability of teaching and learning materials, supportive school leadership, and adequate physical infrastructure (Darling-Hammond et al., 2020; World Bank, 2021). These elements collectively influence instructional delivery, learner participation, and educational outcomes. Accordingly, quality education can be conceptualised as the capacity of an education system to effectively transform educational inputs into meaningful learning outcomes.

In Ghana, quality education remains a central priority for the government, the Ministry of Education, and the Ghana Education Service. National education policies emphasise

the provision of holistic education aimed at developing learners' intellectual, emotional, social, physical, and moral capacities to enable them to contribute meaningfully to national development and adapt to technological and socio-economic changes (Ministry of Education [MoE], 2018; UNESCO, 2022). Achieving this goal requires not only increased access to schooling but also improvements in the quality of teaching, learning environments, and educational resources.

The provision of adequate infrastructure and learning facilities is fundamental to the delivery of quality education. Teaching and learning are most effective when conducted in safe, healthy, inclusive, and gender-sensitive environments equipped with appropriate instructional materials and information and communication technology (ICT) resources (World Bank, 2021; UNESCO, 2021). Quality education delivery also depends on trained and motivated teachers who employ child-centred pedagogies, effective classroom management, continuous assessment, efficient use of instructional time, and supportive supervision (OECD, 2020).

Despite ongoing reforms, several challenges continue to hinder the attainment of quality education in Ghana. Recent studies highlight persistent constraints such as inadequate teaching and learning facilities, poor infrastructure, high pupil-teacher ratios, insufficient numbers of trained and motivated teachers, limited guidance and counselling services, and overloaded curricula at the secondary level (MoE, 2018; World Bank, 2021; UNESCO, 2022). Addressing these challenges is essential for improving educational quality and ensuring that learners acquire the competencies required for lifelong learning and national development.

2.3.3 Characteristics of Quality Education

Quality education is a multidimensional and dynamic concept shaped by the interaction of demand- and supply-side factors within specific social, economic, and cultural contexts. Rather than being attributable to a single determinant, quality education emerges from the alignment of multiple interrelated components that influence learners' access to meaningful learning experiences and outcomes (UNESCO, 2021; OECD, 2020). These components operate as a system in which changes in one element affect the overall quality of education.

Contemporary literature identifies several core characteristics of quality education. These include learner readiness and well-being, supportive learning environments, relevant curriculum content, effective teaching and learning processes, and meaningful learning outcomes (UNESCO, 2022). These dimensions reflect a systems-oriented understanding of quality education and are consistent with global education frameworks.

Learner readiness and well-being constitute a foundational characteristic of quality education. Learners who are healthy, well-nourished, and emotionally supported are more likely to attend school regularly, engage in learning activities, and achieve better academic outcomes. Recent studies in Sub-Saharan Africa demonstrate that health and nutrition significantly influence learners' cognitive development, school attendance, and learning efficiency (World Bank, 2021; UNICEF, 2021). Teachers' health and well-being also affect classroom interactions, instructional quality, and teacher attendance, thereby influencing learning outcomes.

Supportive learning environments are another defining characteristic of quality education. Effective learning environments are safe, inclusive, gender-sensitive, and adequately resourced with appropriate infrastructure, furniture, sanitation facilities, and learning materials. Research shows that such environments promote learner motivation, reduce dropout rates, and enhance academic performance, particularly in disadvantaged and rural communities (OECD, 2020; UNESCO, 2021).

Curriculum relevance and content quality also play a central role in determining educational quality. Quality education requires curricula that promote foundational skills such as literacy and numeracy, as well as life skills, digital competencies, health education, and civic values. Relevant and responsive curricula enable learners to acquire knowledge and skills that align with societal needs and national development goals (UNESCO, 2022).

Teaching and learning processes represent a critical characteristic of quality education. Effective instruction is characterised by trained and motivated teachers who employ learner-centred pedagogies, continuous assessment, and inclusive classroom practices within well-managed schools. Evidence suggests that active teaching approaches, appropriate use of instructional time, and effective supervision contribute significantly to improved learning outcomes and reduced educational disparities (Darling-Hammond et al., 2020; World Bank, 2021).

Learning outcomes are the ultimate indicators of quality education. These outcomes extend beyond examination performance to include knowledge acquisition, skill development, attitudes, values, and the ability to participate productively in society.

Quality education outcomes are closely linked to national education goals and broader socio-economic development objectives (UNESCO, 2022).

Despite ongoing reforms, several challenges continue to undermine the attainment of quality education in Ghana and similar contexts. Recent studies identify persistent issues such as teacher shortages in rural areas, inadequate teaching and learning materials, high pupil-teacher ratios, weak assessment systems, ineffective instructional supervision, and inappropriate language of instruction at the basic level (Ministry of Education [MoE], 2018; World Bank, 2021; UNESCO, 2022). These constraints limit the effectiveness of teaching and learning processes and hinder the realisation of quality education outcomes.

In summary, quality education is characterised by healthy and motivated learners, supportive and well-resourced learning environments, relevant curricula, effective teaching and learning processes, and meaningful educational outcomes. Addressing weaknesses across these interconnected dimensions is essential for improving educational quality and ensuring equitable learning opportunities in Ghana and other developing contexts.

2.3.4 Measurement of Quality Education

The measurement of quality education has evolved significantly in recent years. Earlier approaches to assessing educational quality focused primarily on system inputs such as infrastructure, teacher-pupil ratios, and curriculum coverage. While these inputs remain important, contemporary frameworks increasingly emphasise educational processes and learning outcomes as central indicators of quality (OECD, 2020; UNESCO, 2022).

This shift recognises that the effective use of inputs through teaching, leadership, and school management is critical to producing meaningful learning.

Current approaches to measuring quality education incorporate multiple dimensions, including learner participation, retention, completion rates, teaching effectiveness, learning environments, and learning outcomes. Regular school attendance, reduced dropout rates, and successful completion of basic education are widely used indicators of quality because they reflect learners' engagement with schooling and the relevance of educational provision (World Bank, 2021). Where students perceive schooling as uninteresting or irrelevant, attendance and retention tend to decline, undermining educational quality.

Teacher quality is widely recognised as one of the most significant determinants of educational quality and is therefore a central measure in assessing quality education. Recent studies consistently show that qualified, motivated, and well-supported teachers are critical to improving learner engagement, academic achievement, and retention, particularly in rural and disadvantaged contexts (Darling-Hammond et al., 2020; UNESCO, 2021). Indicators such as teacher qualifications, professional development participation, attendance, and instructional practices are commonly used to assess teacher-related aspects of quality.

In Ghana, disparities in educational quality between urban and rural schools remain a key concern. Recent national and international reports indicate that rural schools continue to experience higher pupil-teacher ratios, shortages of trained teachers, limited access to teaching and learning materials, and weaker learning outcomes compared to urban schools (Ministry of Education [MoE], 2018; World Bank, 2021). These

disparities directly affect access, retention, and completion rates, making them important measures of educational quality.

School leadership and supervision also play a vital role in the measurement of quality education. Effective school heads contribute to improved instructional practices, better use of instructional time, and positive school climates. Conversely, weak supervision, poor teacher attendance, and low professional accountability are associated with reduced learning time and lower educational quality (OECD, 2020). As such, indicators related to school management, teacher supervision, and professional conduct are increasingly included in quality assessment frameworks.

2.3.5 Historical Context of Education in Ghana

Education in Ghana has evolved through distinct historical phases that have shaped the current structure and quality of the education system. Prior to colonial influence, education in Ghana was largely informal and indigenous, with knowledge, skills, values, and cultural norms transmitted through family structures, apprenticeship, and community participation. This form of education emphasised practical skills, moral development, and social responsibility (Ministry of Education [MoE], 2018).

Formal Western education was introduced during the colonial period, initially through European traders and later through Christian missionary activities. This system emphasised literacy, numeracy, and clerical skills, primarily to support colonial administration and commercial activities. While Western education expanded access to formal schooling, it differed significantly from indigenous education in content, pedagogy, and purpose (UNESCO, 2021).

Following independence, successive governments in Ghana implemented education reforms aimed at expanding access, improving relevance, and enhancing quality. Major reform initiatives sought to address the overly academic and examination-oriented nature of the education system by introducing practical, technical, and vocational components to better align education with national development needs (MoE, 2018).

Subsequent reforms in the 1990s and early 2000s focused on restructuring the education system, revising curricula, and improving teacher education and assessment practices. These reforms aimed to promote holistic education by developing learners' cognitive, practical, and social skills, while also improving equity and quality across regions (World Bank, 2021).

More recent education reforms in Ghana emphasise competency-based curricula, inclusive education, and quality assurance mechanisms to enhance learning outcomes at all levels of education. These reforms reflect a growing recognition that access alone is insufficient and that sustained improvements in educational quality are necessary to support national development and global competitiveness (UNESCO, 2022).

2.4 Effect of Deprivation on Pupils' Academic Performance

Deprivation remains a significant factor influencing pupils' academic performance, particularly in low- and middle-income countries. Children living in economically deprived households consistently demonstrate lower academic achievement, lower test scores, higher dropout rates, and reduced completion of basic education compared to their peers from more affluent backgrounds (UNESCO, 2022; World Bank, 2021). In this context, deprivation refers primarily to economic deprivation, characterised by

limited household income, as well as resource and infrastructural deprivation, including inadequate school facilities, learning materials, and supportive learning environments.

Pupils from economically deprived families often lack the financial, social, and educational support systems that enhance school readiness and sustained academic engagement. Limited access to learning materials, nutritious food, stable housing, and safe study spaces negatively affects children's cognitive development, concentration, and motivation to learn (UNICEF, 2021). As a result, children from deprived households are more likely to enter school academically unprepared and to experience persistent learning difficulties throughout their schooling.

Recent empirical studies highlight household income as a strong predictor of pupils' academic performance. Research across Sub-Saharan Africa shows that children from low-income families face greater barriers to educational participation, including irregular attendance, limited parental support, and early engagement in household or income-generating activities, all of which undermine academic achievement (World Bank, 2021; UNESCO, 2022). These challenges are particularly pronounced in rural and deprived communities, where poverty intersects with limited access to quality schools and qualified teachers.

Gender disparities in academic performance are also closely linked to deprivation. Evidence suggests that in economically constrained households, girls are often disproportionately affected due to increased domestic responsibilities, reduced study time, and lower investment in their education compared to boys. Such conditions negatively impact girls' academic performance and increase the risk of school dropout

(UNICEF, 2021; UNESCO, 2022). Deprivation therefore not only affects overall academic outcomes but also reinforces existing gender inequalities in education.

Beyond economic constraints, deprivation exposes children to multiple environmental and psychosocial risks. Pupils from deprived backgrounds are more likely to experience unstable home environments, exposure to stress, poor health conditions, and limited access to social support networks, all of which adversely affect learning and academic performance (OECD, 2020). These factors reduce learners' capacity to concentrate, participate actively in classroom activities, and sustain academic effort.

School-level deprivation further compounds household-level disadvantages. Due to residential and socio-economic segregation, pupils from deprived families often attend poorly funded schools with inadequate infrastructure, overcrowded classrooms, and limited instructional resources. Such school environments are associated with reduced learning opportunities, lower teacher motivation, and weaker academic outcomes (World Bank, 2021). Consequently, deprivation operates through both household and school-level pathways to influence pupils' academic performance.

2.4 School Attendance

School attendance is a critical determinant of pupils' academic performance and overall educational quality. Regular attendance enables consistent participation in instructional activities, facilitates learner-teacher interaction, and supports the gradual development of knowledge and skills. Conversely, irregular attendance disrupts learning continuity and is strongly associated with poor academic outcomes and increased risk of dropout (UNESCO, 2022; World Bank, 2021).

Recent studies indicate that patterns of school attendance are influenced by demographic factors such as age and gender. Evidence suggests that absenteeism tends to increase as pupils grow older, particularly during the transition from upper primary to junior high school. Gender disparities in attendance also persist in many low- and middle-income contexts, where girls are more likely than boys to experience irregular attendance due to household responsibilities, early marriage, and socio-cultural expectations (UNICEF, 2021; Banerji & Mathur, 2021).

In Sub-Saharan Africa, school attendance is further shaped by socio-economic conditions, school quality, and household-level constraints. Pupils from deprived households are more likely to miss school due to poverty-related factors such as child labour, inability to afford school-related costs, and poor health, all of which undermine regular attendance and learning outcomes (World Bank, 2021).

2.4.1 School Attendance and School Absenteeism

School absenteeism refers to the habitual or frequent absence of pupils from school and represents a major challenge to educational quality and equity. Contemporary literature identifies multiple, interrelated causes of absenteeism that operate at the individual, family, school, and community levels (OECD, 2020). At the individual and household level, illness, malnutrition, family responsibilities, household poverty, housing instability, and the need to engage in income-generating activities are significant contributors to absenteeism. In many contexts, children are withdrawn from school to support household labour or caregiving responsibilities, particularly in economically deprived families (UNICEF, 2021; UNESCO, 2022).

School-related factors also play a crucial role in shaping attendance patterns. Pupils may avoid school due to bullying, unsafe learning environments, poor sanitation facilities, teacher absenteeism, or negative teacher-pupil relationships. Research shows that learners are less likely to attend school regularly when they perceive the school environment as hostile, unengaging, or irrelevant to their needs (OECD, 2020; World Bank, 2021).

Parental attitudes and awareness further influence school attendance. Studies indicate that some parents underestimate the cumulative impact of occasional absences, particularly at the basic education level, and may not view sporadic absenteeism as harmful to learning. This perception contributes to irregular attendance and weak academic foundations over time (UNESCO, 2022).

2.5 Concept of Poor Academic Performance

Poor academic performance refers to learners' persistent inability to meet expected educational standards or achieve desired learning outcomes. It is a major concern in education systems because it undermines the core purpose of education, which is to equip individuals with the knowledge, skills, and competencies necessary for personal development and societal participation (OECD, 2020).

Students who consistently perform poorly academically often experience reduced self-esteem, low motivation, and diminished confidence in their abilities. These psychological effects can negatively influence learners' engagement with school activities and their relationships with teachers and peers. Prolonged academic failure

has also been linked to increased risk of school dropout and involvement in negative social behaviours, particularly among adolescents (UNESCO, 2021).

Poor academic performance does not only affect learners but also places pressure on teachers and schools. Teachers' effectiveness is often judged based on students' academic outcomes, and persistent poor performance can undermine teacher morale and professional confidence. In under-resourced schools, this pressure may contribute to ineffective teaching practices and weak accountability, thereby reinforcing low academic achievement (World Bank, 2021).

Research consistently demonstrates that academic performance is influenced by a complex interaction of socio-economic, psychological, and school-related factors. These include household poverty, parental involvement, learner motivation, self-efficacy, anxiety, school infrastructure, teacher quality, and learning environments (OECD, 2020; Darling-Hammond et al., 2020). While learner ability plays a role, contemporary research emphasises that poor performance is more often the result of structural and contextual constraints rather than individual deficiencies.

Parental practices and home environments also significantly influence academic performance. Studies indicate that supportive parenting styles, high educational expectations, and positive home-school relationships are associated with better academic outcomes. Conversely, inconsistent discipline, limited supervision of schoolwork, and low parental engagement are linked to poor academic performance (UNICEF, 2021; World Bank, 2021).

2.5.1 Concept of Students' Academic Performance

Students' academic performance refers to the extent to which learners achieve expected learning outcomes as measured through assessments such as class assignments, homework, tests, examinations, and active participation in instructional activities. Contemporary research conceptualises academic performance as the product of interactions between school resources, learning environments, teaching quality, and learner characteristics (OECD, 2020; UNESCO, 2022).

School infrastructure plays a critical role in shaping academic performance. Adequate classrooms, libraries, laboratories, sanitation facilities, and access to learning materials provide the physical foundation for effective teaching and learning. Studies indicate that well-resourced schools are better positioned to support learner engagement, comprehension, and achievement, while inadequate facilities constrain instructional delivery and limit learning opportunities (Barrett et al., 2019; World Bank, 2021).

Classroom environment and organisation are also central to students' academic performance. Well-managed classrooms characterised by effective lesson delivery, appropriate instructional strategies, clear communication, and positive discipline promote learner participation and sustained academic effort. Evidence suggests that effective classroom management and learner-centred pedagogy enhance understanding, retention, and overall academic outcomes (Darling-Hammond et al., 2020).

Access to updated learning resources further influences academic achievement. The availability of current textbooks, digital learning tools, handouts, and functional library and laboratory facilities—particularly for science subjects—supports deeper learning and conceptual understanding. Learners who have access to diverse and relevant

learning resources demonstrate improved academic performance compared to those in resource-poor environments (UNESCO, 2021; World Bank, 2021).

Interpersonal relationships within the school environment also affect academic performance. Positive relationships among teachers, learners, and school administrators contribute to a supportive school climate that enhances motivation, engagement, and achievement. Conversely, negative school climates characterised by poor relationships and low teacher morale undermine students' academic interest and performance (OECD, 2020).

Additionally, broader environmental and contextual factors influence academic performance. Learners in rural and deprived communities often face disadvantages due to limited infrastructure, fewer qualified teachers, and reduced access to educational resources, which negatively affect learning outcomes compared to their urban counterparts (UNESCO, 2022). These disparities highlight the importance of equitable resource allocation in improving students' academic performance.

2.5.2 Teacher-Side Factors and Students' Academic Performance

Teacher-related factors are among the most influential determinants of students' academic performance. Key teacher-side factors include teacher attendance, motivation, qualifications, teaching effectiveness, and instructional practices. Research consistently demonstrates that what teachers do in classrooms has a substantial impact on learners' academic outcomes (Darling-Hammond et al., 2020; World Bank, 2021).

Teacher attendance is essential for ensuring learners' access to instruction and continuity of learning. Teacher absenteeism disrupts lesson delivery, reduces

instructional time, and weakens learner-teacher relationships, particularly in basic education. Recent evidence indicates that teacher absenteeism remains a challenge in many low- and middle-income countries, with higher prevalence in rural and deprived schools due to poor working conditions, long commuting distances, and limited professional support (World Bank, 2021; UNESCO, 2022).

Teacher motivation is another critical factor influencing students' academic performance. Motivated teachers are more likely to demonstrate commitment, prepare lessons effectively, use innovative teaching strategies, and engage learners actively. Conversely, low motivation—often linked to poor remuneration, limited career progression, and unfavourable working conditions—negatively affects teaching quality and learner achievement (OECD, 2020; UNESCO, 2021).

Teacher qualifications, professional training, and teaching experience also significantly affect academic outcomes. Studies show that learners taught by well-trained and professionally competent teachers tend to perform better academically than those taught by less qualified teachers. Continuous professional development enhances teachers' pedagogical skills, subject mastery, and capacity to respond to diverse learner needs (World Bank, 2021; Darling-Hammond et al., 2020).

Teaching effectiveness, including the use of appropriate instructional methods and assessment strategies, is a strong predictor of students' academic performance. Learner-centred approaches, formative assessment, effective feedback, and inclusive teaching practices have been shown to improve comprehension, retention, and achievement across subjects (OECD, 2020).

In deprived and rural communities, challenges related to teacher deployment and retention further affect academic performance. Many qualified teachers are reluctant to accept postings to remote areas, resulting in reliance on less experienced or untrained teachers. These disparities contribute to persistent achievement gaps between urban and rural schools (UNESCO, 2022; World Bank, 2021).

2.7.3 Concept of School Management and Students' Academic Performance (Revised)

School management plays a central role in shaping students' academic performance by influencing how educational resources are planned, utilised, and monitored. Effective school management ensures that infrastructure, teaching personnel, learning materials, and instructional time are optimally organised to support teaching and learning processes (OECD, 2020; UNESCO, 2022).

Evidence from developing education systems indicates that improvements in school infrastructure alone do not automatically translate into better academic outcomes unless accompanied by effective school leadership and management practices. School heads are responsible for coordinating instructional activities, supervising teachers, maintaining school facilities, and fostering positive learning environments that promote regular attendance and learner engagement (World Bank, 2021).

School attendance is a key mechanism through which school management influences academic performance. Well-managed schools implement attendance monitoring systems, engage parents and communities, and create supportive school climates that encourage learners to attend school regularly. Research shows that students with high levels of absenteeism are significantly more likely to perform poorly academically

compared to those with regular attendance, highlighting attendance as a critical intermediary between management practices and learning outcomes (UNESCO, 2022).

School management also plays a role in addressing learners' emotional and behavioural needs. Schools with strong leadership structures are better positioned to implement guidance and counselling services, establish clear behavioural expectations, and provide psychosocial support for learners. Studies indicate that unmanaged emotional and behavioural difficulties negatively affect learners' academic performance, while supportive school environments mitigate these risks and enhance achievement (UNICEF, 2021; OECD, 2020).

b. School Location and Physical Buildings

School location and the condition of physical buildings significantly influence students' academic performance. The learning environment in which a school is situated shapes access to resources, teacher deployment, student attendance, and overall learning conditions. Research consistently shows that schools located in rural and deprived areas tend to experience infrastructural deficits, limited access to qualified teachers, and poorer academic outcomes compared to urban schools (World Bank, 2021; UNESCO, 2022).

Long distances between home and school remain a major challenge for learners in rural communities. Studies indicate that pupils who walk long distances to school are more likely to arrive late, experience fatigue and hunger, and show reduced concentration during lessons, all of which negatively affect academic performance (UNICEF, 2021; UNESCO, 2022). These challenges disproportionately affect children from low-income households who lack access to transportation alternatives.

The physical condition of school buildings also plays a crucial role in shaping learning outcomes. Poorly constructed or inadequately maintained classrooms, lack of furniture, poor lighting, and inadequate ventilation create un conducive learning environments that undermine teaching effectiveness and learner engagement. Evidence suggests that students in well-maintained school facilities demonstrate higher attendance rates, better concentration, and improved academic achievement (Barrett et al., 2019; OECD, 2020).

c. Teaching Methodology and Assessment

Teaching methodology and assessment practices are critical determinants of students' academic performance. Learner-centred teaching approaches that encourage active participation, critical thinking, and problem-solving have been shown to enhance understanding and retention of knowledge. In contrast, reliance on teacher-centred and rote-learning approaches limits learners' engagement and academic achievement (OECD, 2020; Darling-Hammond et al., 2020).

Curriculum reforms aimed at improving learning outcomes often fail to achieve their intended impact when teachers are not adequately trained to implement new pedagogical approaches. Recent studies in Sub-Saharan Africa indicate that limited teacher preparation for competency-based curricula leads to continued use of traditional teaching methods, thereby constraining students' academic performance (UNESCO, 2022).

Assessment practices also influence academic outcomes. Effective assessment systems support learning by providing timely feedback, identifying learning gaps, and guiding instructional improvement. However, excessive emphasis on high-stakes examinations and memorisation-oriented testing discourages deep learning and critical thinking.

Contemporary research advocates for formative assessment practices that support continuous learning and skill development (OECD, 2020; World Bank, 2021).

d. Relationships Among School Personnel

Positive interpersonal relationships among school personnel contribute significantly to a conducive teaching and learning environment. Healthy relationships between teachers, school leaders, and support staff foster collaboration, professional commitment, and effective instructional delivery. Such environments enhance learner motivation and academic engagement (OECD, 2020).

Conversely, poor relationships characterised by conflict, weak communication, and lack of professional trust negatively affect school climate and instructional quality. Research indicates that schools with dysfunctional staff relationships often experience low teacher morale, ineffective classroom practices, and poor student academic performance (UNESCO, 2021).

e. Job Dissatisfaction Among Teachers

Teacher job satisfaction is closely linked to instructional quality and students' academic performance. Teachers who experience high levels of job satisfaction are more likely to demonstrate commitment, creativity, and positive engagement with learners. In contrast, job dissatisfaction—often associated with poor remuneration, heavy workloads, limited career progression, and unfavourable working conditions—reduces teaching effectiveness and negatively affects learner outcomes (OECD, 2020; UNESCO, 2021).

Studies show that dissatisfied teachers are more likely to exhibit absenteeism, low instructional effort, and negative attitudes toward students, which undermine classroom learning and academic performance. Improving teacher welfare and professional support is therefore essential for enhancing students' academic achievement (World Bank, 2021).

f. School Management

Effective school management is a critical factor influencing students' academic performance. School leaders play a central role in coordinating instructional activities, managing resources, supervising teachers, and fostering positive learning environments. Evidence suggests that schools with strong leadership and effective management practices demonstrate better student attendance, improved teaching quality, and higher academic achievement (OECD, 2020; UNESCO, 2022).

While infrastructure expansion has improved access to schooling in many countries, research shows that increased enrolment alone does not guarantee improved academic performance unless accompanied by effective management and quality assurance mechanisms. School attendance remains a key pathway through which management practices influence academic outcomes. Students with high levels of absenteeism are significantly more likely to perform poorly academically than those who attend school regularly (World Bank, 2021).

School management also influences how schools respond to learners' emotional and behavioural needs. Supportive leadership structures that prioritise guidance, counselling, and inclusive discipline practices contribute to improved learner well-being and academic performance. Learners experiencing unmanaged emotional or

behavioural difficulties are at higher risk of low academic achievement, highlighting the importance of holistic school management approaches (UNICEF, 2021; UNESCO, 2022).

g. Economic Factors

Economic factors are among the most influential determinants of students' academic performance, affecting access to schooling, attendance, learning conditions, and educational outcomes. Household poverty constrains families' ability to meet direct and indirect costs of education, including uniforms, learning materials, transportation, and supplementary academic support, thereby increasing the risk of irregular attendance, dropout, and poor academic achievement (World Bank, 2021; UNESCO, 2022).

Recent empirical evidence consistently shows that children from poor and economically constrained households are more likely to experience interrupted schooling and low academic performance. Studies across low- and middle-income countries demonstrate that poverty and limited access to credit significantly increase the likelihood of school dropout, particularly at the basic and secondary education levels (UNICEF, 2021). Economic vulnerability often forces households to prioritise immediate survival needs over long-term educational investment, especially during periods of economic shocks.

Household economic conditions also interact with gender and family structure to shape educational outcomes. Research indicates that in low-income households, girls are disproportionately affected by economic deprivation due to unequal allocation of educational resources, domestic labour demands, and early withdrawal from school

(UNESCO, 2022). The presence of multiple school-aged children in poor households further strains limited resources, reducing the probability of sustained school attendance and academic success for all children.

Beyond access and enrolment, poverty affects the quality of schooling experiences. Recent scholarship emphasises that economic deprivation leads to “capability deprivation,” where children may be physically present in school but excluded from meaningful learning due to hunger, stigma, low self-esteem, and limited academic support (OECD, 2020; UNICEF, 2021). Such conditions undermine learners’ participation, engagement, and academic confidence, resulting in persistently low performance.

In the Ghanaian context, studies indicate that while policies aimed at expanding access to education have improved enrolment, economic inequalities continue to undermine the provision of quality education, particularly in rural and deprived regions. Schools serving low-income communities often lack adequate infrastructure, teaching materials, and qualified teachers, which negatively affects students’ academic outcomes (Ministry of Education [MoE], 2018; Dzidza et al., 2018). These disparities reinforce cycles of poverty and underachievement.

Education, however, remains a critical pathway for poverty reduction and improved socio-economic outcomes. Evidence shows that higher levels of educational attainment are associated with increased income, improved employment prospects, and reduced poverty at both individual and national levels (World Bank, 2022; UNESCO, 2021). Nevertheless, the relationship between education and poverty reduction is not automatic; it depends heavily on the quality and relevance of education provided.

Increased enrolment without corresponding improvements in educational quality yields limited returns in terms of academic performance and long-term economic benefits.

Overall, economic factors influence students' academic performance through multiple pathways, including household poverty, access to resources, gender inequalities, school quality, and learning conditions. Addressing poor academic performance therefore requires integrated policies that combine poverty reduction strategies with investments in quality education, equitable resource distribution, and targeted support for economically disadvantaged learners.

2.6 School Attendance

School attendance refers to learners' regular and consistent participation in scheduled school activities and instructional programmes. Regular attendance is fundamental to effective learning because it enables continuous engagement with classroom instruction, access to academic support, and sustained interaction with teachers and peers (UNESCO, 2022; World Bank, 2021).

Research consistently demonstrates that regular school attendance is strongly associated with improved academic performance, higher levels of learner engagement, and increased likelihood of completing basic education. Learners who attend school consistently benefit from cumulative learning experiences that support academic achievement and personal development (OECD, 2020). Through regular participation in schooling, learners develop academic confidence, social identity, and a sense of belonging within the school community (UNICEF, 2021).

School attendance also reflects commitment to the learning process by learners, parents, and schools. From enrolment through completion of an academic programme, sustained attendance ensures that learners fully benefit from curriculum content, instructional time, and assessment opportunities. Consequently, attendance is widely used as a key indicator of educational quality and system effectiveness (UNESCO, 2022).

Gender and age disparities in attendance remain evident in many low- and middle-income countries. Empirical studies indicate that absenteeism tends to increase as learners grow older, particularly during the upper primary and junior secondary stages. Gender gaps are also observed, with girls often experiencing higher rates of absenteeism due to household responsibilities, early marriage, and socio-cultural expectations (Banerji & Mathur, 2021; UNICEF, 2021).

Effective monitoring of attendance is therefore essential. School attendance records serve as important quality assurance tools for school management and education authorities, enabling early identification of attendance problems and targeted interventions to support at-risk learners (OECD, 2020).

2.6.1 School Attendance and School Absenteeism

School absenteeism refers to the frequent or habitual absence of learners from school and represents a major barrier to achieving desired educational outcomes. Absenteeism undermines instructional continuity, reduces learning time, and weakens learners' academic progress, thereby contributing to poor academic performance and increased dropout rates (World Bank, 2021).

Contemporary literature identifies absenteeism as a multidimensional phenomenon influenced by individual, household, school, and community factors. At the household level, illness, poverty, food insecurity, family responsibilities, housing instability, and child labour are major contributors to irregular attendance. Learners from economically deprived households are particularly vulnerable to absenteeism due to competing survival demands (UNICEF, 2021; UNESCO, 2022).

School-related factors also play a significant role in absenteeism. Learners may avoid school due to bullying, unsafe learning environments, poor sanitation facilities, teacher absenteeism, or negative teacher-learner relationships. Research indicates that when learners perceive the school environment as hostile, unsafe, or unengaging, their motivation to attend school declines significantly (OECD, 2020).

Parental attitudes and awareness further influence attendance patterns. Some parents underestimate the cumulative impact of occasional absences, particularly in basic education, and may not recognise that missing even a few days of school can disrupt learning progression. This perception contributes to chronic absenteeism and weak academic foundations over time (UNESCO, 2022).

Evidence suggests that absenteeism is not merely a behavioural issue but a reflection of broader structural and socio-economic challenges. Effective responses therefore require comprehensive strategies that integrate health interventions, poverty reduction measures, improved school environments, parental engagement, and effective school management practices (World Bank, 2021).

2.7 Conceptual Framework

Based on the literature reviewed and the objectives set for this study the researcher composed the following conceptual model as shown in Figure 2

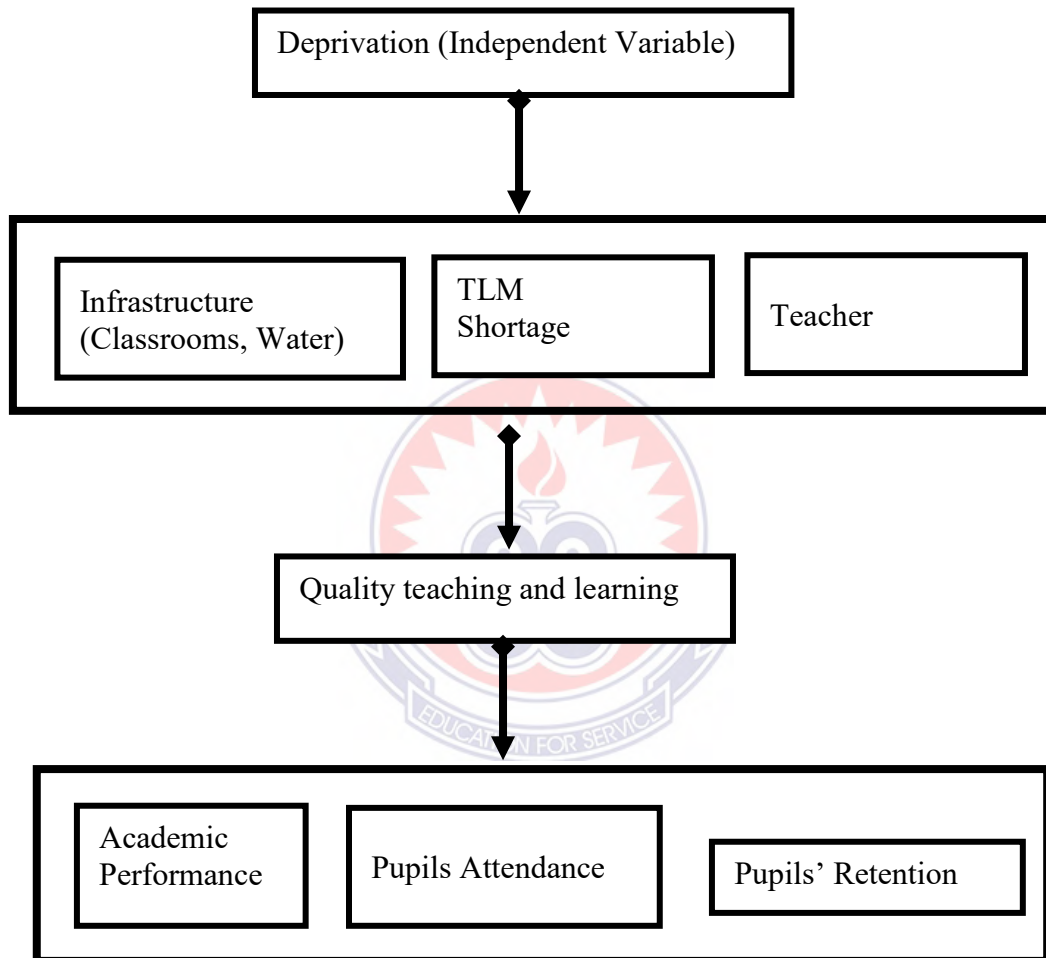


Figure 2: Conceptual Framework

Source: Researcher's construct (2026), adapted from Moore (1990).

Figure 2 presents the Deprivation Effects Model guiding this study. The framework conceptualizes deprivation as the main independent variable, operationalized through three key dimensions: infrastructure deficits (e.g., classrooms and water), teaching and learning material (TLM) shortages, and teacher-related deprivation (e.g., inadequate

teacher numbers and imbalanced deployment). These deprivation dimensions are expected to influence the quality of teaching and learning, which represents the key school process condition through which resources shape education delivery.

The framework further indicates that the quality of teaching and learning is associated with three learner outcomes: pupils' academic performance, pupils' attendance, and pupils' retention. The unidirectional arrows reflect the assumption that resource constraints within schools affect teaching-learning conditions and, consequently, pupils' schooling outcomes in public basic schools in Wassa Amenfi East Municipality.

In this study, the framework is applied primarily to examine statistical relationships (associations) between deprivation indicators (infrastructure, TLMs, and teacher-related deprivation) and outcome measures. Deprivation is measured using composite Likert-scale indices for each dimension, while outcomes are measured using indicators such as teaching/learning quality ratings, academic performance records, and attendance/retention measures. Although the model is adapted from Moore's (1990) Input-Process-Output logic, the analysis focuses on main effects relationships rather than testing moderation or mediation effects.

2.8 Summary of Literature Review

This chapter reviewed relevant literature related to the study. The study was premised on three theories. They were the input processes out-put theory which postulates that an organized institution or an enterprise does not exist in vacuum but a dependent on the external environment for resources for its function therefore, the inputs and processes are directly proportional to the outputs. The inputs-processes-output links resources investment and utilization of instructional time to the achievements of

education of children. Other theories were the Human capital theory which examines the relationships between education, economic growth and social well-being and the system of individual psychology theory by Alfred Adler in 1956.

The literature reviewed a conceptual framework on effects of deprivation on quality of basic education delivery. From the conceptual framework, variables like the students' academic performance, students school attendance were used as the dependent variables those outcomes depend on the independent variables like; lack of infrastructure, lack of teachers and lack of teaching materials like; textbooks TLM's and among others. Hence, the researcher assess the effects of these independent variables i.e. lack of infrastructure on the outcome of the dependent variable like the student academic performance and pupils' School attendance.

Other areas of literature review conceptual literature on the state of basic infrastructure in schools, the effect of deprivation on pupil's academic performance, effects of poverty on pupils performance, the concept of poor performance and school attendance.

CHAPTER THREE

METHODOLOGY

3.0 Overview

This chapter looks at the methodology and specific procedures used to identify, collect, process, and analyse data pertaining to the topic under study. This chapter talks about the study area in the context of Wassa Amenfi East Municipal, research paradigm, the research approach, research design, population of the study, sample and sampling techniques, sources of data for the study, research instrument, data collection procedure, data collection, pilot testing, data analysis and ethical considerations.

3.1 Research Philosophy/Paradigm

A research paradigm refers to a broad theoretical framework that guides how data are analyzed and interpreted in a study. It represents a set of shared beliefs, assumptions, and values that inform how a researcher understands reality and knowledge (du Plooy-Cilliers, 2016). The importance of a research paradigm lies in its influence on what is investigated, how phenomena are examined, and how research findings are interpreted (Bryman, 2012). Research paradigms therefore embody the abstract worldviews that shape researchers' perceptions of the social world and frame their interpretations of empirical evidence. In support of this view, Kivunja and Kuyini (2017) argue that paradigms provide foundational beliefs and guiding principles that influence what scholars study, the methodological approaches they adopt, and how they make sense of their findings. Therefore, researchers must carefully examine philosophical assumptions before selecting an appropriate paradigm for their work. The choice of paradigm establishes research intent and provides a theoretical framework for

methodologies (Mackenzie & Knipe, 2006). Paradigms include positivist, constructivist, interpretive, transformative, or pragmatic approaches.

This study was underpinned by the positivist paradigm, which holds that true knowledge derives from sensory experience obtained through observation and experiment. Positivism, developed by Auguste Comte in the early nineteenth century, assumes scientific methods can identify laws governing social phenomena (Richards, 2003, p. 37). The positivist approach enabled the researcher to examine a wide range of situations efficiently, focusing specifically on the effects of educational deprivation on quality basic education delivery in Wassa Amenfi East Municipality.

3.2 Research Approach

The researcher collected and analyzed data quantitatively. Quantitative social research emphasizes numerical measurement of social phenomena (Bryman, 2008). Kusi (2012) explains that quantitative researchers use structured approaches to test relationships between variables, condensing complex phenomena into measurable indicators. This approach allowed the researcher to gather data from large numbers of respondents across Wassa Amenfi East Municipality and quantify deprivation's effects. Quantitative analysis facilitated statistical measurement and hypothesis testing. As Cooney (2010) states, the goal is to identify "as small a set of variables as possible which explain as much as possible, "establishing general relationships applicable across multiple cases.

Quantitative research produces reliable, generalizable data suitable for testing established theories through pre-formulated hypotheses (Marshall, 1996). Its strengths align perfectly with this study's objectives.

3.3 Research Design

Research design serves as the blueprint for conducting a study that maximizes control over factors affecting validity (Myers, Welle, & Lorch, 2013). Effective design planning increases the likelihood of obtaining valid information reflecting real conditions (Amedahe, 2002).

The study employed a descriptive survey design. Descriptive research aims to accurately portray activities, objects, processes, and persons (Amedahe, 2002). Creswell (2015) notes that descriptive designs examine existing conditions, while Kelley et al. (2003) confirm survey methods effectively collect varied data from large, geographically dispersed samples. This design suited the study's broad scope across Wassa Amenfi East Municipality's public basic schools, enabling comprehensive assessment of educational deprivation's effects on quality basic education delivery.

3.4 Site and Sample Characteristics

The study was conducted in Wassa Amenfi East Municipality, one of Ghana's 261 metropolitan, municipal, and district assemblies (MMDAs) and part of the 14 MMDAs in the Western Region. Created in 2004 by Legislative Instrument (LI) 1788 from the former Wassa Amenfi Municipal Assembly, it was inaugurated on 27th August 2004 with Wassa Akropong as its administrative capital, located 6.7 km from the Cape Coast-Takoradi main road.

The municipality lies between latitudes 5°30'N to 6°15'N and longitudes 1°45'W to 2°11'W, occupying 1,600 square kilometers (7.5% of the Western Region's total area). It is bounded by Wassa Amenfi West Municipal to the west, Upper Denkyira East

District to the east, Prestea Huni Valley District to the south, and Upper Denkyira West District to the north. Wassa Akropong, the capital, is 180 km from Sekondi-Takoradi (regional capital) and 136 km from Kumasi by road.

According to the 2021 Population and Housing Census, the municipality has a population of 179,696 (95,283 males; 84,413 females).

Wassa Amenfi East was purposively selected due to its acute educational deprivation—70% of schools lack permanent structures, teacher vacancy rates exceed 30%, and gold mining pollution exacerbates infrastructure decay—making it ideal for studying deprivation's effects on basic education delivery.

3.5 Population of the Study

According to Wiid and Diggins (2013), population refers to the total group of people or entities from whom information is required. To adequately define the population, three parameters were utilized: the nature, size, and unique characteristics, distinguishing between target and accessible populations (Bryman & Bell, 2015).

The target population comprised all public basic schools (KG-P6) across four circuits in Wassa Amenfi East Municipality, totaling 37 schools and 381 teachers (Wassa Amenfi East District Education Directorate, 2024). The accessible population was teachers from these schools. Table 3.1 summarizes the school and teacher distribution per circuit.

Circuit	Number of schools	Total number of teachers
1. Saa	10	112
2. Japa	8	82
3. Asikuma	9	94
4. Nkonya	10	93
Total	37	381

Source: Author's Construct (2024)

3.6 Sample Size and Sampling Procedure

A sample size of 196 was selected for the study. The sample size was calculated using Yamane (1967) formula. This is presented as:

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

Where “n” represents the required minimum sample size subject to calculation, and “N” is the size of the target population from which a sample is drawn, that is, the total number of teachers in the 4 circuits selected for the study. The letter ‘e’, the margin of error, was set at 5% (0.05) at 95% confidence level. The selection of a 5% error margin aligns with common practices in educational research, where similar studies have successfully utilized this threshold to achieve credible results (Osei, 2020). This alignment reinforces the validity of the chosen margin and positions the research within established methodologies. Based on statistics of teachers in the 4 selected circuits, the target population was 381.

Sampling is a process of selecting individuals from a population such that the selected group represents characteristics found in the entire group (Orodho, 2014). Simple

random sampling selected the 4 circuits. Names of all 10 circuits were written on pieces of paper, placed in an opaque container, and 4 papers randomly drawn representing the 4 circuits.

Proportionate stratified sampling determined teacher numbers per circuit. The accessible population was grouped into strata (Saa, Japa, Asikuma, Nkonya), with each stratum sampled proportionally. The sampling fraction (n/N) remained consistent across strata (Table 3.2). Decimal sample sizes were rounded to whole numbers, yielding 196 teachers total.

Table 3.1. Sample Size Selection Table

Stratum (Circuit)	Population Size (N)	Sample Size (n)	% of Stratum Sampled (%)	Sampling Fraction (n/N)
1. Saa	112	58	51.8	0.514
2. Japa	82	42	51.2	0.514
3. Asikuma	94	48	51.1	0.514
4. Nkonya	93	48	51.6	0.514
Total	381	196		

Source: Author's Construct (2024)

Proportionate stratified sampling enables comparisons between subgroups (Gay, 2016) and produces means closer to population values (Robson, 2019).

Simple random sampling selected individual respondents. Each of the 381 teachers was assigned a unique number (1-381). A random number generator selected 196 unique numbers using Microsoft Excel's RANDBETWEEN (1,381) function. In cell A2, the formula =RANDBETWEEN (1,381) generated random integers, dragged from A2 to

A197 for 196 numbers (Gravetter & Forzano, 2018). Corresponding individuals formed the sample, ensuring equal selection probability. This minimized bias, enhanced reliability, and supported generalizable conclusions reflecting the broader population.

3.7 Validity and Reliability

Research validity ensures that scientific study requirements are met throughout the research process, while reliability confirms consistent measurement across repeated applications (Oliver, 2010). Face validity was established by submitting the questionnaire to experienced researchers, including the study supervisor, who reviewed wording and structure and suggested corrections that were fully implemented before main data collection. Content validity was separately confirmed by management and administration lecturers who vetted items for clarity of purpose, subject matter relevance, comprehensive content coverage, and appropriate language usage, with all recommended changes incorporated (Cohen et al., 2007).

The instrument underwent pre-testing for both face and content validity among two headteachers from basic schools within the district but outside the main study sample, ensuring the questionnaire measured what it was designed to achieve (Nardi, 2007). Cronbach's Alpha tested internal consistency and reliability, yielding an overall scale reliability of $\alpha = 0.88$, which exceeds the acceptable threshold. Howland and Wedman (2004) established that Cronbach's Alpha coefficients of 0.700 or higher indicate highly trustworthy scales, a standard met by all six Likert subscales within the questionnaire (Antwi-Afari et al., 2018). This comprehensive validation process confirms both the instrument's accuracy in measuring deprivation effects and its

consistency across the 196 respondents from Wassa Amenfi East Municipality's four circuits.

3.8 Data Collection Procedure

Cooper and Schindler (2011) state that data collection methods refer to the process of gathering data after the researcher has identified the types of information needed which is; the investigative questions the researcher must answer, and has also identified the desired data type (nominal, ordinal, interval, or ratio) for each of these questions and also ascertained the characteristics of the sample unit that is, whether a participant can articulate his or her ideas, thoughts, and experiences.

Accordingly, an introductory letter from the University of Education, Winneba was sent to the Municipal Director of Education for permission. After permission had been granted to conduct the study, attention was drawn to each of the respondents selected for the study to inform them of the impending meeting for the distributing of the questionnaires. The administration of the questionnaire was done personally at the various selected schools. The researcher assured respondents of the confidentiality of whatever information they provided. The questionnaires were left with the respondents for a week to allow them enough time to respond to the items appropriately and were collected for analysis.

3.9 Data Analysis Procedure

The returned questionnaires were first screened to ensure completeness and accuracy. Questionnaires that were either not responded to or contained substantial missing responses were excluded from the analysis to ensure data quality. Each completed questionnaire was carefully checked item by item to identify unanswered questions.

Where a questionnaire contained a significant number of missing responses, it was eliminated because it could not provide sufficient information for meaningful analysis.

After screening, the data were coded and entered into the Statistical Package for Social Sciences (SPSS) version 24, with Microsoft Excel (2021) used for data cleaning and cross-checking. Descriptive and inferential statistical techniques were employed in line with the specific research questions. Descriptive statistics were used to summarize and describe the data, while inferential statistics were used to examine relationships among the study variables (Polit & Hungler, 2016).

To answer Research Question 1, descriptive statistics, specifically means and standard deviations, were used. Responses to Likert-scale items measuring infrastructure deprivation, teaching and learning material shortages, and teacher-related deprivation were analyzed. The mean scores provided an overall indication of the extent of deprivation in each domain, while standard deviations showed the degree of variation in respondents' views. A decision rule was applied where a mean score of 2.5 or above indicated agreement, and a mean score below 2.5 indicated disagreement, based on the midpoint of the four-point Likert scale.

To answer Research Question 2, Pearson product-moment correlation analysis was employed. Composite deprivation scores (infrastructure, teaching/learning materials, and teacher-related deprivation) were correlated with teachers' teaching effectiveness scores. This analysis was used to determine the strength and direction of the relationship between deprivation and teaching effectiveness.

Pearson correlation analysis was also used to address Research Question 3. Deprivation indices were correlated with measures of pupils' academic performance to examine whether higher levels of deprivation were associated with lower academic outcomes. This approach allowed the study to establish the degree to which deprivation relates to pupils' academic performance.

Similarly, Pearson correlation analysis was used to answer Research Question 4. Deprivation variables were correlated with pupils' attendance data to determine whether resource deprivation was associated with irregular school attendance. The correlation coefficients indicated the nature and magnitude of the relationship between deprivation and pupil attendance.

Descriptive statistics such as frequencies and percentages were used to analyze demographic characteristics of respondents, while inferential results were presented using tables for clarity and ease of interpretation. All analyses were conducted at the appropriate level to ensure that each research question was directly addressed using suitable statistical techniques.

3.10 Ethical Considerations

Research ethics is the process of conducting research in a responsible and morally acceptable way (Gray, 2013). Research ethics enables the researcher to take the safety needs and concerns of the participants into consideration while conducting research (Mack et al., 2005). Henning et al. (2004) maintain that the researcher is accountable for the ethical standards of the research and must strictly adhere to ethical principles while conducting the research. Saunders et al. (2009) postulate that the researcher must consider the participants' voluntary participation and right to withdraw, maintenance

of confidentiality and anonymity, as well as the informed consent and privacy of participants. The researcher obtained an introductory letter with reference number: UEW/EAM/INT/27 signed and dated 30/03/2023 from the University of Education, Winneba. Based on this letter, permission was asked from the Municipal Director as well as the School Improvement Support Officers (SISOs) before the commencement of the data collection. Therefore, this implies that the researcher satisfied all the ethical conditions that were required.



CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION

4.0 Overview

This chapter is devoted to the presentation of the results of the analyses of data. The chapter is organized under three sub-sections. Firstly, is the presentation of demographic characteristics of the respondents, followed by the presentation of the results of the research questions, then is the discussion of the results.

4.1 Bio Data of the Respondents

The bio-data of the respondents such as sex, age, academic qualification, and teaching experience are captured. Table 4.1 is used to present the summary of the bio data.

Table 4. 1: Bio-Data of Respondents

Variable	Category	Frequency	Percent
Sex	Male	129	65.8%
	Female	67	34.2%
Age	21-30 years	67	34.2%
	31-40 years	75	38.3%
	41-50 years	32	16.3%
	51-60 years	22	11.2%
Qualification	Diploma	14	7.1%
	Bachelor's Degree	180	91.8%
Experience	Master's Degree	2	1.0%
	1-5 years	42	21.4%
	6-10 years	57	29.1%
	11-15 years	73	37.2%
	16-20 years	24	12.2%

Source: Fieldwork data (2024)

Table 4.1 reveals that out of the total respondents, 65.8% (129) are male, while 34.2% (67) are female. This distribution indicates a higher representation of males in the sample population, suggesting that more males participated in the study than their female counterparts.

The ages of the respondents are categorized into four distinct brackets. It was found that respondents aged 21-30 years constituted 34.2% (67) of the sample. The largest age group is represented by respondents aged 31-40 years, making up 38.3% (75) of the total. This suggests that the majority of respondents are in their prime working age, which may influence their perspectives and experiences. Those aged 41-50 years accounted for 16.3% (32), while respondents aged 51-60 years constituted 11.2% (22), indicating a smaller representation in the older age brackets. The fewer teachers in the 51-60 years old bracket suggest that staff turnover due to retirement will be minimal in the coming years.

In terms of educational qualifications, Diploma holders formed a minority at 7.1% (14), suggesting that this level of qualification is relatively uncommon among the respondents. The majority, 91.8% (180), hold a Bachelor's Degree, which aligns with the standard qualification required for teaching roles in many educational systems including Ghana. Interestingly, Master's Degree holders constituted only 1.0% (2) of the sample, indicating that further academic qualification is rare among the respondents.

Regarding work experience, 21.4% (42) of respondents reported having 1-5 years of experience, which reflects a significant number of early-career teachers. Those with 6-

10 years of experience accounted for 29.1% (57) of the sample, while the largest group, comprising 37.2% (73), had 11-15 years of experience. This suggests that many teachers are well-established in their careers. Finally, respondents with 16-20 years of experience constituted 12.2% (24) of the sample, indicating a smaller proportion of very experienced teachers.

4.2 Findings

The findings of the study were organised according to research questions.

Research Question One: What is the state of deprivation regarding infrastructure and teachers in public schools in Wassa Amenfi East Municipality?

Research Question 1 examined the state of deprivation regarding infrastructure, teachers, and teaching/learning resources in Wassa Amenfi East Municipality's public basic schools. Respondents (196 teachers) rated 19 items on a 4-point Likert scale (1=Strongly Disagree, 4=Strongly Agree), where means ≥ 2.5 indicated deprivation agreement and means < 2.5 indicated disagreement. Items were grouped into three deprivation components: infrastructure (6 items), teachers (5 items), and teaching/learning resources (TLRs) (8 items). The results are summarised in Table 4.2

Table 4. 2: State of Deprivation in Schools

Item Description	N	Mean	Std. Dev	Severity
Infrastructure				
3. There is adequate space for students to move around during breaks	196	2.79	0.878	Mild
4. Classrooms are not equipped with necessary furniture for all students	196	2.59	1.032	Moderate
14. The school building is well-maintained and safe for students	196	2.22	1.058	Moderate
15. The sanitation facilities (toilets, washrooms) are adequate for students	196	2.07	1.091	Severe
16. There are sufficient classrooms available for all students	196	2.07	0.993	Severe
18. The school has access to clean drinking water	196	1.95	0.749	Severe
Overall mean and SD		2.18		Moderate
Teachers				
2. Teachers have sufficient teaching experience to provide quality education	196	2.95	1.009	Mild
5. Teacher workloads are manageable and allow effective teaching	196	2.42	1.219	Moderate
9. Current teacher-to-student ratio allows effective teaching	196	2.31	1.297	Moderate
11. Teachers receive adequate support from administration	196	2.30	0.937	Moderate
19. Most teachers are adequately qualified to teach their subjects	196	1.79	0.713	Severe
Overall mean and SD		2.36		Moderate
Teaching/Learning Resources (TLRs)				
1. The school encourages collaboration among teachers	196	3.07	0.912	None
6. There is a well-resourced library for students	196	2.41	0.959	Moderate
7. School regularly updates teaching materials	196	2.39	1.129	Moderate
8. School environment is quiet, organized, conducive to learning	196	2.37	0.834	Moderate
10. Sufficient additional learning aids available	196	2.30	0.653	Moderate

Item Description	N	Mean	Std. Dev	Severity
12. Adequate technological resources (computers, tablets)	196	2.29	1.123	Moderate
13. Enough learning materials (chalkboards, projectors)	196	2.28	0.980	Moderate
17. School has reliable access to electricity	196	1.98	0.961	Severe
Overall mean and SD		2.29		Moderate
Overall Total	196	2.34	0.571	Moderate

Source: Fieldwork (2024)

Table 4.2 reveals moderate-high deprivation (overall mean = 2.34). Items were grouped into three deprivation components: Infrastructure showed the most severe deprivation (6 items, mean = 2.18), with critical deficits in sanitation facilities (2.07), classroom sufficiency (2.07), clean drinking water (1.95), furniture shortages (2.59), building maintenance (2.22), and break space (2.79). These indicate fundamental physical inadequacies severely compromising learning conditions.

Teacher-related deprivation was moderate (5 items, mean = 2.36). While teachers reported sufficient experience (2.95) and collaboration (3.07), concerns persisted around manageable workloads (2.42), student-teacher ratios (2.31), and administrative support (2.30). Notably, teacher qualifications scored lowest (1.79), suggesting perceived inadequacy despite professional presence. Teaching/learning resources also showed moderate deprivation (8 items, mean = 2.29), with electricity access (1.98) and library resources (2.41) most problematic, alongside insufficient learning aids (2.30), technological resources (2.29), and teaching materials (2.28, 2.39). The learning environment (2.37) further hindered effectiveness.

The low standard deviation (0.571) indicates respondent consensus. Overall mean of $2.34 < 2.5$ confirms schools operate under moderate-high deprivation across all components, particularly acute in infrastructure and electricity, validating the need to examine deprivation effects on teaching effectiveness, academic performance, and attendance.

Research Question Two: What is the effect of deprivation on teachers’ teaching in Wassa Amenfi East Municipality?

Research Question Two examined the association between deprivation and teachers’ teaching effectiveness in Wassa Amenfi East Municipality public basic schools. Pearson correlation analyzed how inadequate resources, poor infrastructure, and insufficient staff relate to teaching quality. Results appear in Table 4.3.

Table 4. 3: Correlation between Deprivation and teaching and learning

		Deprivation	Teachers’ Teaching
Deprivation	Pearson Correlation	1	-.015
	Sig. (2-tailed)		.221
	N	196	196
Teachers’ Teaching	Pearson Correlation	-.015	1
	Sig. (2-tailed)	.221	
	N	196	196

Source: Fieldwork, (2024)

The correlation matrix between Deprivation and Teachers’ Teaching reveals a very weak negative relationship between these two variables in the Wassa Amenfi East Municipality context. The Pearson correlation coefficient of -0.015 indicates a nearly zero correlation, meaning that changes in deprivation levels have very little to no

association on the quality or effectiveness of teaching. In other words, as Deprivation increases, there is virtually no corresponding change in the quality of Teachers' Teaching, suggesting that the teachers' instructional methods or performance are largely unaffected by the levels of deprivation in the area.

The p-value of 0.221 indicates that the correlation is not statistically significant at the 0.05 level. This means that the observed weak negative correlation could very likely be due to random chance and does not represent a meaningful or reliable relationship. In other words, there is no evidence to suggest that deprivation, as measured in this study, directly influences or alters the teaching practices of teachers in the region.

Research Question Three: What is the effect of deprivation on academic performance of pupils of public basic schools in Wassa Amenfi East Municipality?

This research question sought to examine the association between deprivation in public basic schools (the independent variable) and academic performance (the dependent variable) of pupils attending public basic schools in the Wassa Amenfi East Municipality. Specifically, the question aims to assess whether higher levels of deprivation regarding infrastructure, teachers and teaching and learning resources are associated with changes in academic performance, and if so, how they are related. To analyse this, correlation (Pearson) was used. The results are summarized in Table 4.4

Table 4. 4: Correlation between Deprivation and Academic Performance

		Deprivation	Academic Performance
Deprivation	Pearson Correlation	1	-0.452**
	Sig. (2-tailed)		.000
	N	196	196
Academic Performance	Pearson Correlation	-0.452**	1
	Sig. (2-tailed)	.000	
	N	196	196

** . Correlation is significant at the 0.01 level (2-tailed).

The correlation matrix between Deprivation and Academic Performance reveals a moderate negative relationship between these two variables in the Wassa Amenfi East Municipality. The Pearson correlation coefficient of -0.452 indicates a moderate negative correlation, meaning that as Deprivation increases, Academic Performance tends to decrease. This suggests that higher levels of deprivation (that when conditions such as infrastructure, teachers and teaching and learning materials worsens) are associated with poorer academic performance among pupils of public basic schools in the Wassa Amenfi East Municipality. The p-value of 0.000 indicates that the correlation is statistically significant at the 0.01 level, meaning this relationship is unlikely to have occurred by chance. The significance of the correlation reinforces the idea that deprivation has a measurable impact on academic outcomes, and this effect is not random. The moderate strength of the negative correlation implies that while deprivation may influence academic performance, it is likely not the sole factor. There could be other contributing factors, such as teaching quality, student motivation and administrative support which may also play a role in shaping the academic performance of the pupils. Nonetheless, the negative correlation suggests that efforts to reduce

deprivation in the municipality could have a positive effect on improving academic performance, though the relationship is not overwhelmingly strong.

Research Question Four: What is the effect of deprivation on pupils' school attendance in Wassa Amenfi East Municipality?

This research question investigated the association between deprivation (the independent variable) and pupils' school attendance (the dependent variable) in the Wassa Amenfi East Municipality. Specifically, it sought to understand how the state of deprivation impact the attendance patterns of students in public basic schools in the region. To analyse this, Pearson correlation was used, and the results are presented in Table 4.5.

Table 4. 5: School deprivation and Pupil' Attendance

		School	
		Deprivation	Attendance
School	Pearson Correlation	1	-0.283**
Deprivation	Sig. (2-tailed)		.000
	N	196	196
Attendance	Pearson Correlation	-0.283**	1
	Sig. (2-tailed)	.000	
	N	196	196

** . Correlation is significant at the 0.01 level (2-tailed).

The correlation matrix between School Deprivation and Pupils' Attendance reveals a moderate negative relationship between these two variables. The Pearson correlation coefficient of -0.283 indicates a moderate negative correlation, meaning that as levels of school deprivation increase, attendance tends to decrease. This suggests that higher levels of deprivation, which could include factors such as inadequate school facilities,

lack of teaching resources, or inadequate teachers faced by schools are associated with lower attendance rates among pupils in the public basic schools of the Wassa Amenfi East Municipality. Put differently, when factors like inadequate learning materials, poor school infrastructure, and inadequate teachers worsens, the pupils are more likely to miss school or have irregular attendance.

The p-value of 0.000 indicates that this correlation is statistically significant at the 0.01 level, meaning the relationship observed between school deprivation and attendance is highly unlikely to have occurred by chance. In practical terms, this suggests that interventions aimed at improving school conditions such as better infrastructure, providing learning materials, and addressing teacher shortage could help improve the attendance of pupils of public basic schools in the Wassa Amenfi East Municipality.

4.3 Discussion of Results

Research Question One found that public basic schools in Wassa Amenfi East Municipality experience moderate-high deprivation (mean = 2.34) regarding infrastructure adequacy, teacher availability, and teaching/learning materials. Classrooms (2.07), sanitation facilities (2.07), and clean water access (1.95) are severely inadequate, while furniture (2.59) and building maintenance (2.22) remain problematic. Library facilities (2.41) and teaching materials (2.28-2.39) are also insufficient, with electricity access critically low (1.98). Teacher numbers prove inadequate relative to enrollment (student-teacher ratio: 2.31), despite adequate experience (2.95).

These infrastructure deficits, beyond limiting resource access, likely contribute to absenteeism and lower performance as students experience discomfort and unsafe conditions. This aligns with Osei & Osei (2019) who found inadequate facilities negatively impact student engagement and outcomes, and Adetayo et al. (2020) who linked well-maintained infrastructure to higher achievement and retention. Wassa Amenfi East schools must prioritize infrastructure rehabilitation.

Teacher inadequacy findings corroborate Akyeampong et al. (2018) documenting how shortages increase class sizes and reduce individual attention, hindering learning. Human Capital Theory (Becker, 2018) explains that sufficient qualified teachers maximize student potential which is currently compromised by workload pressures and poor ratios as far as this study is concerned

The significant shortage of teaching/learning materials (textbooks, library books, computers, charts) adversely affects instruction, supporting Kwapong (2021) who demonstrated resource access as essential for effective pedagogy. Material deficits force reliance on outdated methods, stunting critical thinking development.

Through the Input-Process-Output (IPO) framework, RQ1 deficiencies represent flawed inputs disrupting processes (teaching effectiveness) and outputs (performance, attendance). Human Capital Theory further reveals missed productivity opportunities from underinvestment. Addressing Wassa Amenfi East's infrastructure, staffing, and resource gaps could enhance educational processes and societal returns.

Research Question Two found that deprivation levels (RQ1 mean = 2.34) have very little to no association with teaching quality ($r = -0.015$, $p = 0.221$). Teachers maintain

instructional effectiveness despite inadequate infrastructure, teacher shortages, and material deficits. This resilience likely stems from their professional training captured in the bio-data (Table 4.1), where 91.8% hold Bachelor's degrees and 66.3% possess 6-15 years experience. These highly qualified, mid-career teachers were likely trained to anticipate rural teaching realities during their university preparation, equipping them with adaptive strategies for resource-constrained environments. Teacher training programs in Ghana typically expose trainees to deprivation contexts, teaching improvisation techniques and resilience strategies that prevent overwhelm when posted to challenging areas like Wassa Amenfi East.

Teachers demonstrate strong professional commitment, driven by intrinsic motivation to improve learner outcomes. They innovate within constraints—creating teaching aids from cardboard, paper, and local materials when formal resources (RQ1: electricity 1.98, library 2.41) are absent. This aligns with Cain et al. (2019) and Rogers et al. (2020) who found deprivation minimally affects teaching quality in resilient teachers. The finding challenges assumptions that external deprivation inevitably degrades instruction. Evans et al. (2018) similarly documented high teacher commitment overcoming low-resource challenges, while Ball (2019) highlighted resilience through intrinsic motivation. 91.8% Bachelor's-trained teachers apply pedagogical expertise as a buffer against material shortages.

Through the Input-Process-Output (IPO) framework, weak inputs (infrastructure, materials) do not compromise processes (teaching quality) because trained teachers serve as critical buffers. Human Capital Theory (Becker, 2020) explains this through

teachers' professional skills and training. These are valuable human capital which enables high-quality instruction regardless of the situation.

Research Question Three, which examined the association between deprivation and academic performance ($r = -0.452$, $p < 0.01$), found that as deprivation increases, academic performance tends to decrease. Higher levels of deprivation like infrastructure deficits: classrooms 2.07, sanitation 2.07, water 1.95) correlate with poorer pupil outcomes in Wassa Amenfi East public basic schools.

This finding aligns with Lee and Burkam (2002), who demonstrated that schools serving socio-economically disadvantaged communities and operating under severe resource constraints struggle to sustain acceptable educational standards and learner outcomes. Similarly, Barrett et al. (2019) established that pupils' academic achievement is strongly associated with the availability and quality of teaching and learning materials as well as the broader socio-economic context of schools.

When infrastructure, teacher availability (RQ1: ratio 2.31), and learning resources deteriorate, students' learning experiences are compromised. Policy implications are clear: addressing structural inequalities through targeted resource allocation to deprived schools creates equitable opportunities. Systemic reforms beyond teacher performance or curriculum are essential.

Through the Input-Process-Output (IPO) framework, deprivation represents flawed inputs (RQ1: 2.34 overall) disrupting processes (teaching effectiveness) and yielding poor outputs (academic performance). Human Capital Theory reveals missed productivity potential, as resource shortages limit cognitive skill development essential

for future economic mobility. Bergström and Andersson (2021) corroborate higher teacher turnover in deprived areas, while Hoxby and Weingarth (2005) confirm resource gaps directly translate to performance disparities. Technology and advanced materials absence disproportionately harms deprived students.

Research Question Four found higher deprivation levels ($r = -0.283$, $p < 0.01$) on inadequate facilities, teaching resources, and teacher shortages. Poor sanitation (RQ1: 2.07), water access (1.95), and electricity (1.98) discourage regular pupil attendance. This aligns with Lee and Burkham (2020) on disadvantaged school struggles and Barrett et al. (2019) linking resources to engagement. Uncomfortable, unsafe environments reduce student motivation to attend. Policy requires resource allocation prioritizing deprived schools, ensuring equitable access. IPO theory explains how poor inputs (infrastructure/resources) disrupt processes (attendance/engagement), yielding negative outputs (dropout risk). Human Capital Theory reveals lost learning opportunities limiting future productivity. Bergström and Andersson (2021) document teacher retention issues exacerbating attendance problems, while Hoxby and Weingarth (2020) confirm resource disparities drive engagement gaps. Addressing Wasswa Amenfi East's critical deficits could substantially improve attendance.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter discusses the summary of the findings, recommendations and conclusions discovered in the course of the research. The findings were the highlight of issues that were revealed during the research. It also involves the recommendations that can help to overcome the consequences of deprivation of education and subsequently provides a conclusion and recommendations to sum up the entire research.

5.1 Summary of Study

The purpose of the study was to examine the effect of deprivation of schools of infrastructure, teachers and teaching learning resources on teachers teaching, pupils' school attendance and academic performance in public basic school in the Wassa Amenfi East Municipality. The objectives of the study were to;

1. Investigate the state of deprivation regarding infrastructure, teaching and learning materials and teachers in public schools in Wassa Amenfi East Municipality?
2. Examine the effect of deprivation on teachers' teaching in public basic schools in Wassa Amenfi East Municipality
3. Find out the effect of deprivation on academic performance of pupils of public basic schools in Wassa Amenfi East Municipality
4. examine is the influence of deprivation on the attendance of pupils of public basic schools in Wassa Amenfi East Municipality

The study was delimited basic schools in 4 circuits in the Wassa Amenfi East Municipality of the Western Region in Ghana.

The input-process-output system theory and human capital theory as theoretical basis for the study. The positivist paradigm was adopted for the study. The study was quantitative research with the descriptive survey research design. The target population was all 381 teachers in the 37 schools in the 4 circuits the study was delimited to. A sample size of 196 was selected for the study using Yamane (1967) formula. Proportionate stratified sampling and simple random sampling were used to select the respondents for the study. Close-ended questionnaire with 4-point Likert Scale were used for data collection. The data were analysed using descriptive of frequency, mean standard deviation and with inferential statistics particularly correlation with the help of IBM SPSS Statistics version 27, and Microsoft Excel version 2021.

Major Findings

Research question found that public basic schools in the Wassa Amenfi East Municipality are deprived in terms adequacy and good state of infrastructure, teacher availability and teaching and learning materials. Classrooms, library facilities, furniture are woefully inadequate, and the few existing ones are in a very poor state. The number of teachers is inadequate for the schools. Also, the schools have inadequate supply of teaching and learning materials such as textbooks, library books, computers, charts etc to facilitate teaching and learning

Research question two found that the deprivation levels in the schools have very little to no impact on the quality or effectiveness of teaching. In other words, despite factors such as inadequate facilities, limited teaching resources, and insufficient teacher training, the way teachers delivered instruction and engaged with students remained largely unaffected

Research question three, which sought to examine how the state of deprivation influences the academic performance of pupils, found that as deprivation increases, academic performance tends to decrease. This finding indicates that when schools face higher levels of deprivation, students' academic outcomes tend to worsen. The diminished quality of the learning environment likely contributes to lower motivation, engagement, and overall academic achievement among students. This suggests that the availability and quality of resources directly impact students' ability to succeed academically, and that inadequate educational support systems can hinder their academic development.

Research question four found that higher levels of deprivation, such as inadequate school facilities, a lack of teaching resources, or insufficient numbers of qualified teachers, are associated with lower attendance rates among pupils. This finding highlights a critical link between the quality of the educational environment and student engagement. When schools are deprived of basic resources such as functioning classrooms, adequate teaching materials, and skilled teachers, students may be less motivated to attend school regularly

5.2 Conclusions

Based on the findings of this study, the followings conclusions were drawn:

Schools in the Wassa Amenfi East Municipality face moderate-high deprivation (mean=2.34) in terms of infrastructure, teacher availability, and teaching and learning materials. The inadequacy and poor condition of classrooms (2.07), sanitation facilities (2.07), and furniture, coupled with teacher shortages (ratio 2.31), highlight the extent of deprivation in these schools.

Despite moderate-high deprivation levels, there is no significant association with teaching quality ($r=-0.015$, $p=0.221$). Teachers in Wassa Amenfi East exhibit remarkable resilience and commitment, maintaining teaching standards despite inadequate resources and poor infrastructure.

Higher deprivation levels significantly associate with lower academic performance among pupils ($r=-0.452$, $p<0.01$). The worsening material conditions negatively affect students' academic outcomes in public basic schools.

Higher deprivation levels significantly associate with lower student attendance rates ($r=-0.283$, $p<0.01$). Poor infrastructure, inadequate resources, and teacher shortages demotivate students and reduce their commitment to regular school attendance.

5.3 Recommendations

The study recommended the following based on the findings of the study:

1. The Ministry of Education, in collaboration with Wassa Amenfi East Municipal Education Directorate, should prioritize capitation grant allocation (GHC500,000 annually for 3 years) specifically for renovating 100 classrooms, constructing 200 toilets, and installing 50 water points across 37 schools. GES should establish 5-year infrastructure maintenance fund (GHC100,000/year) ensuring sustainability through Public-Private Partnerships with mining companies operating in the municipality.
2. Ministry of Education through Ghana Education Service should implement mandatory annual "Rural Teaching Resilience Program" for all 381 teachers, focusing on improvisation techniques using local materials. District Education

Office should introduce Teacher Welfare Fund (GHC50,000/year) providing recognition awards and psychosocial support, sustained through 1% municipal assembly education levy.

3. Government through Ministry of Education and GES should deploy emergency academic recovery program: recruit 50 trained teachers within 6 months, distribute 10,000 textbooks to 37 schools, and establish after-school bridging classes (3 days/week). District Education Office implements quarterly performance monitoring with digital dashboards linked to capitation grant disbursements for sustained accountability.
4. Wassa Amenfi Education Directorate, collaborating with Ministry of Education, should launch "Attendance Recovery Initiative": free school meals for 5,000 pupils, transport vouchers for 1,000 remote students, and parental engagement committees in 4 circuits. Sustainability: PTA contributions (GHC2/pupil/month) + NGO partnerships for meal programs, monitored through monthly attendance audits.

5.4 Suggestions for Future Studies

Future studies should explore the following:

1. explore how community involvement can help mitigate the negative effects of deprivation on school infrastructure and resources, potentially improving attendance and academic performance
2. Qualitative investigations into teacher resilience factors, examining coping strategies, motivation, and professional development needs among teachers in high-deprivation contexts.

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APPENDICES

Appendix A: Questionnaire

UNIVERSITY OF EDUCATION, WINNEBA

DEPARTMENT OF EDUCATIONAL ADMINISTRATION AND MANAGEMENT

Dear Respondent,

I am a post graduate student at the University of Education, Winneba undertaking a Master of Philosophy programme in Educational Administration and Management. My research topic is: EFFECTS OF EDUCATIONAL RESOURCE DEPRIVATION ON BASIC EDUCATION DELIVERY IN WASSA AMENFI EAST MUNICIPALITY.

The information obtained from you will help give insight into the state of deprivation in our public basic schools, and how it affect the quality of education pupils receive. I assure you that your responses will be confidentially handled. *Please try as much as possible to answer all questions.*

SECTION A: BACKGROUND/PERSONAL DATA

Please either tick (✓) or respond appropriately by writing

1. Gender:

Male []

Female []

2. Age

20-30 []

31-40 []

41-50 []

51-60 []

3. Qualification:

Cert “A” []

Diploma []

Degree []

Masters []

Others (please specify)

4. Length of experience at present post

1-5 years []

6-10 years []

11-15years []

Above 15 years []



SECTION B: State of deprivation in school

This section seeks your view on the state of deprivation in your school regarding teacher quantity, teaching learning resources, and infrastructure. Kindly tick the appropriate box that correspond to your view.

SA: Strongly Agree A: Agree D: Disagree SD: Strongly Disagree

	State of deprivation	SA	A	D	SD
Teacher Related					
1.	The school encourages collaboration among teachers.	4	3	2	1
2.	The teachers in my school have sufficient teaching experience to provide quality education.	4	3	2	1
3.	Teacher workloads are manageable and allow for effective teaching.				
4.	The current teacher-to-student ratio in my school allows for effective teaching and personalized attention.				
5.	Teachers do not receive adequate support from administration.				
6.	Most teachers in my school are not adequately qualified to teach their respective subjects.				
Teaching Learning Resources Related					
1.	Classrooms are not equipped with necessary furniture for all students.	4	3	2	1
2.	The school regularly updates its teaching materials to reflect current knowledge and practices.	4	3	2	1

3.	The school environment is quiet, organized making it conducive to learning	4	3	2	1
4.	There are insufficient additional learning aids (e.g., visual aids, manipulatives) available to enhance teaching	4	3	2	1
5.	My school has adequate technological resources (e.g., computers, tablets) to support learning.	4	3	2	1
6.	There are enough learning materials (e.g., chalkboards, projectors) available for effective teaching.	4	3	2	1
Infrastructure Related					
1.	There is adequate space for students to move around during breaks.				
2.	There is no well- resourced library for students in my school				
3.	The school building is well-maintained and safe for students.	4	3	2	1
4.	The sanitation facilities (toilets, washrooms) in my school are adequate for the number of students.	4	3	2	1
5.	There are sufficient classrooms available for all students in my school.	4	3	2	1
6.	My school has no reliable access to electricity for teaching and learning activities.	4	3	2	1
7.	The school has access to clean drinking water.	4	3	2	1

SECTION C: Academic Performance of pupils

This section seeks your view on the academic performance of your pupils demonstrated during teaching and learning and assessment. Kindly tick the appropriate box that correspond to your view.

SA: Strongly Agree A: Agree D: Disagree SD: Strongly Disagree

Academic performance	SA	A	D	SD
1. My pupils demonstrate understanding of the concepts taught in class.	4	3	2	1
2. Pupils do not participate in class discussions and activities.	4	3	2	1
3. My students do not manage their study time.	4	3	2	1
4. Homework assignments are submitted on time.	4	3	2	1
5. Overall, the academic performance of the pupils is above average	4	3	2	1
6. My students use feedback from me to improve their performance.	4	3	2	1
7. My students appear well-prepared for tests and assessments	4	3	2	1
8. Pupils think critically and demonstrate problem-solving skills	4	3	2	1

SECTION D: State of teaching and learning

This section seeks your view on how well teaching and learning takes place within your school in view of the current state of deprivation in your school. Kindly tick the appropriate box that correspond to your view.

SA: Strongly Agree A: Agree D: Disagree SD: Strongly Disagree

Teaching and learning	SA	A	D	SD
1. My teaching methods are effective in promoting student understanding.	4	3	2	1
2. I regularly use a variety of teaching strategies to cater to different learning styles.	4	3	2	1
3. I provide clear instructions and expectations for assignments and assessments.	4	3	2	1
4. The classroom environment is conducive to learning.	4	3	2	1
5. I have access to adequate resources (books, technology) to support learning.	4	3	2	1
6. The physical layout of the classroom supports different types of activities (group work, individual study).	4	3	2	1

7. Students are self-motivated to learn and participate in class activities.	4	3	2	1
8. Students demonstrate a good understanding of the material taught.	4	3	2	1
9. I provide opportunities for students to connect learning to real-world applications	4	3	2	1



SECTION E: Attendance of pupils

This section seeks your view on how the current state of your school influences pupils to come to school. Kindly tick the appropriate box that correspond to your view.

SA: Strongly Agree

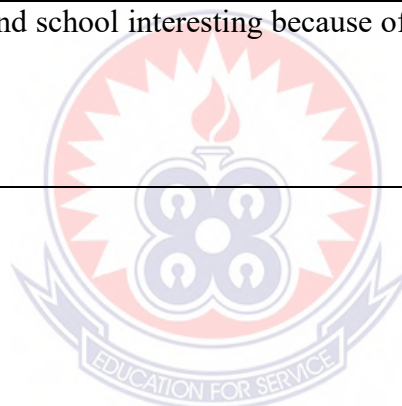
A: Agree

D: Disagree

SD: Strongly Disagree

Attendance	SA	A	D	SD
1. Students are not motivated to attend school regularly due to the deprived state of the school	4	3	2	1
2. Poor school infrastructure (e.g., inadequate classrooms, poor building condition) leads to increased student absenteeism.	4	3	2	1
3. A lack of teaching materials (e.g., textbooks, writing materials) contributes to students missing school.	4	3	2	1
4. Insufficient school facilities (e.g., lack of clean water, sanitation) affect student attendance.	4	3	2	1
5. Inadequate school resources (e.g., not enough teachers or overcrowded classrooms) contribute to students missing classes.	4	3	2	1
6. Students are not motivated to attend school regularly due to the deprived state of the school	4	3	2	1

7. The dilapidated nature classrooms and other infrastructure causes students to stay home, especially in rainy weather conditions.	4	3	2	1
8. The nature of school environment offers little security to the students so they usually absent themselves	4	3	2	1
9. The condition of school facilities (e.g., poor lighting, lack of space, inadequate furniture) negatively impacts student attendance.	4	3	2	1
10. Students do not find school interesting because of the lack of basic facilities	SA	A	D	SD



Pupils learning under trees



Source: Adiemra D/A primary {2023}

Dilapidated school structure of a school at Wassa Amenfi East Municipality



Source: Yawkrom M/A Primary School

School children learning under summer hut



Source: Nkyerifi M/A Primary School (2023)