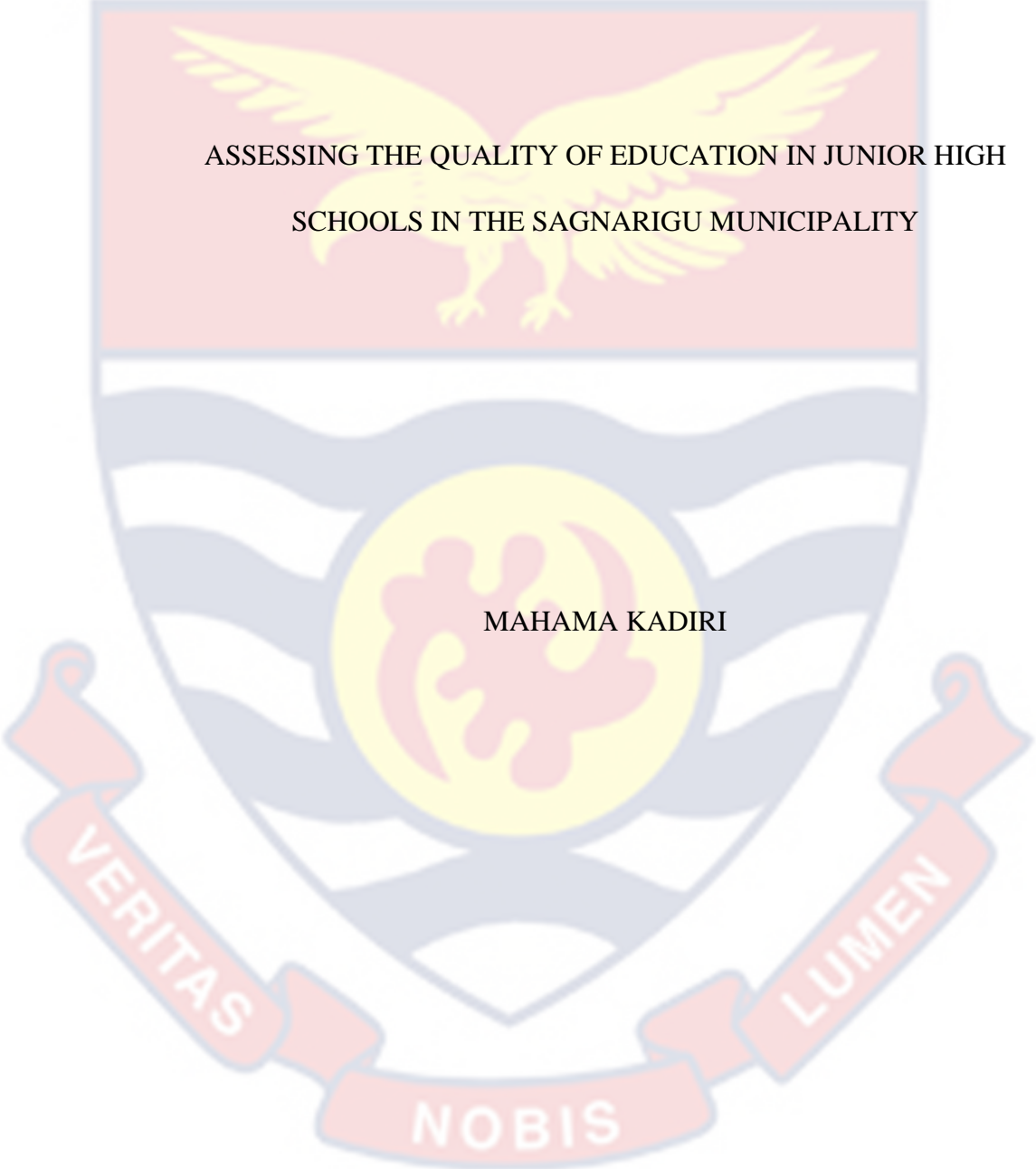


UNIVERSITY OF CAPE COAST



ASSESSING THE QUALITY OF EDUCATION IN JUNIOR HIGH
SCHOOLS IN THE SAGNARIGU MUNICIPALITY

MAHAMA KADIRI

2022

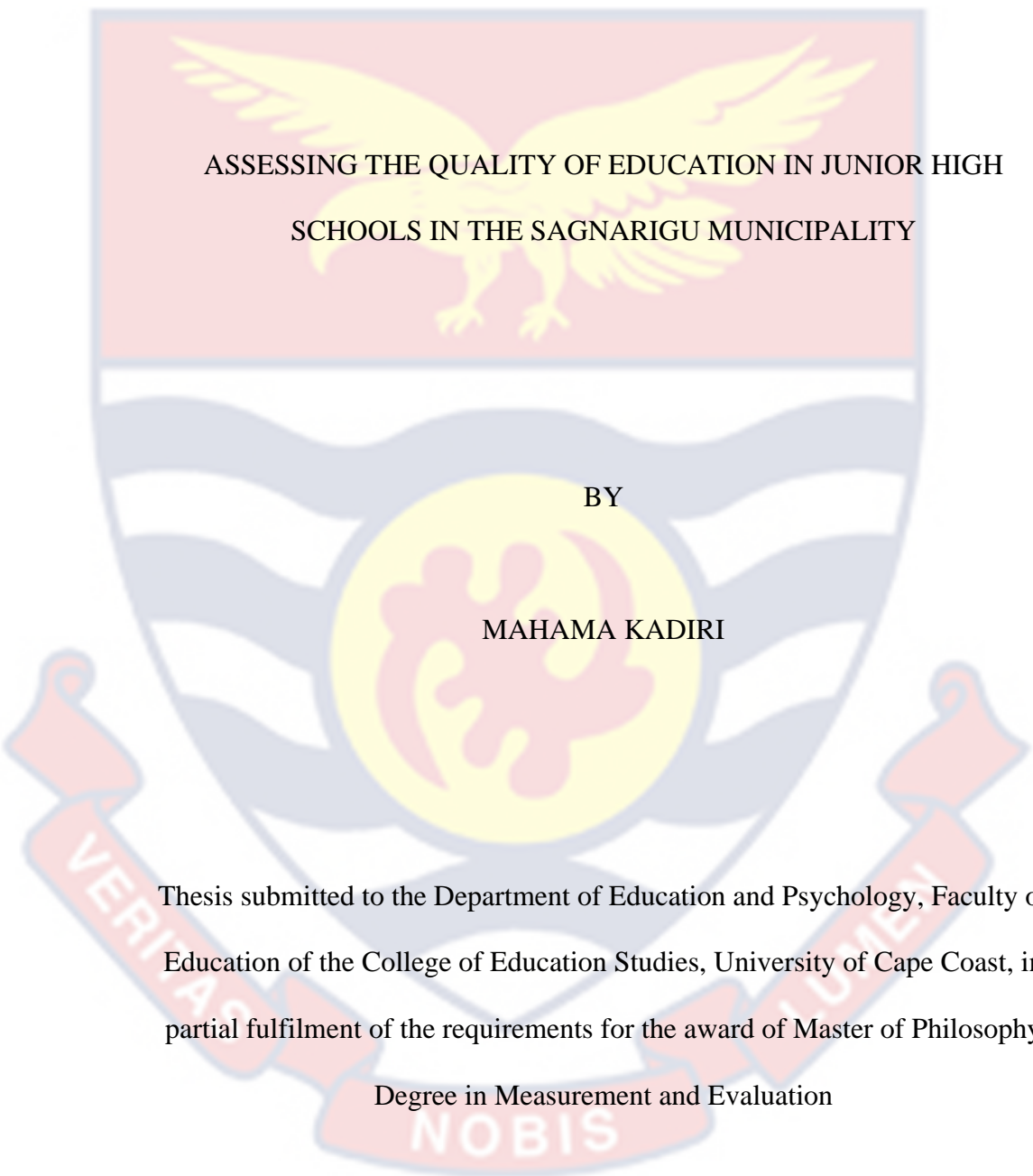


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ASSESSING THE QUALITY OF EDUCATION IN JUNIOR HIGH
SCHOOLS IN THE SAGNARIGU MUNICIPALITY

BY

MAHAMA KADIRI

Thesis submitted to the Department of Education and Psychology, Faculty of
Education of the College of Education Studies, University of Cape Coast, in
partial fulfilment of the requirements for the award of Master of Philosophy
Degree in Measurement and Evaluation

AUGUST 2022

DECLARATION

Candidate's Declaration

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

Candidate's SignatureDate

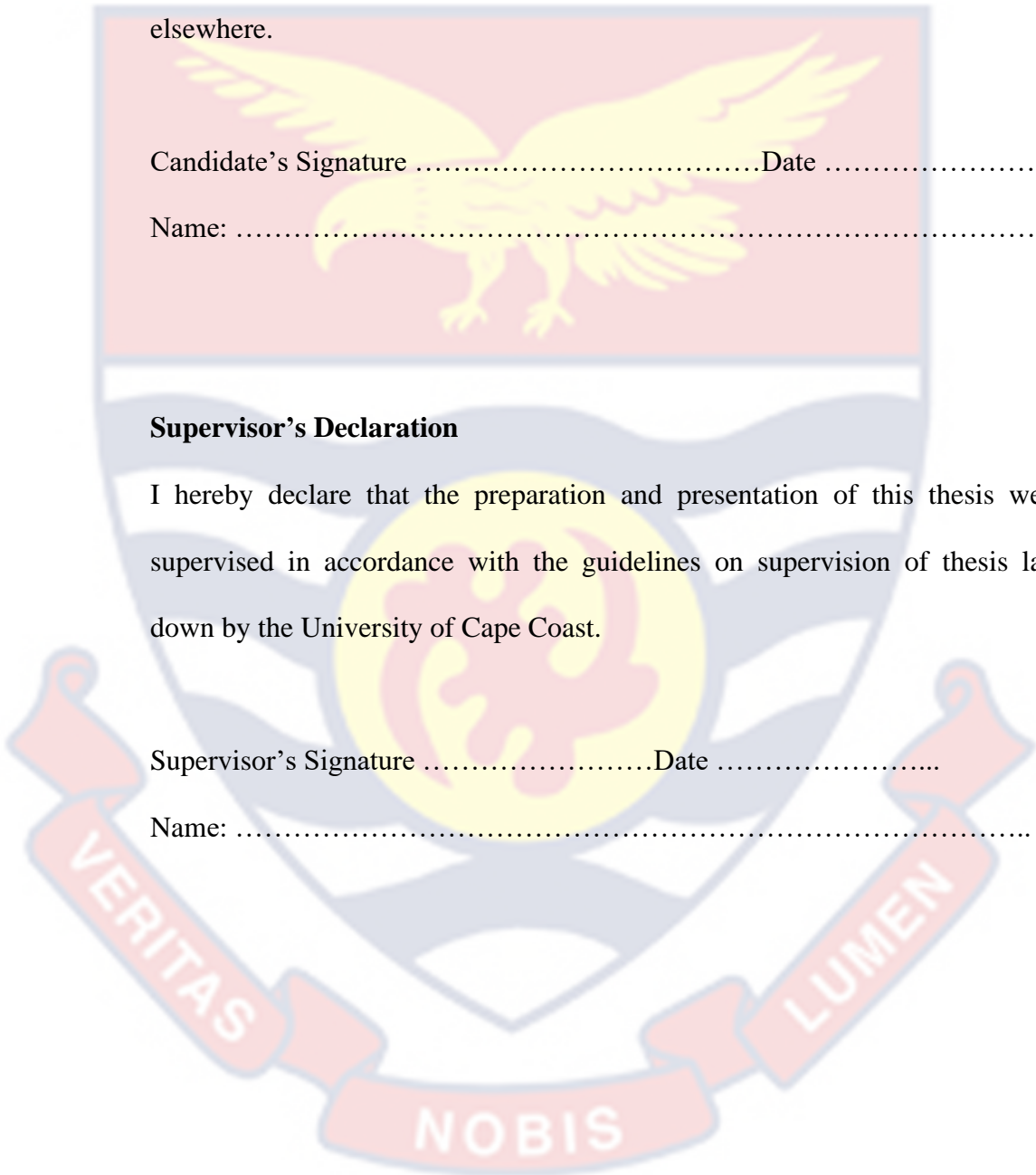
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Supervisor's Declaration

I hereby declare that the preparation and presentation of this thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Supervisor's SignatureDate

Name:



ABSTRACT

The present study sought to compare the quality of education between private and public Junior High Schools (SHS) in the Sagnarigu Municipality. A quantitative cross-sectional study was adopted to conduct this study. Out of a population of 960 JHS teachers and headteachers, 240 were selected to constitute the sample for the study. Questionnaires were used to gather data from the participants. Descriptive statistics as well as independent t-tests and one-way ANOVA were employed for the analysis. Findings from the study showed that private schools lack enough teaching and learning resources, while public schools have adequate staffing levels and physical resources and that public schools frequently employed effective teaching and learning techniques. It was therefore recommended that the National Inspectorate Board should ensure that headteachers (private and public) understand and apply best supervisory practices geared towards achieving globalised standards.

KEYWORDS

Academic Performance

Adequacy of Teaching Resources

Method of Teaching

Private School

Professional Qualification

Public School

Quality Education

Resource Availability

Supervision

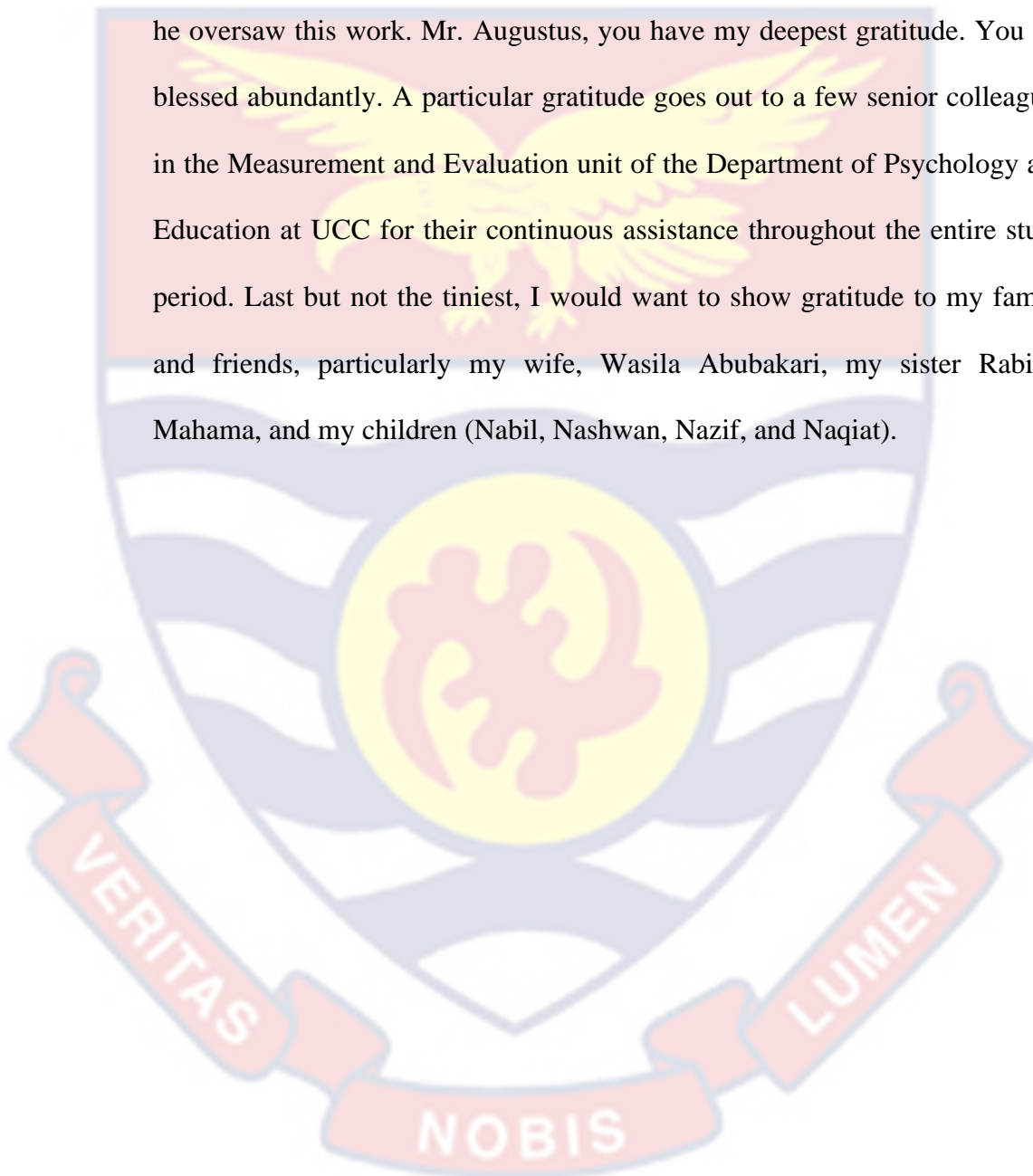
Supervisory Practices

Teaching and Learning



ACKNOWLEDGEMENTS

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DEDICATION

To my deceased mother and grandmother.

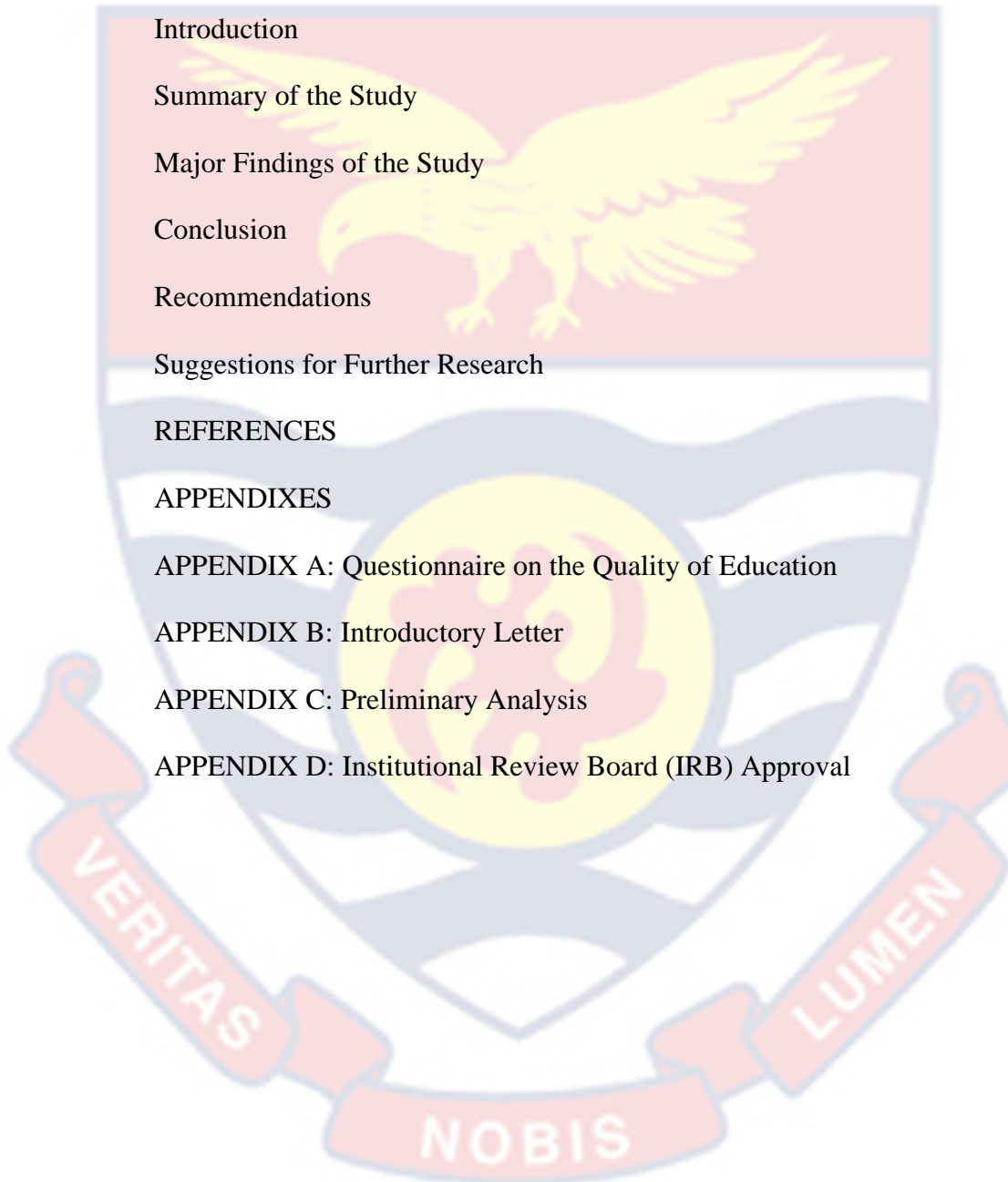


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LIST OF ACRONYMSThe logo of the University of Cape Coast is a large, semi-transparent watermark in the background. It features a shield with a yellow eagle with wings spread, perched on a globe. Below the globe is a banner with the Latin motto 'VERITAS NOBIS LUMEN'. The shield is flanked by two red banners with white text.

ADP	Accelerated Development Plan
ANOVA	Analysis of Variance
BECE	Basic Education Certificate Examination
CGE	Colonial Government in Education
CIDA	Canadian International Development Agency
CIPP	Context, Input, Process, and Product
CPD	Continuous Professional Development
DANIDA	Danish International Development Agency
EdSAC	Educational Sector Adjustment Credit
EQQ	Educational Quality Questionnaire
GES	Ghana Education Service
MoE	Ministry of Education
NaCCA	National Council for Curriculum and Assessment
NTC	National Teaching Council
PED	Partnership in Educational Delivery
PhD	Philosophy Degree
SDG	Sustainable Development Goal
SISO	School Improvement Support Officer
TAE	Traditional African Education
TEI	Teacher Evaluation Instrument
TEQSA	Tertiary Education Quality and Standards Agency
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VQE	Vision on Quality of Education

CHAPTER ONE

INTRODUCTION

Background to the Study

Quality is thought to be a worry for academia around the world, and administrators and academicians are making numerous efforts in many different directions to include this component into the teaching and learning scenario. The development of quality assurance offices in higher education and quality enhancement divisions in general and professional institutions are two examples of how quality is increasingly taking centre stage in local contexts in all academic policies and activities. The goal of the Ghanaian government is to develop the education sector to be resilient towards the attainment of the Sustainable Development Goal (SDG) four (4) and the government of Ghana's developmental agenda for year 2030 (National Teacher Standards-Ghana, 2018). These goals have opened the door for a variety of cultural and knowledge exchanges, international trade in goods, and even the smuggling or importing of individuals. But then, one really important thing it has given us is the chance to have a good education (NTS, 2018).

Just like other developing countries, Quraeshi and Luqmani (2008) indicated that the Malaysian government has put measures in place to attain free, quality, and inclusive universal education for all, as enshrined in SDG goal 4 as part of the country's educational agenda to show how the nation has taken a global approach to secure desirable educational skills.

For the past twenty years, the higher education division has experienced a considerable increase in globalization (Naidua & Derania, 2016). The significant number of students studying overseas and the rise in

colleges and universities offering educational services domestically and internationally are indicators of the demand for higher education. For instance, students from Ghana are increasingly choosing to pursue their education abroad. According to SDG target 4, it appears that their movement is aimed at finding high-quality education. As a result, the idea of quality is complicated in nature, elements, components, and all other ways. The most ethical but smoothest term in the sphere of education is quality. Quality is occasionally employed in evaluation protocols or as a scale of "goodness of fit" to gauge how well teachers and the educational system are doing in comparison to a predetermined benchmark. There is an underlying desire to find some distinctive qualities in academia at times. Therefore, the standards of administration, educational facilities, curricula, instructional methods, assessment and grading systems, teaching staff, availability of resources, physical infrastructure, and student performance are all included in the definition of the quality of education.

In addition, quality education is viewed as the foundation for the acquisition of the knowledge, abilities, values, and comprehension necessary to become informed, engaged, and responsible citizens who will be required to influence the continuing health and welfare of the local, national, and international communities as well as the environment. Additionally, the quality of education that students receive from these educational institutions is occasionally taken into account when analysing student happiness. For instance, Danielson (2013) asserts in her Teacher Evaluation Instrument (TEI) that the quality of instruction or service is a crucial factor that helps students

assess the calibre of the education offered, particularly at the elementary school levels.

According to Shekarchizadeh, Rasli, and Tat (2011), service establishments, such as basic but fundamental educational institutions, are unquestionably under ongoing pressure to outperform their rivals for the sake of maintaining service quality. This may very well be what distinguishes a good public school from a private school. This is due to the fact that a variety of issues, including student achievement and teacher efficacy, affect the quality of education. According to a theory put up by Imran (2017), the level of professional training and qualifications that teachers attain may have an impact on the long-term expansion of the further education industry. Teachers have a role to play in the expansion of educational institutions. Both local and international organizations are working hard to address the issues of low educational quality, including the United Nations Children's Fund (UNICEF), Danish International Development Agency (DANIDA), Tertiary Education Quality and Standards Agency (TEQSA), The World Bank, United States Agency for International Development (USAID), Canadian International Development Agency (CIDA), Ministry of Education (MoE), and Ghana Education Service (GES). The aforementioned organizations make sure that Ghana finds a solution to its challenges with inadequate education in one way or another.

For instance, the Educational Sector Adjustment Credit was supported by the World Bank between 1987 and 1995. (EdSAC). Funds are provided for the Primary Education Project by the United States Agency for International

Development (USAID). The Canadian International Development Agency (CIDA) offers buildings, staff, and technical assistance (Sekyere, 2019).

According to the Vision on Quality of Education (VQE, 2017), a high-quality education is one that equips all students with the knowledge and abilities required to contribute to peaceful and democratic societies, become economically productive, develop sustainable means of subsistence, and enhance personal well-being. Depending on the context, different learning outcomes are necessary, but by the end of the basic education cycle, they must include the fundamentals of literacy and numeracy, scientific knowledge, and life skills, including awareness and illness avoidance. Throughout this journey, it is essential to build the capacity of teachers and other education stakeholders.

There are six dimensions that could be applied to achieve quality education, according to the Vision on Quality of Education (VQE, 2017). These include learning outcomes; sustainability; child-friendly teaching and learning; contextualization and relevance; equity; and a balanced approach. This assumes that the level of teaching and learning quality, in combination with other factors, defines the quality of education that learners ultimately obtain. Meyer (2008) stated it well when he said that if education is an essential human right for all children, then every child in the world must have access to a high-quality education that will help them become integrated members of society and enjoy economic independence. There has been a trend in educational advancement due to Ghana's desire for high-quality education. Through the pre-colonial, colonial, and post-colonial centuries, these trends have been developing. Traditional African education was the foundation of

Ghanaian education before moving on to castle schools, missionary schools, and finally state-owned and privately-owned schools today.

The Ghana Education Service (2006) outlined trends in educational development in Ghana as: Traditional African Education (TAE) to Castle Schools to Missions Education (ME), to Colonial Government in Education (CGE) to Colonial Education from 1900 to 1927, to Accelerated Development Plan (ADP) 1951, to the 1961 Education Act, to immediate post-Nkrumah reforms, and to Partnership in Educational Delivery (PED). Traditional education is one where learning used to take place within society through observation, imitation, and participation, which do not confine the individual to the formal system. However, it can be argued that though there have been a series of transformations in the Ghanaian education sector, there appears to be little development in the quality of education received by her citizenry.

Additionally, educational stakeholders are of the view that private basic schools perform comparably better than public basic schools in Ghana. However, this assertion, more often than not, is ascribed to the quality of education offered in the two categories (private and state-owned) of schools. Public schools are state institutions of learning that are established by the central government or by bodies such as churches, communities, or individuals' philanthropies and later absorbed into the public educational system. Public schools are largely funded by the central government. Under public schools, pupils are not supposed or mandated to pay levies in any form. The number of hours spent in school is determined by the state. Sekyere (2019), however, posits that private schools are institutions of learning which are established by individual entrepreneurs or bodies and are generally

charged commercial fees to cover tuition, administration, supervision, maintenance, and the entrepreneurs' own marked-up profits on investment, just to mention a few.

Sekyere (2019) is of the view that since public schools are funded by the state and that they have available resources for the implementation of the curricula, the quality offered should differ to a high extent from the privately owned schools. Nevertheless, Adeyemi (2014) disagreed to say that though public schools receive adequate support, there is ineffective supervision and management of such facilities and human resources compared to the private schools that have little yet manage to effectively put them to use. Sekyere (2019) and Adeyemi (2014) thus show that teaching and learning resources, professional qualification of teachers, and managerial practices of head teachers, among other things, account for the quality of education offered by the basic schools in the Sagnarigu Municipality.

It is no doubt that private schools in Ghana and the Sagnarigu Municipality in particular perform extremely higher than public schools in the Basic School Certificate Examination (BECE) (GES-Sagnarigu Municipality, 2018). As a result, it is not clear of the quality of education provided by these two categories of basic education in the Sagnarigu Municipality; hence, the need to conduct the current study to investigate the difference or similarity that may exist in the quality of education provided by public and private schools in the Sagnarigu Municipality of the Northern Region, Ghana.

Statement of the Problem

The Basic Education Certificate Examination (BECE) is the main standardised examination for Ghana's formal education at the basic level. The

results from BECE are normally used for certification, selection, and placement of pupils at the basic level at senior high schools. These results are also used to predict the progress of pupils in second-cycle schools. The BECE results do not only assess the pupils but also provide an excellent opportunity to assess the performance of the basic school system (Oduro, 2000). There appears to be an entrenched belief by most Ghanaians that the academic performance in public schools, where the majority of children receive their basic education, has fallen as compared to their private counterparts (Sekyere, 2019). This also appears to be true in the Sagnarigu Municipality.

In the Sagnarigu Municipality, it appears that private schools are performing better than public or state-owned schools because the BECE performance from 2015-2018 in the municipality revealed that 8 out of the 10 schools that scored 100% were private schools compared to the public-school students' performance. In the 2017 academic years also, only 3 public schools had 100% while 10 of the private schools had 100% percent passed pegging the past aggregate at aggregate 30 (GES, Sagnarigu Municipality, 2018). This is an indication that there is a falling standard in the quality of education as it is reflected in the academic achievement of the students.

The poor performance of students in the BECE is a nationwide concern, but the degree of failure differs from region to region, district to district, and school to school, with some schools still scoring zero percent or less than five percent from year to year. Data from Ghana Education Service and that of the West Africa Examination Council showed that students in Sagnarigu municipality over the years have been recording poor BECE results. Sagnarigu municipal was placed 11th out of 26 districts in the league table of

BECE in 2018. Various stakeholders in education in the municipality constantly blame each other for the falling standard of education. While some attribute the falling standards to the incompetence of teachers, others associate them with education officials in the municipality. Some also blame educational policies and programs and parents for not being attentive to their children's education.

Additionally, previous studies established mixed reactions towards the quality of education (Sekyere, 2019; Rodgers, 2017; Aliyu, 2015). Among the studies conducted, it has been observed that in terms of content, it appears that no study has been conducted in the Sagnarigu Municipality that focused on the quality of education at the basic schools. The researcher has not come across any study that investigated or evaluated the quality of education in the Sagnarigu Municipality. However, some similar studies in education focused on senior high schools in Sagnarigu, but their concentration was on the qualitative research approach.

Despite the perceived disparities in the quality of the educational products (students) in private and public basic schools, there appears to be limited or no empirical study in the Sagnarigu Municipality to that effect. The lack of or inadequate studies into the quality of education in public and private JHS in the Sagnarigu Municipality has given the stimulus for this study, which seeks to evaluate the quality of education in basic schools by comparing the public and private junior high schools in the Municipality.

Purpose of the Study

The purpose of this study was to assess the quality of education in public and private junior high schools in the Sagnarigu Municipality of the Northern Region, Ghana.

Specifically, the study sought to:

- i. identify the availability of teaching and learning resources among public and private Junior High Schools in Sagnarigu Municipality.
- ii. find out the teaching methods adopted by teachers in the Sagnarigu Municipality for teaching and learning.
- iii. compare the supervisory practices of head teachers of private and public Junior High Schools in Sagnarigu Municipality.
- iv. find out some measures that can be adopted to enhance the quality of Junior High School education in the Sagnarigu Municipality.
- v. determine the difference in the supervisory practices of head teachers of private and public Junior High Schools in the Sagnarigu Municipality.
- vi. differentiate the quality of education in public and private Junior High Schools based on professional qualification of teachers in the Sagnarigu Municipality.

Research Questions

To guide the conduct of this study the following questions were addressed:

1. To what extent is the availability of teaching and learning resources in public and private Junior High Schools in Sagnarigu Municipality?
2. What teaching methods are adopted by teachers in the Sagnarigu Municipality for teaching and learning?

3. What are the supervisory practices of head teachers of private and public Junior High Schools in Sagnarigu Municipality?
4. What measures can be adopted to enhance the quality of Junior High School education in the Sagnarigu Municipality?

Research Hypotheses

The following hypothesis is formulated to guide the study:

1. H₀: There is no statistically significant difference in the supervisory practices of head teachers of private and public Junior High Schools.
H₁: There is a statistically significant difference in the supervisory practices of head teachers of private and public basic schools.
2. H₀: There is no statistically significant difference in the quality of education in both public and private Junior High Schools based on professional qualification of teachers.
H₁: There is a statistically significant difference in the quality of education in both public and private Junior High Schools based on professional qualification of teachers.

Significance of the Study

The study is relevant to all stakeholders in education. It will serve as a direction to parents as stakeholders as to which schools they should send their wards. The study will also be relevant to educational policy and program formulators. That is, it will help the policy formulators to know the needed tools and resources that could help realize the policies formulated. The study will also be vital to the Ghana Education Service (GES) as an implementation agency for educational policies and programmes. It will help the agency GES identify their management challenges and the necessary remedies to that

effect. The study will also be a wakeup call to teachers and students in both private and public schools. This will contribute to knowledge since the study will identify the strengths and weaknesses of both private and public schools.

Delimitations

Scope-wise, this study was limited to only junior high school teachers and head teachers in the Sagnarigu Municipality of the Northern Region. In terms of content, the study is devoted to the quality of education from the perspective of teachers and head teachers, with the availability and adequacy of resources, school management practices, and students' academic performance as benchmarks. Furthermore, the study was methodologically limited to the quantitative research approach using self-reporting instruments.

Limitations

The study was not free from limitations that might have affected the validity of the results. For instance, the use of questionnaires to gather data had the possibility of not attaining all the desirable information. This was due to the fact that respondents might have been absent-minded or not thoughtful within the full setting of the situation, or they might have thought that they would not benefit from responding to the items, perhaps even be reprimanded for giving their factual opinions. To minimise this limitation, the researcher ensured that the purpose of the study was vividly elucidated to the respondents. A "reactive effect" may also have occurred, in which respondents may have felt obligated to respond in what they consider to be socially or contextually appropriate in academia. However, respondents were assured of their confidentiality and the fact that the study was meant for academic purposes only.

More so, respondents may omit or fail to recall important information regarding the quality of education in their jurisdiction. Again, since the questionnaire was a self-reporting instrument with reference to a standard scale (4-point Likert scale), there was the likelihood that teachers ticked the items without reading them exclusively to understand in order to give a fair view of their practice, and the information they provided may not be entirely truthful. This might be caused by the fact that the questionnaire was self-reported. Thus, it is difficult to identify and exclude from the study those who gave erroneous information. To guarantee that respondents gave accurate and impartial data, respondents were given the assurance of confidentiality and informed consent was acquired.

Operational Definition of Terms

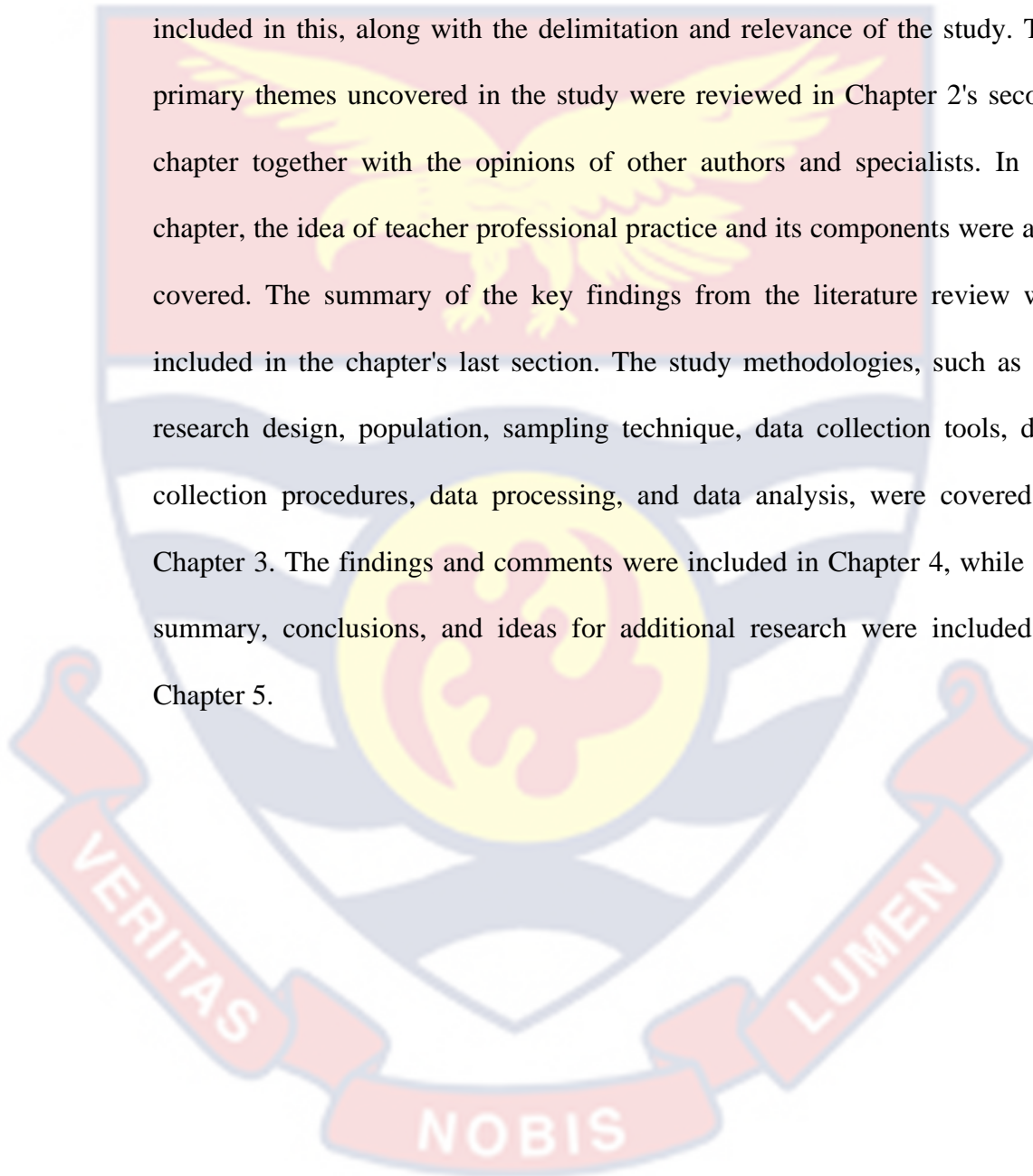
Quality of Education: Education that equips all students with the knowledge and abilities required to contribute to peaceful and democratic societies, become economically productive, develop sustainable means of subsistence, and enhance personal well-being.

Private School: Institutions of learning which are established by individual entrepreneurs or bodies and are generally charged commercial fees to cover tuition, administration, supervision, maintenance, and the entrepreneurs' own marked-up profits on investment.

Public School: State institutions of learning that are established by the central government or by bodies such as churches, communities, or individuals' philanthropies and later absorbed into the public educational system.

Organization of the Study

Five chapters make up the study's organization. The introduction to the subject was the main topic of the first chapter. The background of the study, the problem statement, the purpose, objectives, and research questions were all included in this, along with the delimitation and relevance of the study. The primary themes uncovered in the study were reviewed in Chapter 2's second chapter together with the opinions of other authors and specialists. In the chapter, the idea of teacher professional practice and its components were also covered. The summary of the key findings from the literature review was included in the chapter's last section. The study methodologies, such as the research design, population, sampling technique, data collection tools, data collection procedures, data processing, and data analysis, were covered in Chapter 3. The findings and comments were included in Chapter 4, while the summary, conclusions, and ideas for additional research were included in Chapter 5.



CHAPTER TWO

LITERATURE REVIEW

Overview

This chapter sought to review relevant literature in accordance with key variables of the study both conceptually, empirically and theoretically. The chapter was further grouped under the following sub-themes:

1. Theoretical Review
2. Conceptual Framework
3. Conceptual Review
4. Empirical Review

Theoretical Review

The CIPP model of curriculum implementation was adopted as the philosophical underpinning of this study.

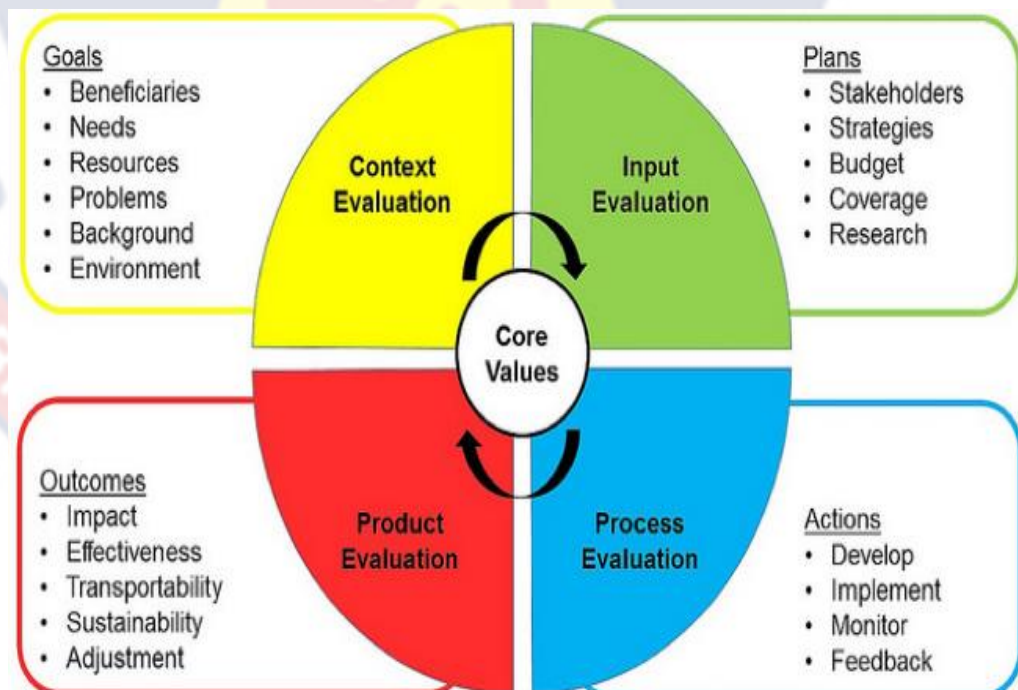


Figure 1: CIPP Model of Curriculum Evaluation

The idea of effective implementation is frequently connected to how well and to what extent goals are achieved (Adams, 1993; Cobbe, 1990). Therefore, using the four domains (Context, Input, Process, and Product) of curriculum implementation, the CIPP model can be used to explain the quality of basic education. The context, inputs, process, and end product (CIPP Model) are additional explanations that can be used to explain how the curriculum is being implemented (Amedahe, 2016; Stufflebeam & Shinkfield, 2016). The CIPP Model, a social systems model used in program evaluation, was created by Stufflebeam in 1971. It provides a systematic method for examining a variety of various components of the curriculum creation process, including the following:

Context domain

The purpose of context domains is to justify the choice of objectives. It is the most fundamental kind of evaluation because it establishes the relevant environment, describes the desired and actual conditions regarding that environment, identifies the needs and opportunities, and pinpoints the issues that prevent the satisfaction of those needs and the utilization of those opportunities. The societal traits and institutional design of the educational system are context domains. Some of the important context domains are demographics, a basic financial and economic backdrop, educational goals and standards, public community attitudes toward education, the function of the school in the community, and the degree of educational readiness of the community (Amedahe, 2016; Stufflebeam & Shinkfield, 2016). The diagnosis of the issue enables the instructor to create goals whose accomplishment will lead to a better program. This depends on the requirement to examine school

environments critically. The input, process, and outcome may be impacted by these context domains.

Input domains

The material, financial, and human resources used in education are referred to as the input domains. They consist of building resources, financial resources, teacher and classroom attributes, training and experience of teachers, and parental support (Amedahe, 2016). Once more, Guga (2015) claimed that input teachers assist decision-makers in choosing and creating practices thought to be conducive to boosting the attainment of program objectives. Regarding the standard of instruction at the basic schools, these input domains are quite crucial. This is true since all programs require a combination of material and human resources. By promoting, enhancing, and sustaining program inputs and processes, input domains approaches can help achieve the objectives of education in basic education.

Process domains

The managers of planned, approved, and used programs receive recurring input from the process domains. Process evaluation serves three basic functions, among which are:

- a. identifying or anticipating flaws in the design or execution of the procedure during the implementation stages.
- b. offers data for program decisions,
- c. keeps a record of the process as it happens.

Process domains keep an eye on the real process in education to assist in preparing decision-makers to foresee and overcome procedure challenges. The process domains may have an impact on the result because, if the domains

are well-managed in a favorable environment, there is a chance that the result will be favorable (Amedahe, 2016; Stufflebeam & Shinkfield, 2016).

Product domains

The program domains and the program's conclusion aim to measure and interpret attainment as often as necessary. They discuss attainment, involvement, and educational success. The dimensions include post-secondary results; participation rates at different educational levels; the progression through the educational system; and student academic achievement in basic curricular subjects (Amedahe, 2016; Stufflebeam & Shinkfield, 2016). All the necessary components must be present in order to guarantee excellent training at the basic level. Therefore, the implementation of the curriculum is dependent upon teachers' professional growth, their availability, the administration of the school, methodological materials, and students' academic performance (Amedahe, 2016).

Therefore, how well this model implements the curriculum may depend on the quality of particular teaching process components, the quality of relationships between particular school system components (head teachers-teachers, teachers-students, students-educational goals, teachers-teaching methods), and the quality of relationships between a school and its environment (Amedahe, Stufflebeam & Shinkfield, 2016). To fully and successfully apply the curriculum, each of these domains must be considered.

Conceptual Framework

The quality of education based among private and public schools is illustrated in Figure 2.

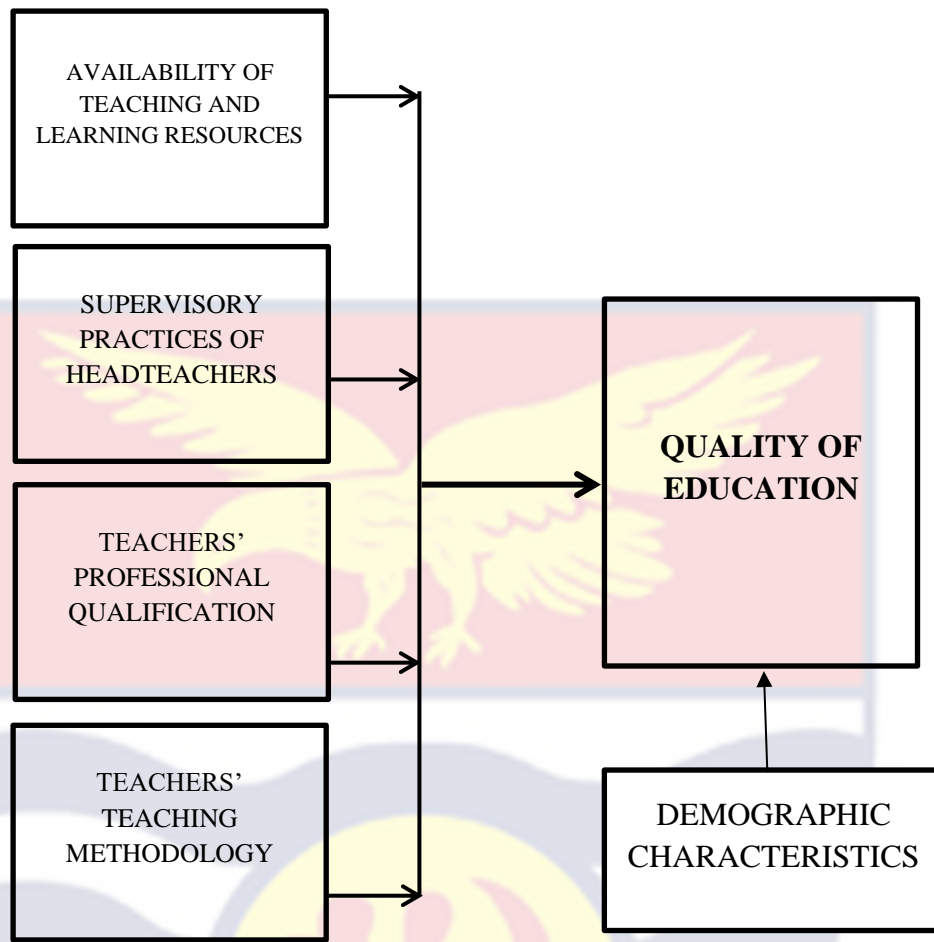


Figure 2: Conceptual framework of quality of education

Source: Author's construct (2020)

Based on the goals and notions used in this study, the conceptual framework was built from the body of existing literature. The impact of the availability of teaching and learning resources, headteacher supervision techniques, teacher professional qualifications, and instructional approaches on educational quality is highlighted in Figure 2. The Figure 2 also shows that four conceptual teaching areas can be examined in order to assess the quality of education. The quantity of resources on hand, the instructional approaches used by the teachers, the types of supervision or monitoring that school administrators engage in, as well as the teacher's credentials, stand out among them.

Furthermore, it is well-established in the literature that a teacher's gender (whether male or female) influences their dedication to teaching; as a result, it is possible that female teachers will view teaching quality differently from male teachers (Rodgers, 2017; Makamure, 2017). However, the fact that each of the independent factors can be examined separately suggests that they all directly affect how well education is provided. It should be highlighted that the contribution of the teacher (see Figure 1) has a significant independent influence on the quality of education in addition to the effects of the dependent variables.

Adams (1993) found in his study that the teacher's personality (input) significantly affects the teaching and grading strategies he uses. This indicates that regardless of the availability or sufficiency of resources, supervision, and teaching methods, the demographic features of the teachers are crucial in providing high-quality teaching and learning, which in turn contributes to high-quality education.

Conceptual Review

The conceptual framework that underpinned this study I explained and discussed as follows:

The concept of Quality Education

According to Rateb, Asma, Bader, and Kareemwhich (2019), quality is the degree to which the product or service complies with the standards that have already been established. This definition covers the idea of conformity, which is partly related to the procedure of attempting, testing, and concentrating the results of the good or service before they are made available to the consumer. Total quality management is regarded as the logical

continuation of the implemented effort in developing the service or product and enhancing it. Max Webber's hierarchical organization came after Frederick Taylor's performance improvement concepts, which served as the initial impetus for this endeavour.

Mayo and his associates in the field of humanitarian relations also established a link between worker satisfaction and performance. Along with the nature of the relationships between employees and their managers, This concept first assisted in expressing the relationship between performance, on the one hand, and the head teachership style, on the other hand, and it eventually reached the Japanese intellectuals who discovered the fundamentals of comprehensive quality management and the most effective approaches to enhance it.

Concept of Coaching

Over the past ten years, educational coaching has continued to expand. To improve student outcomes, Australian, British, and American colleges and universities have started implementing coaching interventions (Kee, Anderson, Dearing, Harris & Shuster, 2010; van Nieuwerburgh 2012; Knight, 2007). The term "educational coaching" refers to a wide variety of interventions intended to enhance student and educational setting outcomes. Coaches collaborate closely with teachers, students, and other education professionals (Campbell, 2015). In educational settings, the term "coaching" is occasionally used figuratively, so it is crucial to define it right away. The absence of uniform definitions is in fact one of the issues facing the education industry. Sometimes the words "instruction," "teaching," and "coaching" are used interchangeably.

Whitmore's explanation of coaching, which reads, "Unlocking people's potential to enhance their own performance," most effectively captures the several styles of coaching covered in his work (2009, p. 10). The goal of coaching is to encourage the coach to accept responsibility for changing his behaviour or mentality to get better results. Whitmore distinguishes between "coaching" and "teaching" by stating unequivocally that coaching is about "helping [people] learn, not teaching them" (2009, p. 10). In this way, coaches can expand the skill set of educators by offering a non-instructional approach to aid in others' self-learning.

Concept of Teaching

A more mature personality and a less mature personality interact intimately while teaching one another in order to promote the education of the latter. Equations were used to convey this teaching concept by Morrison and Dewey in 1934. As with buying, teaching is also learning. "Teaching is the construction and manipulation of settings in which there are gaps or difficulties, and in which the individual will seek to overcome and learn," (John Brubacher, 1939). Teaching is "a pattern of action meant to induce learning," according to B.O. Smith. Gage (1963) claims that teaching is a sort of interpersonal influence intended to alter the behavioural potential of others.

In 1963, Smith further broadened the notion of teaching to include two sets of things outside the control of the agent (class size, student characteristics, physical facilities, etc.) as well as what he could change (such as teaching techniques and strategies). Teaching is described as "an interactive activity involving mostly classroom talks that take place between teachers and pupils and take place in certain specified activities" by Edmund Amidon

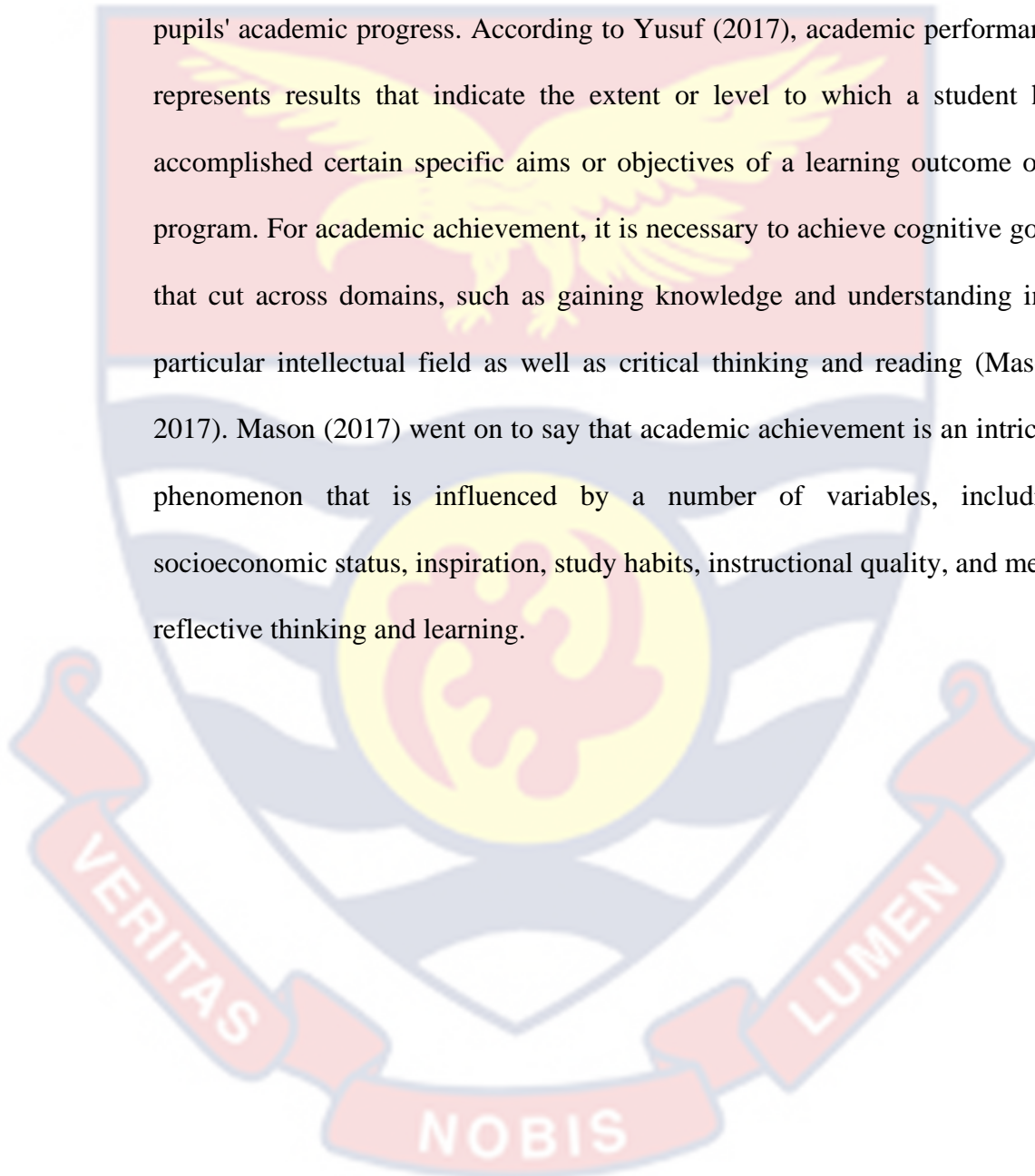
(1967). Significant contributions to the definition of this idea came from Davies et al. (1962), Gagne et al. (1974), and Gage (1978), whose opinions can be summed up as follows: Content, communication, and feedback are the three basic pillars of teaching, which is a scientific process. The effectiveness of teaching methods is shown in how well students learn. It is always subject to change, advancement, and development.

The system is flexible enough to accommodate new teaching techniques; an effective teaching environment can establish learners' final behaviour in terms of learning structure. Teaching can be seen as a sort of problem-solving and decision-making that involves interacting with medical professionals. This approach sparked a number of studies that looked into instructional decision-making with an emphasis on the student data teachers used to decide and how they customized instruction to meet the requirements of each individual student (Calderhead, 1995). Training is used less often than any form of conditioning. Instead of teaching knowledge, training emphasizes the development of knowledge-based skills. Training can be fully mastered and is occasionally used to teach everyday chores. The ability to handle the unexpected, comprehend what one is doing and why, and be intelligent and introspective when using one's skills must all be developed in order to teach someone a skill.

Academic performance

Performance is an individual's quantitative and observable behaviour under a particular circumstance (Yusuf, 2017). Yusuf went on to say that performance gauges an individual's traits as shown in their behaviour at a particular moment in time (2017). A psychological test (a performance test) is

carried out to evaluate the person's performance. Singer (1981) described a performance test as a psychological test in which the subject is required to carry out an action that can be observed and measured. Therefore, psychological performance tests can be used as a benchmark for evaluating pupils' academic progress. According to Yusuf (2017), academic performance represents results that indicate the extent or level to which a student has accomplished certain specific aims or objectives of a learning outcome of a program. For academic achievement, it is necessary to achieve cognitive goals that cut across domains, such as gaining knowledge and understanding in a particular intellectual field as well as critical thinking and reading (Mason, 2017). Mason (2017) went on to say that academic achievement is an intricate phenomenon that is influenced by a number of variables, including socioeconomic status, inspiration, study habits, instructional quality, and meta-reflective thinking and learning.



Studies on academic performance (e.g., Mason, 2017; Yusuf, 2017; Woolfolk, 2007; Spinath, 2012) have shown that the idea is a result of several dynamics acting both inside and outside the learner. Three main categories can be used to group the causes of academic success (intellectual, emotional and environmental). Studies have revealed that emotional elements, such as anxiety and self-esteem, play a significant role in how well pupils succeed academically (Regier, 2011). Additionally, it is clear that academic performance refers to a learner's commonly seen and assessed academic achievement for the goal of gauging his progress through time. Performance, as opposed to achievement, gauges a student's academic capacity at a given moment based on the tasks that are given to him. Mason (2017) also concurs that learners' academic performance should be evaluated as a long-term process of social interactions between their abilities, dispositions, intentions, and commitments, as well as the features of the learning environment. This means that the learner's observable disposition is likely to be influenced by the learning environment.

Supervisory Practice of Headteachers

The school's mission must be adhered to when managing curriculum and instruction (Liu, Hallinger, & Hallinger, 2018; Hallinger, 2016; Hosani & Mohammed, 2015). Teachers have the tools they need to give pupils the chance to achieve thanks to the headteacher's repertoire of instructional methods and classroom management. To achieve school goals for student achievement, the headteacher supports teachers in implementing best practices and instructional methodologies based on the most recent research.

The expectations and attitudes of the entire school community are essential to fostering a positive learning environment. In fact, among all the significant factors that appear to affect students' learning, the set of beliefs, values, and attitudes that the management, facilitators, and learners have about learning may have the most influence (Weber, quotation in Hallinger, 2016). Headteachers aim to improve teacher commitment to the school by conveying instructional goals; establishing high standards for performance; creating a calm learning atmosphere; and enforcing clear discipline norms (Hallinger, 2016; Hosani & Mohammed, 2015).

An increase in autonomy (decision-making authority) is to be associated with an increase in responsibility for school management as part of the function of the school headmaster. However, the management boards of the school should encourage decision-making abilities by clearly defining the school's goals. In this instance, responsibility is defined as the headteacher's obligation to answer to the school administration (School Board/School Management Committee) and any other parties with an interest in the establishment of the school's educational program. The Ghana Education Service (GES), the National Teaching Council (NTC), the National Council for Curriculum and Assessment, the Parent Teacher Association (PTA), the School Management Committee (SMC), and the Ministry of Education (MoE) are some of the stakeholders in Ghana (NaCCA). Their duties encompass management, administration, decision-making, supervision, and monitoring as well as the provision of instructional resources and the hiring, retention, and evaluation of their staff, among other things.

For instance, the headteacher of a basic school in Ghana is responsible for implementing the head teachership style that is best for both the individual instructor and the overall school. In order to ensure that all instructions and missions given to the school are respected, his head teachership function to define the mission of the school steers away from the administrative type of the school fashioned by GES, type of inspection (e.g., clinical supervision). In order to make sure that all rules imposed on employees are fully respected and applied in a way that promotes the progress and expansion of the school or organization, the majority of administrative systems around the world have a body of traditionally specialized functionaries with extensive investigative powers. In essence, the headteacher's role as the curriculum headteacher in the neighbourhood school is to make sure that "goal setting" and school accomplishment become the most important factors in decision-making in order to guarantee that the objectives and missions are accomplished.

Empirical Review

The empirical evaluation looks at studies conducted by other academics on the calibre of instruction and academic performance of pupils. It especially covers research that examines the relationship between gender and educational quality as well as the qualifications of instructors and how they affect educational quality.

Availability of teaching and learning resources

According to Rodgers (2017), effective teaching and learning cannot occur without sufficient resources. This also holds true for the execution of the curriculum. The government or ministry of education should supply schools with enough supplies, including stationery, teaching aids, and textbooks, to let

instructors and students successfully carry out their responsibilities during the curriculum implementation process. This will ensure that the officially designed curriculum is fully implemented as planned (Aliyu, 2015). To create an atmosphere in which implementation can occur, it is suggested that the central government also offer physical facilities, including schools, labs, workshops, libraries, and sports fields. According to Makamure (2017), the accessibility and calibre of resources as well as the availability of suitable facilities have a substantial bearing on how well a program is implemented. Curriculum materials are essential to the teaching-learning process and the application of the curriculum, claims Ughamadu (2017). When using curriculum resources to apply the curriculum, the teacher is the key player. In order to apply the curriculum, the teacher is expected to be familiar with a wide range of curriculum resources. Additionally, the teacher must be aware of the functions played by these materials in the teaching and learning process, as well as the characteristics of effective curriculum materials and other relevant topics. Curriculum materials are all the tools used in a formalized educational system for the transmission and acquisition of knowledge, according to Abolade (2016).

Due to the distinctive nature of education, a wide range of resources can be used in both teaching and learning. These resources can be divided into three categories: places, materials, and human resources. A resource person or human resource in education is anyone who is used in the class and has precise knowledge or first-hand information about the topic of interest. Because of his participation in the event, his academic success, his professional training, or his membership in a certain association, religious group, club, or society, the

resource person may be of great assistance. Lawyers, bankers, traditional leaders, senators, doctors, artisans, blacksmiths, police officers, pilots, traders, and farmers are examples of resource people (Uchegbu & Ikwuazom, 2017).

The list of resource materials that could be used by teachers in education is endless. This is because virtually every material around us is useful in the teaching and learning process, except if it is not appropriately matched or selected for the learning. The materials are categorized into the following:

- a. Realia are real objects and are capable of making the lesson more interesting and permanent. Examples are craft, weapons, seeds, utensil and food items, etc.
- b. Printed materials include such things as textbooks, magazine, pamphlet, newspaper, novel and encyclopaedia.
- c. non-print material includes pictures, globes, maps and charts.
- d. Audio-visual materials provide the students with the opportunity to see and hear from them. Examples are television, films and computer (Danladi, 2006).

Resource places are places of importance that students visit to learn something of interest from them. It is important in learning because it makes the abstract or imaginative experience real. Furthermore, it motivates and encourages students to learn more about their field of work as well as their future career goals (Hicks, Friedman, & Lee, 2017). Like resource materials, the list of resource places used in teaching and learning is endless. They include markets, educational institutions, banks, dams, libraries, motor parks, etc.

According to Danladi (2006) the following are guidelines for selecting and using these resources: they must be suitable to the maturity of the learner;

relate to the lesson's objectives; current and relevant; cheap and affordable; bold attractive and in good condition; harmless to both teacher and student and tested before taken to class.

Kigwilu and Akala (2017) explored how Catholic-sponsored public colleges in Nairobi utilise the current physical facilities and teaching and learning resources in order to execute artisan and craft curricula successfully. A mixed-methods research design was employed for the study. By using proportional stratified random selection, 18 teachers, 172 students, and four community college directors were sampled. Directors were questioned, and questionnaires were distributed to teachers and students. We discovered a variety of appropriate but underutilized teaching and learning resources, including workshops, equipment, lecture halls, laboratories, raw materials for practical training, and reference books.

However, the availability of sports facilities, libraries, and course materials was insufficient. Resource shortages were frequently alleviated by setting up equipment co-sharing arrangements with competitor institutions and neighbourhood businesses. Teachers paid significant attention to how physical amenities affected how the curriculum was applied. Both students and teachers had good opinions of how teaching and learning tools affected how the program was implemented.

Chukwu, Eze, and Agada (2016) looked into the availability of educational resources at the primary education level in the Enugu Education Zone of Enugu State, Nigeria. One research question and one hypothesis served as the study's guidelines. The study topic was addressed using mean and grand mean ratings, and the hypothesis was evaluated using a t-test

statistic with a significance level of .05, and a critical value of 1.96. The study employed a researcher-developed instrument tagged with a questionnaire about the accessibility of educational resources at the basic education level and a descriptive survey research approach. The tool was validated by three experts—two in educational management and one in measurement and evaluation. The instrument's dependability was evaluated using Cronbach's alpha. The investigation's instrument has a high dependability rating with an alpha value of 0.73. Data analysis findings show that the Enugu Education Zone in Enugu State has limited access to instructional resources at the basic education level. This has disastrous effects on the system as a whole.

Ogaga, Igori, and Egbodo (2016) looked at how instructional materials affected teaching and learning in secondary schools in Oju using four aims, four research questions, and a hypothesis. The population of the study included both teachers and students, and a survey approach was employed. A sample of 100 people from five different schools was handed questionnaires. Chi-square was used to assess the data for both the hypothesis and the research question, which was expressed as a simple percentage (percent). When evaluated at the 0.05 level of significance, all four hypotheses were shown to be false. The study discovered a strong relationship between the potential for teacher improvement, the availability of appropriate instructional tools, and teaching and learning in the Oju local government area.

In secondary schools, Ogheneakoke and Akpochafo (2015) evaluated teachers' abilities to employ the inquiry technique. There are a total of 1,110 instructors from all of the secondary public schools in Nigeria's Edo, Delta, and Bayelsa states. However, using stratified random selection approaches, the

researchers selected 600 teachers from 300 junior secondary schools. A survey and observational approaches were used in the investigation. The Teachers' Competencies Inquiry Method Rating Scale was the study's instrument (SSTC1MRS). Nonparametric and inferential statistics were used in the data analysis. The mean and standard deviation were used to respond to the research question, and the t-test was used to evaluate the hypothesis. The results showed that there is no appreciable variation in the proficiency of male and female teachers in using the inquiry method in upper basic schools. The teachers, both male and female, displayed an equal degree of proficiency.

Kankam (2015) looked at how teacher candidates perceived the type, value, and suitability of the curriculum implementation materials. Six teacher training colleges in the Ashanti Region were used to choose a sample of 233 students using basic random sampling and stratified sampling techniques. Trainees were asked to rate their agreement with statements made about the official curriculum and the resources available for its implementation on a questionnaire that was primarily made up of Likert-type items. According to the findings, more than 90% of the trainees felt that the program's educational and curriculum goals were true and essential. However, they didn't think textbooks and other reference materials were enough.

Teacher professional qualification and quality of education

Pepple and Esu (2017) conducted a study to investigate the potential impact of teaching credentials on efficacy and math student achievement in Rivers State. In all, 200 teachers with a variety of qualifications participated in the study. The results demonstrated that students taught by certified instructors outperformed those taught by unqualified teachers significantly, but there was

no discernible variation between learners taught by experienced and inexperienced facilitators in terms of academic achievement. Pepple and Esu's study looked at the relationship between teaching credentials and student accomplishment.

The analysis and conclusions were based on the academic performance of pupils under the instruction of experienced and inexperienced teachers, respectively. Instead of weighing teachers' qualifications against students' academic performance or achievement, the current study will focus on how well they choose their teaching strategies.

According to Bello (2016), from preschool to university, the success of the educational system is greatly influenced by the calibre of its teachers, their preparation, and the ethical ways in which they carry out their sacred duties of informing and educating the youths under their care in the classroom. It is interesting to note that the quality of teachers' inputs, which in turn depends on the type and depth of teacher training, is a prerequisite for the achievement of any admirable goals, such as the instillation of admirable ideals.

According to Lovat (2015), the extent to which a teacher failed to use all of his potential, or perhaps the extent to which his training was inadequate, was the single factor limiting his ability to bring about change. Rowe (2017) contrasted the results in the behaviours of an advantaged group under ineffective teaching and a disadvantaged group with quality teaching; quality teaching had the potential to reverse the disadvantage. This led to the conclusion that the effectiveness of a teacher directly affects the effectiveness of student learning results and that the effectiveness of pedagogy has the most direct and significant impact on learning outcomes.

Although the National Policy on Education (2015, p. 5) correctly states that "no education system may advance above the quality of its instructors," the topic of teacher education nevertheless causes well-intentioned people great concern. Therefore, when there are issues with teacher education, there must be issues with the entire educational system and society as a whole, especially when it comes to value manifestations and individual and societal health. In order to evaluate the systematic analysis and comprehensive theoretical and empirical description of teachers' competences, Ololube (2006) performed research among teachers, principals, and supervisors of education from the Rivers State, Nigeria, with a sample size of 300. Data for this study was collected using questionnaires, interviews, documents, observations, and observational methods. Percentages, means, T-tests, one-way ANOVAs, and cross-tabulation were used to analyse the data. The study's conclusions show that for effective education, teachers need a broad base of general knowledge, professional information, and professional teaching skills. The study also showed that, as compared to female instructors, male teachers demonstrate more professional behaviours, including competence in classroom management.

Ololube (2006), on the other hand, focused completely on teachers and their abilities. Ololuba (2006) evaluated teacher competency with a single data collection instrument (questionnaire) to determine their professional practices, in contrast to Sunday and Kola's (2015) study, which employed a standard instrument for assessing teacher competence. The study's conclusions were likewise restricted to schools in Nigeria.

In Lafiagi, Kwara State, Nigeria, Sunday and Kola (2015) conducted a second study on the relationship between teacher training and pupils' academic achievement. Seven domains were used by Sunday and Kola to measure the correlation between instructors' qualifications. The outcome showed that a teacher's personality, rather than credentials, mattered more to students' academic success. This shows that the quality of education is influenced by both the personal qualities (dispositions) and professional qualifications of teachers.

Furthermore, Liakopoulou (2011) conducted a study in Greece with a sample size of 727 secondary school teachers to evaluate the capabilities of teachers for effective pedagogical and didactic performance. A six-point Likert scale was employed for both closed-ended and open-ended questionnaires. Simple percentages, frequency counts, and correlation were used to analyse the data. The study's findings showed that teachers lacked the necessary professional credentials to handle several difficulties, like the lack of teacher homogeneity and the lack of enthusiasm present in contemporary classrooms.

In addition, a study by Oyebola (2016) in Ogun State, Nigeria, sampled 80 trained teachers with the intention of determining how much the optimism, motivation, attitude, and commitment of basic school teachers trained by the National Teachers' Institute (NTI) contribute to their professional proficiencies. The Teachers' Characteristic Questionnaire was used in the study, and the data was analysed using descriptive statistics, the t-test, and multiple regression, all of which were based on the descriptive survey design. The study's findings showed that teachers from the National Teachers' Institute

(NTI) were much more dedicated to their jobs as teachers than full-time educators. According to Oyebola's (2016) research, the professional qualifications of teachers have a big impact on the standard of instruction.

Last but not least, this study targeted freshly educated and licensed instructors as opposed to Liakopoulou's (2011) study, which targeted all teachers. The focus of Oyebola's (2016) study, however, was on primary school teachers and their level of professional competency. Both open-ended and closed-ended questionnaires were employed in the study. In contrast to the current study, which focused on instructors, the study was conducted in Nigeria without specialized subject teachers.

Teaching methods

In 2016, Ubah and Shu'aibu conducted research on the evaluation of the Nigeria Certificate in Education program's implementation in federal colleges of education in Nigeria's north-western political zone. They centered their study on how curriculum implementation in federal institutions of education in Nigeria's north-western political zone is influenced by content, money, and instructors' qualifications. The descriptive survey design was chosen, and data were gathered using a questionnaire. The 108 respondents in the study were lecturers and members of the management teams at the federal colleges of education that were the subject of the research. Due to the little amount of the population that could be sampled, there were only three schools included in the sample. They discovered that the employment of conventional teaching methods, particularly the lecture method, to the disadvantage of other instructional approaches, dominates the execution of the course materials.

In a junior secondary school in Botswana, Adeyemi (2012) investigated the role of storytelling in the efficient instruction of traditional values. A brief presentation of Botswana's national values was made, with a focus on how hard effort produces effective citizens. A form one class's inquiries and responses were elicited using the example of a lazy student. The qualitative replies of the pupils showed a progression from low to high order responses. This is taken to suggest that storytelling is an effective teaching and learning strategy.

There were a lot of conclusions drawn, including the improvement of learning through storytelling, the use of storytelling to stimulate high order thinking, and the utilization of small groups for information acquisition and decision-making. It was advised that teachers adapt their teaching strategies to the unique teaching-learning environment and highlight storytelling as a form of instruction in the curricula or syllabuses based on the study's findings and conclusions. This study has identified one particular tactic that educators might employ to influence students' acquisition of the value of hard effort. This acts as the study's primary eye-opener on the analysis at hand. However, it did not shine its searchlights on other implementation indices. Francis (2016) conducted an evaluation of the effective citizenship curriculum's application in Kaduna State's primary schools. This research's major goal is to determine the viability of teaching and learning strategies for Kaduna State's primary schools. Using the Krejcie and Morgan formula, he used a survey design with a population of 5552 primary school pupils and teachers and a sample of 357 students and instructors. The results of his research showed that teaching strategies like discussion, inquiry, and role-playing that support

learning had a significant impact on students' ability to exercise effective citizenship in primary schools.

Hwali (2015) looked into the degree of teaching proficiency among Malaysian school teachers. 309 teachers from various secondary and primary schools in Johor Bahru made up the study's population. Their teaching competency skills were evaluated using a questionnaire tool. With the use of the mean, t-test, and Pearson correlation, the data were analysed. The findings disclosed that there is a strong correlation between teaching ability and gender and that all teachers are competent.

Deveci and Dal (2017) conducted a study with the main goal of finding out what primary school teachers thought about the program's effectiveness in promoting values. The study, which used a survey design, featured semi-structured interviews with 25 primary school teachers who were working with students in the fourth and fifth grades. Teachers believed that pupils could not translate the ideals they acquire in school into behaviours, according to data evaluated using descriptive analysis approaches. The majority of participants say the program is effective in terms of values gain. Additionally, educators think that the setting and family support were vital for making the program's values teachable. He discovered that teachers frequently used storytelling, drama, and case studies to convey principles to their students.

Kadiri (2017) investigated how students' achievement was impacted by interactive teaching methods and strategies. 240 JHS III students from four randomly chosen educational zones in Kano state made up the study's sample. The study, which employed a pre-test post-test group research design, discovered that interactive teaching methods could improve students'

performance in a range of subject areas, regardless of gender, geography, or kind of school. The study is pertinent to the present study because it took into account a crucial element of curriculum implementation that this study focused on: teaching methods. It has been demonstrated that teaching strategies have an impact on/influenced students' levels of understanding.

Onipe (2017) evaluated the junior secondary school students in Kano Metropolis's value clarification, competency, and utilization curriculum. The work concentrated on clarifying values, teachers' credentials, and the teaching strategies employed by instructors in Kano City. The study sample included 20 teachers, 120 students, and 20 parents. The researcher used a descriptive survey approach for the investigation. Documentary sources and questionnaires were the primary tools used. Official curriculum materials were the documentary's primary source, with pertinent textbooks serving as its secondary source. The results demonstrated that the students' level of skill in value explanation was insufficient and that teachers prioritized teacher-centred methods over activity-based or student-oriented ones.

Adoke (2016) used a total of 2016 students and 160 teachers to research how instructors and students in selected junior secondary schools in Nigeria's northern states perceived various teaching approaches. The goal of this study project is to identify the teaching strategies employed by instructors, the availability of instructional resources, and the number of qualified instructors in a sample of junior secondary schools in Nigeria's northern states. The research was conducted using a survey design, and the instrument for gathering data was a questionnaire. It was found that the most popular ways were storytelling and discussion, while the least popular were the problem-solving approach, group method, and utilization of resource people.

Chapter Summary

This chapter reviews the research on the theoretical and conceptual frameworks, conceptual review, and empirical review as well as ideas related to the accessibility and sufficiency of teaching and learning; the teaching strategies employed by teachers; the supervision strategies employed by head teachers; and the steps taken to raise the bar for basic school education.

CHAPTER THREE

RESEARCH METHODS

Overview

The study's methodology is discussed in this chapter. It talks about the population, sampling techniques, data collection tools, data collection techniques, and analysis.

Research Design

This study used a cross-sectional survey research design. With a view to describing relationships between variables, this architecture enables the collection of data at a single moment in time (Tate, 1998). This makes the study primarily exploratory in nature. The strategy enables data collection to help test hypotheses or respond to inquiries about the current status of the phenomenon (quality of education) under research as stated by Amedahe (2002). The cross-sectional survey research approach, which is based on the quantitative paradigm, permits using a small portion of the population as a sample in order to gather data and then generalize the results to the full population (Fraenkel & Wallen, 2012). This quantitative approach entails the use of numerical analysis for the design, testing, and pursuit of solutions to research questions or hypotheses (Cresswell, 2014). Since the study's design entails gathering information from population members in demand to assess its present state with reference to one or more variables, a cross-sectional study was deemed appropriate for the study (Mugenda & Mugenda, 2009). The benefit of this method is that comparisons can be made between the relevant variables while data is collected from pre-set respondents at a specific moment in time (Acemoglu, Johnson, & Robinson, 2001; Fraenkel & Wallen, 2012).

Descriptive, inferential, and explanatory data from surveys can be used to establish links between survey items and leitmotifs, which is another reason why the design was chosen (Cohen, Manion & Morrison, 2007). In view of the study's primary goal, which was to assess the level of education in the Sagnarigu Municipality, the adoption of a quantitative approach is necessary. This is so that generalizations can be made, which necessitates the collection of data from a large sample of respondents. As a result, it is necessary to collect information in a consistent manner by utilizing the same tools and questions for each sampled respondent.

Study Area

Sagnarigu is a brand-new municipality that was separated from the Tamale Metropolitan in 2012 as a district and was given municipal status in 2018. The municipal area is 200.4 km² in size overall, and it borders Savelgu Municipality to the north, Nanton District to the north-east, Tamale Metropolis to the south and east, Tolon District to the west, and Kumbugu District to the north-west. According to the Ghana Statistical Service (2010), Sagnarigu District has 148,099 residents, accounting for 6% of the total population of the northern region (which includes the northern, north-east, and Savannah areas). Once more, there are 50.6 percent of men and 49.7 percent of women in the municipality. Like other municipalities, this one has both urban and rural populations. Urban residents make up 63.2 percent of the population, while those living in rural areas make up 36.8 percent. Ghanaians make up 96.1 percent of the population (95.4 percent by birth and 0.7 percent by naturalization). The majority of the working class in the city works in the service industry, whereas those living in rural areas primarily work in the

primary sector, which is agriculture. Due to rural-urban drift from neighbouring districts to the municipal and the development of elementary schools by private individuals in every nook and cranny of the municipality, the majority of its rural areas are quickly becoming urban. According to Ghana Education Service-Sagnarigu Municipal (GES-SM), the municipal is one with the greatest number of both public and private basic schools, most especially junior high schools (JHSs) in Northern Ghana. The municipal has 76 public junior high schools and 29 private junior high schools within 11 circuits. These make the Sagnarigu Municipality ideal for such a study, which seeks to compare the quality of education in private and public junior high schools.

Population and Sample Procedures

The population of this study comprised all the teachers in the Sagnarigu North and Sagnarigu South circuits. These two circuits are considered as the core of the Sagnarigu Municipality because they are located at the center. Also, the COVID-19 pandemic restrictions and measures prevented the researcher from including other circuits within the municipality. All the teachers in the twenty (20) junior high schools located within the selected circuits constituted the population of the study. The Educational Directorate reports that there are two hundred and forty (240) teachers and headteachers, including 194 from public junior high schools and 46 from private junior high school, spread across twenty (20) junior high schools in the two circuits (Sagnarigu North and Sagnarigu South circuits) of the Sagnarigu Municipality.

A census survey was used in the present study due to the relatively small number of teachers in the selected population thus all the subjects in the municipality were used as the sample. Again, the census was chosen because there is no sampling error and it provides a genuine measure of the population (Cohen et al., 2007; Cresswell, 2014). Furthermore, due to generalization purposes, the census survey was used. Through the use of this strategy, benchmark data for future studies may be obtained in situations when little is known about the subject area. Additionally, it offers the chance to receive in-depth details about tiny subgroups of the population that would not be available in cases of sampling.

Data Collection Instruments

A self-designed structured questionnaire was used for the data collection. The questionnaire was named "Educational Quality Questionnaire (EQQ)" was used to collect data from the respondents.

Educational Quality Questionnaire (EQQ)

Only closed-ended items with a four-point Likert scale (Strongly Disagree = 1, Disagree = 2, Agree = 3, and Strongly Agree = 4) were included in the EQQ. There are four (4) sections in the EQQ. With 10 items, the first portion concentrated on the availability and sufficiency of teaching and learning resources. The second section, with 8 items, focuses on the difference in the academic performance of the students, while the third section is on the managerial practices of the head teachers, with 10 items. The fourth section concentrated on the measures that can be adopted to promote the quality of education from the perspective of teachers, and the head teaches about nine items.

Furthermore, the EQQ's design made it appropriate for the study because it directly asks respondents for their opinions based on specified variables and characteristics related to education and its quality. The decision to use a questionnaire was made based on the finding by Cohen et al. (2011) that questionnaires tend to be more reliable than interviews because their anonymity fosters greater candor. The EQQ is also suitable as the primary instrument for this study because it is efficient at gathering data on a subject's ideas, traits, and attitudes (Kelinger, 1997).

As a self-reporting tool, the EQQ may have certain drawbacks, including respondents who may not always describe their beliefs and attitudes in a positive manner and data that is influenced by the respondents' motivation, knowledge, and experience. Oliver (2010), however, believes that while questionnaires, when designed and given appropriately, serve as the most appropriate and valuable data-gathering tool in quantitative studies, they have a wider coverage and may reach respondents more easily than other methods. In light of this, the EQQ was the primary tool utilized to get responses from the respondents.

Pilot-Testing of the Instrument

According to Amedahe (2002), piloting aids in the identification of ambiguous and unclear language as well as the gathering of data regarding potential outcomes. The purpose of the piloting was to determine whether the items were given in a clear and logical manner and to see if the respondents would interpret the questionnaire items identically. This led to the need for the questionnaire to undergo a pilot test. 35 participants who were not a part of the real sample but shared traits with the identified sample were used in the

Tamale Metropolitan area for the questionnaire's pilot study. The piloting was carried out since it aids in establishing reliability because it leads to the correction and suitable adjustment of areas of weakness in regard to the study's subject.

Validity and Reliability of the Instruments

Procedures for face, content, and construct validity were applied to the survey. Peer and expert review were used as non-statistical methods of evaluating the content and construct validity (Cohen et al., 2007). First, the face validity of the instruments was determined by considering my supervisors' comments. A measurement and evaluation expert were granted access to them to ensure that the initial instruments adhered to the research objectives, questions, and item construction processes. His suggestions and thoughts were then used to redesign the instruments.

Additionally, the perspectives, remarks, additions, and deletions that were raised were taken into account. On the other hand, my supervisor, who has a strong background in research and education, helped to confirm content validity. In order to determine whether a question accurately assesses what it is supposed to measure, the supervisor compared the questionnaire's questions and study objectives (validity). The pilot testing made it possible to assess the consistency of the study's findings under several test settings that are similar to those suggested by Cohen et al. (2011).

Using Cronbach's Alpha Coefficient, the validity of the questionnaire's pilot test was assessed. The most popular statistic, the Cronbach's alpha coefficient (De Vellis, 2012; Tabachnick & Fidell, 2013), was employed in the analysis to determine the reliability of the questionnaire. The range of Cronbach's alpha

values is 0 to 1. An acceptable degree of internal reliability was determined to be a computed alpha coefficient of at least .92 (Bryman, 2008). Using SPSS 22.0 version, the Cronbach's alpha co-efficient was determined. The results (Cronbach's alpha values) for the headteachers' methods of supervision and the availability and sufficiency of their teaching and learning materials are shown in Table 1.



Table 1: Reliability Coefficient Score (Cronbach's Alpha Value) for Availability and Adequacy of Teaching and Learning Resource, Teaching Methods and Supervisory Practices

Number	Construct	No. of Items	Cronbach's Alpha Value
1	Availability and Sufficiency	8	.76
2	Teaching Methods	10	.72
3	Supervisory Practices	19	.85
4	Measures	8	.81
Total		45	.92

Source: Field survey (2021).

Since all of the computed alpha coefficients in Table 1 were greater than .70, this was regarded as a satisfactory degree of internal dependability (Bryman, 2008). Due to the value of that statistic, Cronbach's coefficient alpha was chosen. Cronbach's alpha, according to Ary, Jacobs, and Razavieh (2013), is employed when a measure has many scaled components, such as an attitude scale. After the final administration of the questionnaire and the pilot testing based on the benchmark and necessary corrections, the collected completed questionnaire copies were also processed, and the reliability co-efficient of the questionnaire was calculated using the same Cronbach alpha co-efficient.

Data Collection Procedures

Prior to starting the data collection, the researcher received approval from the Institutional Review Board (IRB) of the University of Cape Coast and an introduction letter from the College of Distance Education (CoDE). The ethical clearance served as evidence that the study had received

permission to proceed. Along with the introductory letter, the researcher introduced himself to the respondents and gave a clear explanation of the study's objectives. Beforehand, a series of visits were performed in order to first get to know the students and faculty in order to establish a good connection and then to administer the questionnaire. For teachers and students to be aware of the administration of the questionnaire, the head of each of the schools visited was informed of the study's goal.

To formally identify himself, the researcher gave copies of the introductory letter to the chosen education directorate and, subsequently, to the sampling school heads. Before distributing the questionnaire, each respondent was given the consent statement in order to confirm their willingness to take part in the study. The respondents' privacy was maintained as needed. The respondents were informed that taking part in the study was completely optional and that they might decide to opt out at any time. The respondents were then given the questionnaires, and the researcher ensured their independence as they answered the questions. No more than 30 minutes were spent on the questionnaire by each respondent. The surveys were self-administered to the respondents in their respective schools by the researcher. A two-month data collection period was used. According to Leedy and Ormrod (2005), the overall return rate for administering the questionnaire was 100%, which is considered appropriate. To prevent loss, the retrieved surveys were stored in a safe.

Additionally, the responders received guarantees of anonymity and that their identities would never be disclosed. No participant was under any sort of duress or coercion to take part in the study; they volunteered to do so. The

concepts of voluntary participation and informed consent were scrupulously upheld (Denscombe, 2010; Cohen et al., 2007).

Ethical Considerations

The University of Cape Coast Institutional Review Board's ethical approval was obtained prior to the fieldwork before the data collection. The respondents' fully informed permission was also requested. At the outset of the questionnaire, a statement about informed consent was made, soliciting the respondents' cooperation. At the start of administering the questionnaire, this was reiterated to the responders.

Data Processing and Analysis

The collected information was examined for accuracy, completeness, duplicate responses, and no responses. Only single replies to items and fully completed questionnaires were utilized for the analysis after the double responses and incomplete questionnaires were removed from the data collection. The responses to each individual item on each scale were scored using the Statistical Package for the Social Sciences (SPSS) version 24 for convenience of entry and management. Each item on the questionnaire was given a serial number and a code number. Research questions or hypotheses were used to break down the data for analysis.

Analysis of research questions 1-3 employed means and standard deviation. The first hypothesis was tested using an independent sample t-test, and the second hypothesis was tested using a one-way analysis of variance. However, to analyse the respondents' bio-data (professional qualification), frequency and straightforward percentage counts were used. Table 2 provides a clearer understanding of the analysis process.

Table 2: Summary of data Processing and Analysis

Research Question/Hypotheses	Instrument	Statistical Tool
RQ1: To what extent is the availability of teaching and learning resources in public and private basic schools in Sagnarigu Municipality?	Questionnaire	Mean and Standard Deviation
RQ2: What is the difference in the academic performance of public and private basic schools' students in the Sagnarigu Municipality?	Questionnaire	Mean and Standard Deviation
RQ3: What teaching methods are adopted by teachers in the Sagnarigu Municipality for teaching and learning?	Questionnaire	Mean and Standard Deviation
RQ4: What measures can be adopted to enhance the quality of basic school education in the Sagnarigu Municipality?	Questionnaire,	Mean and Standard Deviation, Frequency and percentage counts
Ho 1: There is no statistically significant difference in the quality of education in both public and private basic schools based on professional qualification of teachers.		Independent sample t-test
Ho 2: There is no statistically significant difference in the managerial practices of head teachers of private and public basic schools.		One-way ANOVA

Source: Field survey (2020)

Chapter Summary

Chapter three provided a description of the research design. It also provided an insight into the quality of education offered in the Sagnarigu Municipality. This includes the research paradigms employed, the sampling techniques used, and instrumentation. The procedure for data collection and analysis was also discussed. Chapter four presents the results and discussion.



CHAPTER FOUR

RESULTS AND DISCUSSIONS

Introduction

The analyses and discussions of the data from study respondents are covered in this chapter. The primary goal of the study was to assess the educational quality of junior high schools that were both public and private. The Sagnarigu Municipality was the place chosen for the investigation. Following a study of the demographic details of the respondents, the analysis of the answers to the research questions and hypotheses was done as follows:

1. To what extent is the availability and adequacy of teaching and learning resources in public and private basic schools in Sagnarigu Municipality?
2. What is the difference in the academic performance of public and private basic school students in the Sagnarigu Municipality?
3. What teaching methods are adopted by teachers in the Sagnarigu Municipality for teaching and learning?
4. What measures can be adopted to enhance the quality of basic school education in the Sagnarigu Municipality?

Descriptive statistics such as means and standard deviations were used to analyse the data and draw conclusions on the research objectives. All tables used were well labelled and interpreted. In all, a total of 240 respondents were captured for the study. The next session discussed the demographic features of the respondents.

Demographic Characteristics of Respondents

The demographic characteristics of the respondents of the study that were considered were gender, academic qualification, and school category. The response of the participants in terms of demographic characteristics is presented in Table 3.

Table 3: Demographic distribution of the respondents

Variable		Frequency	Percentage
Gender	Male	149	62.1
	Female	91	37.9
Professional qualification	PhD Degree	1	.4
	Master's Degree	23	9.6
	First Degree	121	50.4
	Diploma	87	36.3
	Others	8	3.3
School Category	Public	194	80.8
	Private	46	19.2

Source: Field survey (2021).

Out of the total of 240 respondents who took part in the study, it emerged that the majority (149) of them were males. This accounted for 62.1% of the total sample, while 91 (37.9%) of them were females. The result as presented in table 2 therefore clearly shows that most of the participants who returned the responded questionnaires were males as showed in Table 3. The result further shows that 121 (50.4%) of the total of 240 respondents were qualified teachers with a First Degree in Education, followed by 87 (36.3%) of them who were professional teachers with a minimum of a Diploma in

Education. The result presented in Table 1 also shows that 23 (9.6%) of the respondents were qualified teachers with a Master of Education degree, but 8 (3.3%) of them were not qualified or professional teachers at the time of the study.

However, only one teacher representing 0.4% was with a PhD degree during the time of the study. From the analysis, it appears that both private and public teachers who took part in the study were professional teachers. This accounted for more than 96.3% of the teachers who hold a Master of Education, Bachelor of Education and Diploma in Education. Table 3 further indicates that based on the classification of the schools (private and public) the more than half (194) of the respondents showed that they teach in a public school. This accounted for 80.8% of the sample while only few, 46 (19.2%) of them teach in private schools. Specifically, majority (80.8%) of the teachers who took part in the study were in the public sector. From the narrative, there is clear evidence that the municipality has more professional teachers than non-professional or non-education qualified teachers. This presupposes that teaching and learning in the municipality will be effective hence, the quality of education will be higher.

Main Results

The data collected from the questionnaire was analysed based on the research questions and hypotheses. Means and standard deviation were used to analyse research questions 1, 2, 3, and 4, while independent sample t-test and ANOVA were used to test the first and second hypotheses, respectively. For the purpose of better interpretation and understanding of the analysis, the results are presented in frequency distribution tables.

Research Question 1**To what extent is the availability of teaching and learning resources in public and private Junior High Schools in Sagnarigu Municipality?**

The first research question was descriptively analysed using mean and standard deviation and discussed based on the standard/set mean of $M = 2.50$, indicating that responses less than 2.50 were classified as negative while those equal to or above were classified as positive responses. In other words, the respondents agreed with the statement or item when the item mean was either equal to the standard mean or higher than the standard mean of 2.50.

Table 4: Availability of teaching and learning resources

Statement	Mean	Std. Dev.
Most of our classrooms have sufficient chairs for both pupils and teachers.	3.22	.73
My school has enough teaching and supporting staff for smooth running of the school.	2.63	.92
There is enough spacious classroom for teaching, learning and examination in my school.	2.40	1.10
Classrooms are adequately furnished for the comfort of pupils and teachers in my school.	2.20	.81
We have all textbooks and other related materials for all subjects in our school.	1.82	.99
My study school has health official for pupils and teachers who provide first aid for emergency cases.	1.43	.71
There exists a well-stocked library for pupils and teachers to do further reading.	1.39	.70
There exist a functional and well-furnished guidance and counselling coordinator's office in my school.	1.31	.65
Overall Mean	2.05	0.51

Source: Field survey (2021).

Based on the statements that sought to seek the availability of teaching and learning resources in the municipality, it emerged that apart from those on

teaching and supporting staff and sufficiency of chairs for teachers and students, all other statements recorded lower means hence, on the average, the respondents disagreed that basic schools in the Sagnarigu Municipality have sufficient teaching and learning resources. Hence, the schools cannot be classified as those of higher quality nor standard. This is typically evident in the case that they agreed that their schools have enough teaching and supporting staff ($M=2.63$; $M=.92$) and sufficient chairs for pupils and teachers ($M=3.22$; $M=.73$) respectively. On that note, it can be observed that supporting staff such as labourers and librarians in the schools are sufficient for the day-to-day activities of the school and that of physical infrastructure such as chairs, and tables.

Aside that, all other items proved otherwise hence, the mean of means was weak ($M=2.05$). Considering the mean of the overall standard deviation ($SD=0.51$), there is clear evidence that the difference between the respondents who disagreed and those who agreed to the statements are closely related because the SD is relatively small hence the data on the availability of teaching and learning resources in the municipality could be describe as homogeneous since the Coefficient of Variation is less than 33 ($0.51/2.05*100=24.88$). This assumption is based on the recommendation of Pallant (2010) that the closer the SD to the overall mean of the items, the closer the responses to each other. In other words, there is less discrepancy between the positive and negative responses.

Furthermore, the results presented in Table 4 show that the respondents disagreed that teaching and learning resources in their schools are not available or sufficient. This accounted for the mean of 2.50 and a standard

deviation of 0.51. In the cases where the respondents slightly agreed that they have the resources needed in their schools, it was identified that those resources were not adequate for the smooth running of the school as well as the implementation of the curriculum. For instance, on the item of classroom space available for the purpose of teaching and conducting examinations, it was identified that the responses were negative because the item mean ($M = 2.40$) is relatively lower than the standard mean. However, there is less difference between those who disagreed and those who agreed as a result of the rate of the SD, which is presumed to be relatively far apart from the data set. Evidently, the result on the availability and adequacy of classrooms for teaching and learning and examination recorded a mean of 2.40 and a SD of 1.01, which means that the respondents disagreed with the statement. This therefore means that the classrooms are not adequately furnished for the comfort of pupils and teachers.

In addition to the availability of space, it emerged that the basic schools in the Sagnarigu Municipality lack sufficient and well-furnished guidance and counselling centres or the offices meant for the guidance and counselling coordinators. This statement recorded a mean of 1.31 and an SD of 0.65, indicating that the respondents disagreed that they have a "functional and well-furnished guidance and counselling coordinator's office" in basic schools within the Sagnarigu Municipality. The notion of the respondents thus shows that there is no functional nor well-furnished guidance and counselling office in my school for assisting both teachers and students in terms of counselling needs ranging from psychosocial, academic, moral, etc. needs.

The analysis also revealed that in the area of amiable and well-functioning libraries, the respondents were of the view that they were not available ($M = 1.39$, $SD = 0.70$). As is evident from the SD , most of them agreed that they either do not have libraries at all in their schools or the few available are not stocked with sufficient and modern books for teaching and learning. Hence, the item mean ($M = 1.39$) was less than the standard mean. As per the account given by the respondents, the result means that there is no well-stocked library for pupils and teachers to do further reading.

Concerning the statement of the availability of health officials or school nurses with basic schools in the Sagnarigu Municipality, it was observed from the analysis that the respondents disagreed with the assertion ($M = 1.43$, $SD = 0.71$). The account of the respondents is an indication that perhaps none of the basic schools within the Sagnarigu Municipality has a professional nurse that oversees the health of the school as well as administers first aid to the students and staff. In the case of emergency response that demands the presence of a school nurse, the respondents were of the view that it is unavailable in the Sagnarigu Municipality. This is evident in the mean score of 1.43, with a comparable standard deviation of 0.71 between those who disagreed and those who agreed that they have nurses in the various basic schools. But as the standard of education demands, each school needs a professional medical practitioner who is permanently stationed in the school to oversee the business of health for both teachers and students in the school. However, it appears as evident in this study that none of the schools has a nurse, doctor, or any other allied health professional who can either administer drugs, diagnose the needs of the students and teachers, or refer them to

appropriate hospitals/health centres. This is likely to undermine the quality of the school's progress and quality both in the private and public sectors.

With regard to the availability and sufficiency of textbooks related to teaching and learning materials in schools, it was identified that only a few of the respondents positively responded to the statement. In their responses, it was clear that most of them disagreed with the statement because of the mean score of 1.82 and a standard deviation of .99. The result is classified as a "negative response" because it has an item mean less than the standard mean and standard deviation close to the data set. In this case, the majority of the respondents disagreed that in their schools there are sufficient teaching and learning textbooks and other materials for the execution of the curriculum. Clearly, basic schools in the Sagnarigu Municipality do not have the necessary textbooks and other teaching and learning materials.

The result of the first research objective, which sought to identify the availability and adequacy of teaching and learning resources among public and private basic schools in Sagnarigu Municipality, revealed that apart from the availability and sufficiency of supporting staff and chairs for teachers and students, the respondents disagreed that the number of resources they have in their schools are enough to be regarded as a quality situation for education in the 21st century. This is evident in the average mean score of $M = 2.05$ and a standard deviation of 0.51, which indicates that only a few respondents agreed that there were available and functioning teaching and learning resources. However, they agreed that they have enough staff and chairs that can help the school implement the curricula as designed to meet the needs of their students, society, and the country as a whole. Therefore, to a large extent, teaching and

learning resources among private and public basic schools in the Sagnarigu Municipality are unavailable; hence, they are not sufficient for the smooth implementation of the school curriculum. This is likely to reduce the standard of teaching and learning and the quality of the product of teaching and learning.

From the narrative of the first research objective, there is some amount of similarity with available literature (Kigwilu & Akala, 2017; Chukwu, Eze & Agada, 2016). For instance, Kigwilu and Akala (2017) studied the utilisation of teaching and learning materials among basic mission schools in Nairobi, and it was found that sports grounds, libraries, and course texts were inadequate among the schools. This result is quite similar to the current one in the sense that they both studied the availability of teaching and learning materials or resources. However, it was quite different in the case of the schools being purely mission-based, whereas the current study focused on private and state-owned schools. In the area of methodology, whereas the current study adopted the quantitative research approach, that of Kigwilu and Akala used the mixed method approach. The results are the same because of the nature of their analysis and the sample used.

Because of the unavailability of appropriate teaching and learning resources such as functional textbooks and state-of-the-art teaching classrooms, the standard of teaching and learning will fall. This assertion, as revealed by the first research objective, is supported by Makamure (2017)'s study, which established that, while some teaching and learning materials were available in basic schools in Kenya remote areas, their sufficiency was nothing to write home about. Makamure is of the view that the few teaching and learning

materials that were made available by the state for teachers and students have less secured rooms to keep them. This assertion is in line with the current study because it was identified that the basic schools in Sagnarigu do not have well-equipped libraries or workshops conducive to teaching and learning. As a result, the standard of teaching and learning and the quality of education when observed will be minimised.

Similarly, this study disagrees with the findings of Ogaga, Igori, and Egbodo (2016). Just like the nature of the current study, Ogaga, Igori, and Egbodo found a relationship between the availability and adequacy of teaching and learning materials when their study compared the supply, selection, and availability of instructional materials to the improvement in the quality of education. It was identified that there was no significant influence between the materials' availability and the quality of education as measured through the academic performance of the students and the output of teachers. This in turn renders the two studies similar in nature. However, the research questions were purely analysed using percentages while the influence (hypothesis) was analysed with chi-square. Hence, there is a research gap that needs to be filled. The study of Kankam (2015) also agrees with the current result when he studies the perception of teachers about the nature, adequacy, and usefulness of teaching and learning materials in the implementation of the curriculum. In his study, it was found that the respondents disagreed that there were adequate teaching and learning materials such as textbooks and other related materials for teaching and learning. Clearly, both studies showcase the absence and/or inadequacy of teaching and learning resources in schools as far as the quality or standard expected of their provision is concerned. In the case of Kankam,

the study was conducted to test the competence of the teachers about the use or adaptation of the variable teaching and learning resources. Hence, it was not surprising when the respondents disagreed that the materials or resources were not available. Hence, the study could not adequately establish their competence as far as the execution of the curriculum is concerned.

The study convincingly established that, while some teaching and learning resources are available for use among basic school teachers and students in the Sagnarigu Municipality, their sufficiency as a measure of educational quality is insufficient. This means that when the standard or quality of education is measured on the availability and adequacy of teaching and learning resources as a variable, there will be less or minimal work output by teachers and poor academic performance of students. This in turn will lead to a weaker education, especially among the study sample as the core implementers of the curriculum and the foundation of the educational ladder.

Research Question 2

What teaching methods are adopted by teachers in the Sagnarigu Municipality for teaching and learning?

The second research question sought to find out about the kinds of teaching methods that the basic school teachers in the Sagnarigu Municipality use in the course of the teaching and learning process. A total of 10 items on the questionnaire were used to solicit the opinions of the respondents concerning the methods of teaching they use. The statements or items used exposed the teachers to both teacher-centered and learner-centered methods of teaching. The purpose was to ascertain whether the teaching methods adopted by the teachers had any significant effect on the quality of teaching and

learning or not. The mean and standard deviation were used to analyse the result as presented in Table 5.

Table 5: Teaching methods used by the teachers

Statement	Mean	SD
I use a field trip as a teaching strategy	3.01	2.08
I use the discovery method.	2.98	.96
I often give my students reading assignments	2.90	.76
I use the inquiry method.	2.87	.82
I use the lecture method.	2.81	.90
I use the expository method.	2.80	.86
I use the discussion method.	2.76	.81
Projects are often given to students.	2.76	.80
I use comparative learning	2.68	.92
I use the role-play method.	1.83	.86
Overall Mean	2.74	.97

Source: Field survey (2021).

The result presented in Table 5 was based on the analysis of the responses concerning the kinds of teaching methods used by basic school teachers in Sagnarigu. A standard mean of 2.50 was used to justify whether the respondents agreed or disagreed with the statements. In that regard, the third research question found that the respondents agreed ($M = 2.74$, $SD = .97$) that they used or applied all the teaching methods stated in the questionnaire during the instructional periods except "role play" ($M = 1.83$, $SD = .87$). Since the study established that the respondents agreed to the statements (teaching methods) stipulated to investigate their use of the methods, a composite mean

of $M = 2.76$ was recorded against the standard mean ($M = 2.50$). This clearly indicates that the responses were positive (agree) because the average mean is higher than the standard mean set as a benchmark to measure whether or not the teachers used the teaching methods for their lessons. The coefficient of variation of the data also reported the data as heterogeneous ($0.97/2.74*100=35.40$), hence teachers in the municipality use various methods of teaching.

Concerning the statement about the use of the discussion method by the teachers, the result presented in Table 5 shows that most of them used the method ($M = 2.76$, $SD = 0.81$). From the analysis, it emerged that the item mean ($M = 2.76$) is higher than the standard/set mean ($M = 2.50$), indicating that a majority of the respondents agreed that they often conduct their teaching around the discussion method. From the basis of the standard deviation, there is clear evidence their responses were homogenous. On the expository teaching method, the responses suggest that the teachers adopt and apply it most often. This is evident in the mean score of 2.80 and a standard deviation of 0.86. Hence, the respondents agreed with the notion that "I use the expository method" in teaching.

Concerning the results provided in Table 5, there is clear evidence that the respondents agreed that they often give their students reading assignments to read their modules at home and present them face-to-face ($M = 2.90$, $SD = 0.76$). On the use of the enquiry method of teaching, the results presented in Table 4 further show that the respondents agreed. This is evident in the mean score of 2.87 and a standard deviation of 0.82. The response in this case indicates that the respondents were for the notion that "I use the inquiry

method." On the item of using the discovery method of teaching, the respondents agreed ($M = 2.98$, $SD = 0.96$) that the use of the discovery method was used during face-to-face. On the statement of the "use of the role-played method in teaching, it emerged that respondents disagreed with the statement that "I use the role-play method." This is shown in the mean score of 1.83 and the standard deviation of 0.86. What the result means is that the teachers do not often teach using the role-play method during their lessons. As such, there is a likelihood that the students may not be able to gain confidence in public speaking.

Additionally, the responses presented in Table 5 show that most of the teachers were using the lecture method of teaching and, as such, a mean of 2.81 and a standard deviation of 0.90. The response could be classified as favourable or positive because the item ($M = 2.81$) mean is higher than the standard mean ($M = 2.50$). Again, a mean of 2.76 and a standard deviation of 0.80 out of the total score of respondents indicate that the majority of them agreed with the notion that "project" as a teaching method is often given to students to increase their knowledge and understanding of the concepts they are taught. Also, regarding the use of trips as a teaching method, the results in Table 4 show that the respondents agreed; hence, a mean score of $M = 3.01$ and a standard deviation of $SD = 2.08$ were recorded. The response in this case indicates that the respondents were in favour of the notion that "I use the field trip as a teaching strategy". Similarly, the respondents were of the view that a comparative method of teaching was used in their schools. As such, more than half ($M = 2.68$, $SD = 0.92$) of the respondents agreed with the notion that the comparative method of teaching is most often used.

However, the result in Table 4 shows that the respondents were against the statement "I use the role-play method." This accounted for a mean of 1.83 and a standard deviation of .86. It is evident from the standard deviation that the item mean is not far apart from the data set. Hence, most of the respondents disagreed with the notion or the responses were homogenous in nature. Therefore, the respondents agreed that they use a variety of teaching methods such as discussion, expository, reading assignments, inquiry, discovery, lecture, projects, field trips, and comparative learning. For that reason, appropriate teaching and learning methods were adopted and used by the basic school teachers in the Sagnarigu Municipality, which will increase the quality of education as a result of their involvement in the quality of teaching and learning.

The finding emerged from the research question 2, which sought to find the kinds of teaching methods that basic school teachers use in teaching and learning. As such, it was identified that both private and public-school teachers use instructional methods ranging from inquiry, lecture, and projects, among others. This finding agrees with available literature. For instance, Ubah and Shu'aibu (2016) in their study established that secondary and basic school teachers in Nigeria most often use traditional methods of teaching, such as the lecture method of instruction, to the detriment of other teaching methods. Likewise, the current study also mentioned the lecture method as part of the instructional strategies that the basic school teachers in the Sagnarigu Municipality use.

Similarly, there is congruence between the current finding and that of Adeyemi (2012), who studied the use of storytelling as an activity-based

teaching tool for preschool and basic school students in Botuana. The study of Adeyemi (2012) found that the lecture, enquiry, discussion, and comparative teaching methods in their basic school lessons. The study also revealed that the teachers were selective in their choice of teaching methods, which appeared to be highly recommended by educationalists. However, the difference between the study of Adeyemi and the current is that the former used a pure qualitative design whereas the latter used a quantitative approach irrespective of their sample, which both were basic school teachers and headteachers.

Further analysis of the result indicates that the finding is in line with the result of Francis (2016), who assessed the implementation of the primary school citizenship curriculum in Kaduna State, Nigeria and found out that discussion, inquiry, and role-play were commonly used by the teachers. In the case of his study, it was established that though the teachers did not use methods such as the expository, they were able to adopt and use the enquiry methods which is more scientific and student oriented. As such, their teaching and/or demonstration was highly recommended for increasing the understanding of the students, hence increasing their performance in academics. However, the difference between the study of Francis (2016) and the present result boils down to the sampling strategies adopted.

Research Question 3**What are the supervisory practices of headteachers of private and public basic schools in Sagnarigu Municipality?**

The supervisory practices of the headteachers were determined with Section D of the questionnaire having 19 items. The respondents were made to justify their agreement or disagreement with the statements on the scale of 1-4 (refer to Data Collection Instrument) about the kinds of supervisory practices used in their schools. The mean and standard deviation were used to analyse the results (refer to Table 6) collected by the close-ended questionnaire named "Educational Quality Questionnaire (EQQ).

Table 6: Supervisory practices of headteachers

Statement	Mean	SD
Reward special efforts by teachers with opportunities for professional recognition	3.57	.66
Acknowledge teachers' exceptional performance by writing memos for their personal files	3.53	.68
Compliment teachers privately for their efforts or performance	3.45	.73
Meet individually with teachers to discuss student progress	3.40	.70
Reinforce superior performance by teachers in staff meetings, newsletters, and/or memos	3.13	.74
Discuss academic performance results with the staff	3.09	.73
Participate actively in the review of curricular materials	3.05	.86
Use tests and another performance measure to assess students' progress	3.02	.84
Inform teachers of the school's performance results in written form	2.83	.67
Draw upon the results of school-wide testing when making curricular decisions	2.92	.86
Monitor the classroom curriculum to see that it covers the school's curricular decisions	2.90	.80
Point out specific strengths in teachers' instructional practices in post-observation feedback	2.85	1.02
Review student work products when evaluating classroom instruction	2.74	.86
Assess the overlap between the school's curricular objectives and the school's achievement tests	2.70	.92
Ensure that the classroom priorities of teachers are consistent with the goals and direction of the school	2.68	.81
Make clear who is responsible for coordinating the curriculum across grade levels	2.68	.89
Point out specific weaknesses in teachers' instructional practices in post-observation feedback	2.67	.85
Conduct informal observations in classrooms on a regular basis	2.62	.96
Overall Mean	2.99	1.81

Source: Field survey (2021).

Concerning the results about the kinds of supervisory practices that the headteachers adopt and apply in their schools' management and administration, it emerged from the results presented in Table 6 that they ensure the mission of the schools is defined appropriately ($M = 2.68$, $SD = 0.81$). This means that the headteachers are able to command the priorities of teachers to be in line with the goals (mission) of the schools. Consistently, the findings demonstrate that respondents support the idea that supervisory techniques ensure that teachers' classroom priorities are in line with the aims and course of the school. The respondents agreed ($M = 2.74$, $SD = 0.86$) that supervisors should "Review student work outputs when evaluating classroom instruction" in relation to the other item, which asked about doing so (see Table 5). It was once more noted that respondents concurred that supervisors regularly perform informal observations in classrooms. The item mean score of 2.62 and a standard deviation of 0.96 demonstrate this.

It was discovered that the respondents agreed with the following statement regarding the supervisors' behaviours: "Point out specific strengths in teachers' instructional techniques in post-observation comments." This is demonstrated by the mean score of 2.85 and standard deviation of 1.82, which reveal that the supervisory practices highlight particular teaching strategies that teachers use that are effective when providing post-observation comments. Additionally, the respondents stated in Table 6 that post-observation feedback from supervisory practices identifies particular areas of weakness in instructors' instructional practices. As a result, the findings indicate that they concurred ($M = 2.67$, $SD = 0.85$). The respondents agreed ($M = 2.68$, $SD = 0.89$) that supervisory practices make it clear for respondents

to know who is responsible for coordinating the curriculum across grade levels. This is also shown in Table 6 regarding the supervisory practices regarding who is responsible for coordinating the curriculum across grade levels.

The findings in Table 6 demonstrate that respondents believe ($M = 2.92$, $SD = 0.86$) that headteachers' supervisory methods use the outcomes of school-wide testing when making curricular decisions.

The replies also show that headteachers used supervision to check that the classroom curriculum followed the school's curricular decisions. This led to a mean score of $M = 2.90$ and a standard deviation of 0.80. The study noted a mean of 2.70 and a standard deviation of 0.92 regarding the evaluation of the overlap between the school's curriculum goals and its achievement tests. This demonstrates unequivocally how well the headteacher's oversight of teachers was in determining if the curriculum's goals and achievement exams aligned. Additionally, it was noted that the majority of respondents ($M = 3.05$, $SD = 0.86$) believed that the supervision style of headteachers results in active participation in the review of curriculum materials. Additionally, it was noted that heads of schools had private meetings with teachers to go over students' progress. The average score of 3.40 and the standard deviation of 0.70 show this to be the case. The respondents were in agreement ($M = 3.09$, $SD = 0.73$) that heads of schools should discuss academic performance results with the employees as part of their supervisory duties. However, headteachers also used student progress assessments as a kind of supervision. The development of the kids was evaluated using tests and other performance indicators. This is clear from the data's mean of 3.02 and 0.84 standard deviation. Similar to this,

heads of schools tell instructors in writing of their performance evaluations as a kind of supervision. The average score of 2.83 and the standard deviation of 0.67 show this to be the case.

It was discovered that the respondents agreed with the statement that "reinforce superior performance by teachers in staff meetings, newsletters, and/or memos" regarding the practice of headteachers in staff meetings. The average score of 3.13 and the standard deviation of 0.74 show this to be the case. In situations similar to this, school administrators informally congratulate instructors on their work or performance. The average score of 3.45 and the standard deviation of 0.73 show this to be the case. Additionally, the respondents ($M = 3.53$, $SD = 0.68$) concur with the idea that heads of schools sent memoranda for their own files commending instructors on their great performance. Additionally, teachers who put forth extra effort were rewarded with chances for professional recognition because their efforts were not unappreciated. Table 6 displays this finding, which has a mean of 3.57 and a standard deviation of 0.66.

It has been determined that instructional supervision, co-curricular activity monitoring, records and register keeping, fostering a positive school environment, managing instructional time and resources, coaching, and staff development are frequently used as forms of supervision among basic school headteachers in the Sagnarigu Municipality, in response to the third research question. This is clear from the average score of 2.99, which presumes that respondents fairly agreed with the claims, and the standard deviation of 1.81. Additionally, because the SD is relatively modest in comparison to the mean of means, the mean of the standard deviation demonstrates that the majority of

respondents agreed with the idea. The data set consistently shows a strong relationship with the mean, showing that the majority of respondents agreed that the headteachers at both private and public basic schools in the Sagnarigu Municipality conduct a variety of supervisory duties to improve the quality of teaching and learning.

The findings focused on how the types of supervisory practice that the headteacher adopts and exhibits are consistent with the findings of Heck and Hallinger (2014), who discovered that instructional supervision required the heads of school, along with other employees such as teachers, to engage in administering and coordinating school curriculum activities. Therefore, the findings of Heck and Hallinger identified the significant role of the headteacher in promoting effective management of instructional time through teacher and student supervision proceedings. This means that there is equivalence between the current study and that of Heck and Hallinger (2014) and others like Buttram, Mead, Loftus, and Wilson (2006). Buttram et al. identified that irrespective of the time allocated for the teaching of each subject, headteachers have the sole responsibility of performing such educational roles as instructional supervision, co-curricular activities monitoring, records keeping, and promoting a conducive school environment. As identified in the current study, the headteachers played the instructional role of supervising and evaluating teaching and learning activities for the attainment of quality education delivery and promoting learner output.

The findings of the current study also agree with Glatthorn, Boschee, Whitehead and Boschee (2016), for instance, whose study focused on the

supervisory practices of basic school headmasters in managing teaching and learning in the school environment.

In the current study, it was identified that, as Hallinger (2018) pointed out, the performance of the students is measured by the test results gathered by the headteachers as a component of setting and communicating the goals of the school for ensuring quality. This presupposes that the supervisory practices of the headteachers in terms of ensuring that effective teaching and learning prevails do not only involve teaching and academic performance but also coordinating the affairs of the teachers to implement the curriculum as it was designed. Hence, the study of Anderson, Leithwood, and Strauss (2010), just like the study of Hallinger (2018), affirmed the result that quality education, which believes strongly in instruction and emphasizes standardised and criterion-referenced testing, makes the coordination of the curriculum effective for both the school and the management of teaching and learning activities.

The result, however, contradicts the finding of Goldring and Berends (2016) in a study that investigated the validity of students' data as a basis for determining teacher effectiveness and educational quality. To the study of Goldring and Berends, supervising teachers' progress forces the heads of schools to meet teachers individually to discuss students' progress and academic performance results with the staff. In essence, the headteachers use the information gathered from their supervision to grade the teachers for selection and promotion purposes to ensure quality teaching and learning is delivered.

Research Question 4**What measures can be adopted to enhance the quality of basic school education in the Sagnarigu Municipality?**

In order to collect relevant information to answer the fourth research question, Section E (measures to enhance the quality of basic school education) on the EQQ with a 5-point Likert scale was used to that effect. A descriptive analysis (mean and standard deviation) was performed to determine the kinds of measures that could be adopted to increase the quality of teaching and learning among basic schools in the Sagnarigu Municipality. The result is presented in Table 7.

Table 7: Measures to Enhance the Quality of Education

Statement	Mean	SD
The school should provide time for teachers for professional development.	3.74	.47
The school should organize staff development activities for teacher competence in areas such as peer observation, mentoring, and pupil assessment.	3.72	.51
GES should collect and circulate information on professional development programs in various schools.	3.67	.68
MoE and GES should have a separate budget for the professional development of teachers.	3.66	.71
Education stakeholders have to pay periodic visits to the schools.	2.92	.86
Teachers should make teaching and learning more fun than rigorous schooling.	2.90	.80
There should be an introduction and well-equipped technology for teaching and learning.	2.90	.80
There should be periodic workshops on the subject matter, methodology, and other education-related topics.	2.68	.89
Overall Mean	3.27	.71

Source: Field survey (2021).

Concerning the result presented in Table 7 about measures that can be adopted to enhance the quality of the basic school, it emerged that the respondents agreed with the statement that states, "The school should provide time for teachers for professional development." This is evident in the mean score of 3.74 and a standard deviation of 0.47. On the item of enhancing quality in basic education, the respondents agreed that the school should organize staff development activities for teacher competence in areas such as peer observation, mentoring, and pupil assessment. This is evident in the mean score of 3.72 and a standard deviation of 0.51. It was again identified that the respondents agreed that GES should collect and circulate information on professional development programs in the various schools. This is evident in the mean score of 3.67 and a standard deviation of 0.68.

It is quite noteworthy that most ($M = 3.66$, $SD = 0.71$) of the respondents agreed that MOE and GES should have a separate budget for the professional development of teachers as far as the quality of basic education is concerned. The findings in Table 7 show that the respondents agreed. This is evident in the mean of 2.68 and a standard deviation of 0.89. The response, in this case, indicates that the respondents were for the notion that when it comes to quality basic education, there should be periodic workshops on the subject matter, methodology, and other education-related topics. It was also found that the majority ($M = 2.92$, $SD = 0.86$) of the respondents agreed that education stakeholders have to make periodic visits to the schools.

In terms of enhancing quality basic education, it emerged that teachers should make teaching and learning more fun than rigorous schooling. As such, the study recorded a mean of 2.90 and a standard deviation of 0.80. Furthermore,

the result presented in Table 7 shows that the respondents agreed that to enhance the quality of basic education, there should be the introduction of well-equipped technology for teaching and learning.

The results presented in Table 7 concerning the measures that enhance the quality of education revealed that the respondents agreed with the assertions or items measuring their opinion. This is evident in the average mean score of $M = 3.27$ and a standard deviation of $SD = 0.71$. From the mean, there is clear evidence that the response is positive because it is higher than the standard mean ($M = 2.50$). Furthermore, the standard deviation ($SD = .71$) proves that the majority of the respondents agreed with the statements because the SD is relatively lower compared to the mean. This means that the responses from the data are homogeneous since the coefficient of variation is less than 33 ($0.71/3.27*100=21.71$). Hence, it has been identified that the major measures to increase the quality of basic education are intensification of teacher professional development and peer observation. The analysis further shows that in order to increase the quality of teaching and learning and teacher output, there should be consistent and effective mentoring, pupil assessment, sufficient budget allocation for teacher training and development, effective teachers, supervision and monitoring, as well as the introduction of technology for teaching and learning.

From the analysis, there is clear evidence that supervision or instructional monitoring, assessment, and professionalism of teachers will enhance quality education among public and private basic schools in the study area. As such, the result agrees with available literature in the sense that the study of Bonsu (2016) revealed that teacher professionalism was identified as

the major factor to consider in ensuring the quality of education is positive and effective in the eyes of stakeholders. The study further established that public basic schools have more qualified teachers; however, their commitment to the task of teaching and learning is less compared to the private schools with less academic qualification but higher teacher output. This simply means that the quality of education in private schools is higher because those schools put effective measures such as supervision and commitment of the teachers in place. Therefore, there is a congruence between the current study and the findings of Bonsu (2016).

Additionally, the result agrees with the finding of Essiam (2011) in a comparative study of supervisory practices of private and public junior high schools in the Cape Coast Metropolis, who advocated that an effective strategy to promote quality education is through intensive internal supervision and monitoring conducted by headteachers to assist the teachers professionally. From the perspective of Essiam, there is the likelihood that the rate of supervision and assistance offered by the headteachers will increase the participation of teachers and students in effective instructional activities.

Similarly, there is an analogy between the current result and the finding of Imran (2008), who studied the difference in the quality of education between public and private secondary schools in Punjab, Pakistan. The result, according to Imran, revealed that for both state-owned and private-owned schools to increase in terms of quality, secure job opportunities, behavior modification of teachers and staff encouragement should be adopted by the school management. The analogy of both studies therefore foretells that the quality of education can best be felt when the school climate is secured such

that both teachers and students have the opportunity to upgrade their knowledge and to uphold effective intellectual abilities.

Additionally, it is more effective when the activities of the school encompass the smooth passage of curriculum interactions and implementation with the school management as the principal leaders. In so doing, every member of the school feels relevant and part of the school, therefore ensuring that the mandate of the school is made effective for the realisation of the potential of both teachers and students (products). This is because when there is prudent student academic achievement, the quality of education delivered in the schools will be realized as effective and goal-oriented.

Normality Test

In order to test the hypotheses, normality tests using Kolmogorov-Smirnova, Shapiro-Wilk, and skewness and kurtosis were performed. These tests helped to identify whether a parametric test or a non-parametric test should be used in the analysis. Table 8 provides the results of the normality tests for all the dependent variables considered in the study.

Table 8: Test of Normality among the Variables

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
Availability of teaching resources	.168	240	.000	.894	240	.000
Teaching methods adopted by teachers	.133	240	.000	.896	240	.000
Supervisory practices	.081	240	.001	.964	240	.000
Measures to enhance quality education	.190	240	.000	.916	240	.000

a. Lilliefors Significance Correction

SK = Skewness

K= Kurtosis

Table 8 shows the results of normality tests using Kolmogorov-Smirnova, Shapiro-Wilk, and Skewness and Kurtosis. Concerning the availability of teaching resources, the results show that the data was not normally distributed. All the dependent variables were not normally distributed (refer to Table 8); however, parametric tests were used in the analysis because parametric tests are robust tests. Even when the normality assumption is violated, parametric tests make allowances to be used. Tests are robust in the presence of violations of normality test assumptions when the sample size is large based on the central limit theorem (Box & Tiao, 1964; Domrose & Rasch, 1987; Rasch, & Guiad, 2004).

Hypothesis 1

H₀: There is no statistically significant difference in the supervisory practices of headteachers of private and public basic schools.

The third item on the demographic data of the respondents concerning the category of school the teachers teach was used to find the difference in the supervisory practice of the headteachers. Table 9 provides information concerning the results obtained from the t-test analysis on the supervisory practices of the headteachers of public and private basic schools in the Sagnarigu Municipality. Prior to the analysis, a preliminary analysis was conducted to ensure that there was no violation of the assumptions for the parametric test.

Table 9: *t*-test Result Comparing Supervision Practices of Public and Private School Headaches.

Grade Level	n	Mean	SD	df	t-value	p-value	Decision
Public school	194	56.69	10.31	238	-2.372	.019	Reject
Private school	46	60.61	8.90				

Source: Field survey (2021). * $p < 0.05$ (2-tailed significant result)

An independent-sample *t*-test was conducted to compare the differences between the supervisory practices of the heartaches of public and private basic schools in the Sagnarigu Municipality. The result revealed that there is a statistically significant difference in the scores for the public schools ($M = 56.69$, $SD = 10.31$) and private schools ($M = 60.61$, $SD = 8.90$; $t(238) = p = .019$ two-tailed) concerning the supervisory practices of the headteachers. Therefore, the results presented in Table 9 show that there is a statistically significant difference ($p = .019$) between the supervisory practices of private and public school headteachers with respect to the quality of education delivered. However, the magnitude of the difference that exists between private and public schools in terms of the quality of education is "small" (eta squared = 0.0003), representing 0.03%. This is compared to the proclamation of Cohen (1988) cited by Pallant (2010). Similarly, the magnitude of the difference between public and private school teachers' supervisory practices may be by chance or other factors like experience, availability of teaching and learning resources, and/or professional qualification.

The study therefore rejects the null hypothesis, which states that "There is no statistically significant difference in the supervisory practices of headteachers of private and public basic schools." Hence, there exists a statistically significant difference (.03%) in terms of how the headteachers exhibit supervisory practices in the Sagnarigu Municipality. However, when the category of school was compared, the difference in the supervisory practices of the basic school headteachers was small; thus, such differences could have occurred as a result of other relating factors.

The analysis also shows that the private schools ensure effective supervision compared to public schools due to the constant presence and monitoring of their headteachers and, in some cases, the proprietors. With reference to Table 8, there is clear evidence from the mean score ($M = 60.61$) for the private schools, which is higher than that of the public schools ($M = 56.69$), indicating that most of the responses were in favour of the private schools. It is also an indication that private school teachers are more committed to the course of teaching, learning and other co-curricular activities due to the effective supervisory practices and the allocation of teaching and learning materials made available by the school management.

Furthermore, the current result, which found a difference in the supervision activities of the private schools to be more effective than those of the public schools, is in line with the inference from the studies of Hallinger (2016), Liu and Hallinger (2018), and NaCCA (2018). The study of Hallinger revealed that the quality of education can be manifested when the management of the curriculum and instruction are in congruence with the core mandate for the establishment of the schools. However, although the current study and that

of Hallinger (2016) are similar in nature, the sample size for the current study appears to be higher and the study was conducted among basic school teachers and their heads, whereas the study of Hallinger was among college tutors. Nevertheless, the practices in terms of supervision among the two categories of schools appear to be similar; hence, the results can be compared.

Again, the result is in line with the study of Liu and Hallinger (2018), who investigated the impact classroom supervision has on the teaching effectiveness of teachers in both state-owned and individual-owned schools. It was identified in their study that most individual-owned schools are more supervised by their immediate sectional heads, making the output of the teachers more significant than in public schools, where teaching and learning are given less attention.

Similarly, there is correspondence between the report of the NaCCA (2018) and the current finding on the supervisory practices of the basic schools. In the report of NaCCA, it was identified that although most private schools in Ghana have less professionally trained teachers, their teachers performed better than those in government schools due to a number of measures that the school owners put in place. NaCCA (2018) therefore recommended that government school teachers be trained in the area of supervision and monitoring; hence the reform of changing the face of circuit supervision to school inspection School Improvement Support Officers (SISO).

However, the difference in the supervision of the school as claimed by the finding is refuted by a study conducted by Hosani and Mohammed (2015) in the sense that supervision is not a correlate to quality education. The finding

of Hosani and Mohammed also argued that managerial practice, as in the case of supervision in private schools, is a minute aspect of the teaching and learning process or education which forms part of ensuring the running of the school.

However, the study revealed a contradictory statement which indicated that "supervision leads to effective work output; hence, teachers' and students' output needs to be given special attention for the smooth running of the curricula." This statement clearly demonstrates that supervision, as most practiced by private schools, is an effective avenue for safeguarding the conduct and practice of teachers, students, and other school employees. In parallel, school heads who promote a positive learning climate by communicating instructional goals, establishing high expectations for teacher output, establishing an orderly learning environment with clear discipline expectations, and working to increase teacher commitment to the school have a higher chance of quality education delivery.

Hypothesis 2

H₀: There is no statistically significant difference in the quality of education in both public and private basic schools based on professional qualification of teachers.

In order to test the second hypothesis, the second item (professional qualification) on the EQQ was used to compare the difference in the quality of education among the schools. One-way analysis of variance was used to test the hypothesis as presented in Table 10.

Table 10: Summary of F-test, Means, SD of Teachers' Professional Qualification and Practice

Professional Qualification	N	Mean	SD	Df	F	p	r
PhD Degree	1	123.00		3	4.04	.003	0.06
Master's Degree	23	119.26	20.89				
Bachelor Degree	121	124.62	19.72				
Diploma	87	132.91	18.79				
Others	8	138.00	10.04				
Total	240	127.55	19.76				

Source: Field survey (2021). * $p < 0.05$ (2-tailed significant result)

One-way between-groups analysis of variance was conducted to explore the difference in the quality of education based on professional qualification. Preliminary statistics were conducted to ensure that no assumption for one-way analysis of variance was violated. The respondents were divided into 5 groups according to their professional qualifications (PhD, Master's Degree, Bachelor's Degree, Diploma, and others). There was no statistically significant difference at the $p.05$ level in the scores for the five professional qualification groups. $f(3, 122) = 4.04, p = .06$. Since there is no statistically significant difference between the professional qualifications of the teachers and the quality of education, the post-hoc analysis was not calculated.

Therefore, there were no grounds on which the effect size using the eta squared could have been calculated to establish the amount of difference that exists between the variables. This means that there is no difference in the quality of education irrespective of the professional qualification of the

teachers in both private and public schools. The study failed to reject the alternative hypothesis, which states that "There is no statistically significant difference in the quality of education in both public and private basic schools based on the professional qualification of teachers." This result is interpreted to mean that teachers with higher degrees like Master of Education or Master of Philosophy, who may be regarded as more experienced and with deep pedagogical knowledge, do not differ in how they exhibit such pedagogical skills such as in teaching, assessment, and supervision. Therefore, irrespective of the qualification of the teacher, it does not influence the quality of activities such as the availability of resources and the adaptation of appropriate teaching methods as well as the supervision of teaching and learning activities.

It is, however, surprising to see no difference in the scores as almost all public schools in the study area have professionally trained teachers managing the schools and teaching various subjects. This is so because it is expected, as indicated by Kporyi (2020), that the professional qualification of a teacher influences his instructional output. Therefore, those with higher degrees or qualified teacher certificates should ensure better education delivery than those with lower qualifications, as mostly found in private schools. Therefore, there is a discrepancy, according to available literature, between the quality of education in public and private schools, though the study found otherwise.

The purpose of the second hypothesis (Ho: There is no statistically significant difference in the quality of education in both public and private basic schools based on the professional qualification of teachers) is to investigate how the professional qualification of a teacher affects his/her mastery of teaching and the demonstration of quality teaching skills. One-way analysis of variance was

compared for the first degree, postgraduate degree, and other certificates other than the first two. Their comparison with the views of the teachers showed that there was no difference in how much they displayed their competencies for achieving quality education. The result is attributed to the notion that teachers with higher degrees who are expected by all standards coupled with field experience to exhibit higher professionalism, leading to significant positive change in the quality of delivery, especially in public schools, might have had less mastery in the area of adaptation of teaching methods and supervision. Hence, their output may be the same as that of teachers with lower qualifications like bachelor's degrees and diplomas or less or with those without any form of teacher education as usually found in private schools.

The result agrees with the findings of available literature such as Peple and Esu (2017) and Bello (2016). The study of Peple and Esu investigated the influence teacher qualification has on their effectiveness in teaching and learning and students' academic achievement. The result of Peple and Esu (2017), just like the current study, found that there was no difference in the effectiveness of teachers as a component of quality education and the qualification of the teachers. The similarity in the results suggests that they both assessed quality education and similar samples of teachers were used for the study. However, there is a jurisdiction difference as the current study was conducted in the Sagnarigu Municipality, Northern Region, Ghana, while the study of Peple and Esu (2017) was conducted in the Rivers State of Nigeria.

The current study also agrees with the result of Bello (2016), who examined the impact of the quality of education as dependent on the quality of teachers as they progress from nursery to university level. The findings of the two

studies therefore suggest that quality education, though dependent on the quality and training of teachers, has not been established as the respondents disagreed that quality teachers influence teaching and learning, thereby reducing the quality of education and the academic achievement of students.

More so, the study disagreed with available literature because Bello (2016) and Pepple and Esu (2017) both believed that the quality of education is not dependent on the qualification and certification of teachers.

It was also established that, while other studies found a difference between the quality of teaching and education, Rowe (2017) did not. Rowe revealed in his study that the accomplishment of any laudable goals of education, as the inculcation of worthy values, depends on the quality of teachers' inputs, which in turn depends on the nature and extent of teacher training. The findings of Rowe (2017) revealed that most public-school teachers are competent in the use of enquiry and demonstration teaching skills as a result of their qualifications. However, they have not been able to apply the skills obtained in their teaching, assessment and monitoring. This means that although the teachers might have obtained higher degrees, that does not translate into how much impact they make in the classroom for the purpose of the smooth implementation of the curriculum.

Furthermore, the current finding disagrees with the National Policy on Education (2015), which indicates that the quality of education is presumed appropriate or effective when the quality of the teachers blends with the educational structure and demands of society as well as the ability of its products (students) to identify and solve societal problems to the benefit of individuals and society at large. Therefore, the quality of the teacher in terms

of qualification (professional) affects the output of teaching and learning and the achievement of students as a correlate to the quality of education.

Chapter Summary

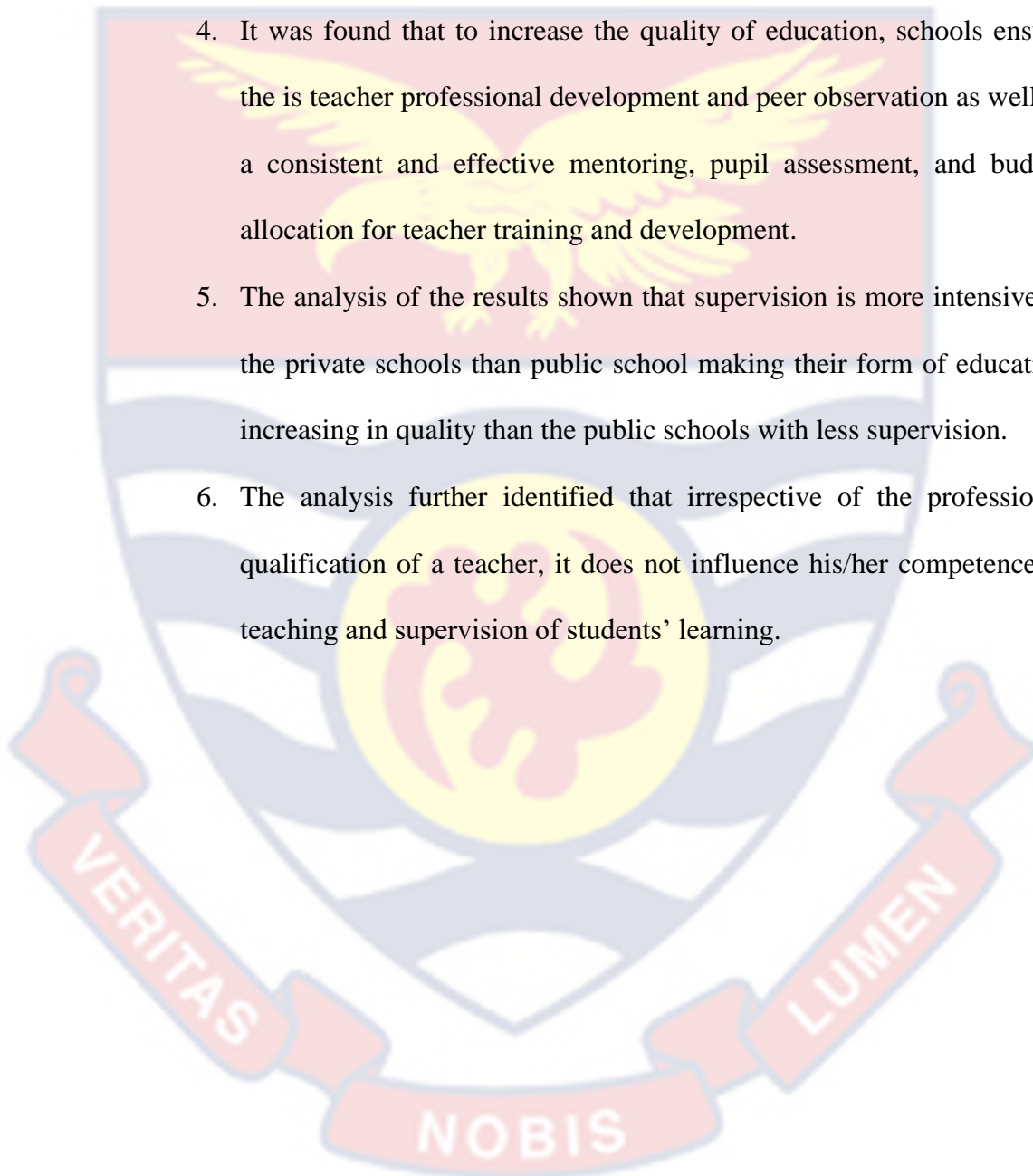
The findings observed from the study presuppose that the Context, Input, Process, and Product (CIPP) model is effective for evaluation of the quality of education. The CIPP model indicates that the quality of education stems from the nature or context in which education takes place, including the availability of teaching and learning materials, the adaptation of teaching approaches and methods, the supervisory practices, and the academic achievement of students.

The demographic distribution of the respondents was determined using descriptive statistics such as frequency counts and simple percentage, while mean and standard deviation were used to analyze research questions 1, 2, 3, and 4. Again, inferential statistics (independent sample t-test and ANOVA) were employed to test hypotheses 1 and 2 respectively. Major findings that emerged from the analysis include:

1. The analysis and discussion of the findings revealed that majority of the respondents disagreed that in their schools, there are sufficient teaching and learning materials such as textbooks and other resources for the implementation of the curriculum.
2. The discussion, expository, reading assignments, inquiry, discovery, lecture, projects, field trip and comparative learning were found to be the teaching methods often used by the teachers.
3. In terms of supervision as a process for quality education, the chapter identified that the headteachers exhibit strong abilities in instructional

supervision, co-curricular activities monitoring, records and registers keeping, promoting conducive school environment, management instructional time, and resources, coaching and organisation of staff developmental.

4. It was found that to increase the quality of education, schools ensure the is teacher professional development and peer observation as well as a consistent and effective mentoring, pupil assessment, and budget allocation for teacher training and development.
5. The analysis of the results shown that supervision is more intensive in the private schools than public school making their form of education increasing in quality than the public schools with less supervision.
6. The analysis further identified that irrespective of the professional qualification of a teacher, it does not influence his/her competence in teaching and supervision of students' learning.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter comprises sections such as the summary of the study, including key findings, conclusions, recommendations, and suggestions for further studies.

Summary of the Study

The main purpose of this study was to assess the quality of education and the academic achievement of students in public and private basic schools in the Sagnarigu Municipality of the Northern Region, Ghana. The following research objectives guided the study:

1. Identify the availability and adequacy of teaching and learning resources among public and private basic schools in Sagnarigu Municipality.
2. Find out the teaching methods adopted by teachers in the Sagnarigu Municipality for teaching and learning.
3. Compare the supervisory practices of head teachers of private and public basic schools in Sagnarigu Municipality.
4. Find out some measures that can be adopted to enhance the quality of basic school education in the Sagnarigu Municipality.
5. Determine the difference in the supervisory practices of head teachers of private and public basic schools in the Sagnarigu Municipality.
6. Differentiate the quality of education in public and private basic schools based on professional qualification of teachers in the Sagnarigu Municipality.

The theoretical, conceptual, and empirical reviews were based on the objectives of the study. Specifically, the study was identified in the CIPP model. The cross-sectional survey research design using the quantitative research approach was adopted for this study within 11 circuits with a population of 1065 teachers and a sample size of 240 selected using the census sampling technique. The Educational Quality Questionnaire (EQQ) was used to collect the relevant data and research questions 1, 2, 3, and 4 were descriptively analysed using mean and standard deviation. Hypotheses 1 and 2 were tested using an independent sample t-test and an ANOVA, respectively.

Major Findings of the Study

In accordance with the analysis and discussion presented in chapter four, the major findings are presented on the research questions and hypotheses.

Research objective one identified the availability and adequacy of teaching and learning resources among public and private basic schools in Sagnarigu Municipality. The key findings that emerged were:

1. There is the availability and sufficiency of supporting staff and chairs for teachers and students. However, only a few respondents agreed that there were available and functioning teaching and learning resources.
2. Public schools have enough staff and chairs that can help the school implement the curricula as designed to meet the needs of students, society, and the country as a whole. However, the private schools disagreed that they have sufficient teaching and learning resources for smooth implementation of the curriculum. Hence, they lack sufficient human resources as a basis for quality education.

On the second objective, the study examined the kinds of teaching methods that basic school teachers in the Sagnarigu Municipality adopted for their lessons. The major findings revealed that:

1. Both public and private basic school teachers used diverse teaching methods such as discussion, expository, assignments, inquiries, discovery, lectures, projects, field trips, and comparative learning for teaching.
2. Public school teachers adopted and used appropriate teaching and learning methods aimed at increasing the quality of teacher output and students' academic achievement compared to the private basic schools.
3. Both public and private teachers involved themselves in all teaching and learning activities that helped to translate the theory behind the use of the teaching methods they adopted for their lessons. However, the private school teachers revealed that there are fewer teaching support systems available; hence, they are not able to blend the teaching methods to meet the needs of students. As a result, public schools are better prepared to use student-centred teaching methods.

With regards to the third objective, the supervisory practices of the head teachers in the private and public basic schools were compared. The results revealed that:

1. Instructive supervision, provision of teaching and learning resources, coaching, and staff development are supervisory practices that are ensured in private schools while less of them are practiced in public schools.

2. The main supervisory practices that private school principals ensure in the administration of their schools are co-curricular activity monitoring, records and register keeping, the promotion of a conducive school environment, and the management of instructional time.

Concerning the fourth objective, the study assessed the measures that were adopted by the teachers to enhance the quality of basic school education.

Among other things, the study found out that:

1. In order to improve the quality of basic education in the Sagnarigu Municipality, teachers are supposed to be involved in the intensification of professional development, peer observation, mentoring, and pupil assessment; the allocation of a sufficient budget for teacher training and development; effective teacher supervision and monitoring; and technological advancement of teachers for an effective pedagogy.
2. Both private and public basic school headteachers should be resourced enough to assist teachers in the course of teaching and learning.

The fifth objective of the study determined the difference (private and public) concerning the supervisory practices of the basic school headteachers. The key findings that emerged were:

1. A statistically significant difference ($p=.019$) between the supervisory practice of the private and public basic school headteachers with respect to the quality of education delivered.
2. Although there is a difference between the supervisory practices of the headteachers, the degree of the difference is small (0.03%).

The final objective sought to find the difference between public and private basic schools in terms of the qualifications of the teachers and the quality of education delivered. The result revealed that:

1. There is no statistically significant difference ($p=.06$) between the professional qualification of private and public basic school teachers and the quality of basic school education in the Sagnarigu Municipality.
2. There were no discrepancies in the competencies of the teachers in terms of teaching, assessment, and supervision aimed at increasing the output of teaching and learning.
3. Teachers with a higher degree, who are expected by all standards and field experience to exhibit higher professionalism, resulting in a significant positive change in the quality delivered, have fewer command for the adaptation and use of teaching methods and supervisory practices, particularly in public schools

Conclusion

The study convincingly established that, while some teaching and learning resources are available for use among basic school teachers and students in the Sagnarigu Municipality, their adequacy as a measure of educational quality is insufficient. As a result, when the standard or quality of education is measured on the availability and adequacy of teaching and learning resources as a variable, there will be less or minimal work output by teachers and poor academic achievement of students. This in turn will lead to a weaker education, especially among the study sample as the core implementers of the curriculum and the foundation of the educational ladder.

Concerning the kinds of teaching methods adopted by the teachers, the researcher concludes that since teachers in public and private basic schools in the Sagnarigu Municipality use the same or similar teaching methods in their delivery, it is expected that the course of teaching and learning will be of a high standard. However, in the case where public or private school teachers adopt and use more effective teaching methods in line with the characteristics of their students, the quality of education (output/product) will be higher to meet the 21st century educational standards. It is further concluded that teachers who use more effective and goal-oriented teaching methods stand the chance of increasing the zeal of their students as the output of education (refer to theoretical review). So, since both private and public-school teachers examined in the study indicated that government school teachers have more opportunities in terms of their understanding and use of teaching methods, failure by stakeholders to ensure that private teachers get enough is likely to result in an educational deficiency.

Finally, the researcher concludes that since the study found no difference between private and public schools in terms of supervisory practices, it is expected that the educational quality will be the same. Consequently, there is a need for both public and private school teachers to involve themselves in Continuous Professional Development (CPD) programmes/activities that will increase their level of competence, especially in the delivery of lessons and supervision. However, the inability of teachers with higher degrees to effectively teach and promote learning will decrease the pace at which schools strive for perfection.

Recommendations

In accordance with the findings and conclusions drawn in the study, the following recommendations were made:

1. The GES and the association of private schools should ensure that teachers are sufficiently resourced to effectively teach and promote the quality of education in the municipality and Ghana at large.
2. The MoE should, as a matter of standardisation, inspect and ensure that every basic school has sufficient teaching and learning resources geared towards ensuring a more conclusive education for all.
3. The National Council for Curriculum and Assessment (NaCCA) and the National Teaching Council (NTC) of the Ghana Education Service should intensively organise workshops and seminars for teachers to update their knowledge and skills on the best forms of teaching methods that will help them to meet the goals and aspirations of their students and society at large.

Additionally, the fourth objective found the measures that were adopted to enhance the quality of basic school education in the Sagnarigu Municipality and the researcher recommends that;

4. The GES, NaCCA, and the teacher unions should collaborate and facilitate the adaptation of effective supervisory practices, instructional activities, and assessment processes of the basic schools to achieve quality. In so doing, the teachers will appreciate the performance of their headteachers and capitalise on that to exhibit effective teaching competence.

5. The MoE, through the GES, should supervise and monitor effectively the activities of the school heads so that the process of the curriculum implementation will be as planned using the CIPP model.
6. Every headteacher should be required to participate in CPD programs aimed at assisting them in attaining best educational practices.

Suggestions for Further Research

To further encompass literature on the quality of education between private and public schools, the following recommendations are made for further studies:

1. Further studies can be conducted on public schools in the Sagnarigu Municipality to examine the impact on the academic achievement of students.
2. The study used a close-ended questionnaire for the data collection. However, other data collection tools such as open-ended questionnaires and other related approaches could be used for further analysis of the same or similar type of study in the future.

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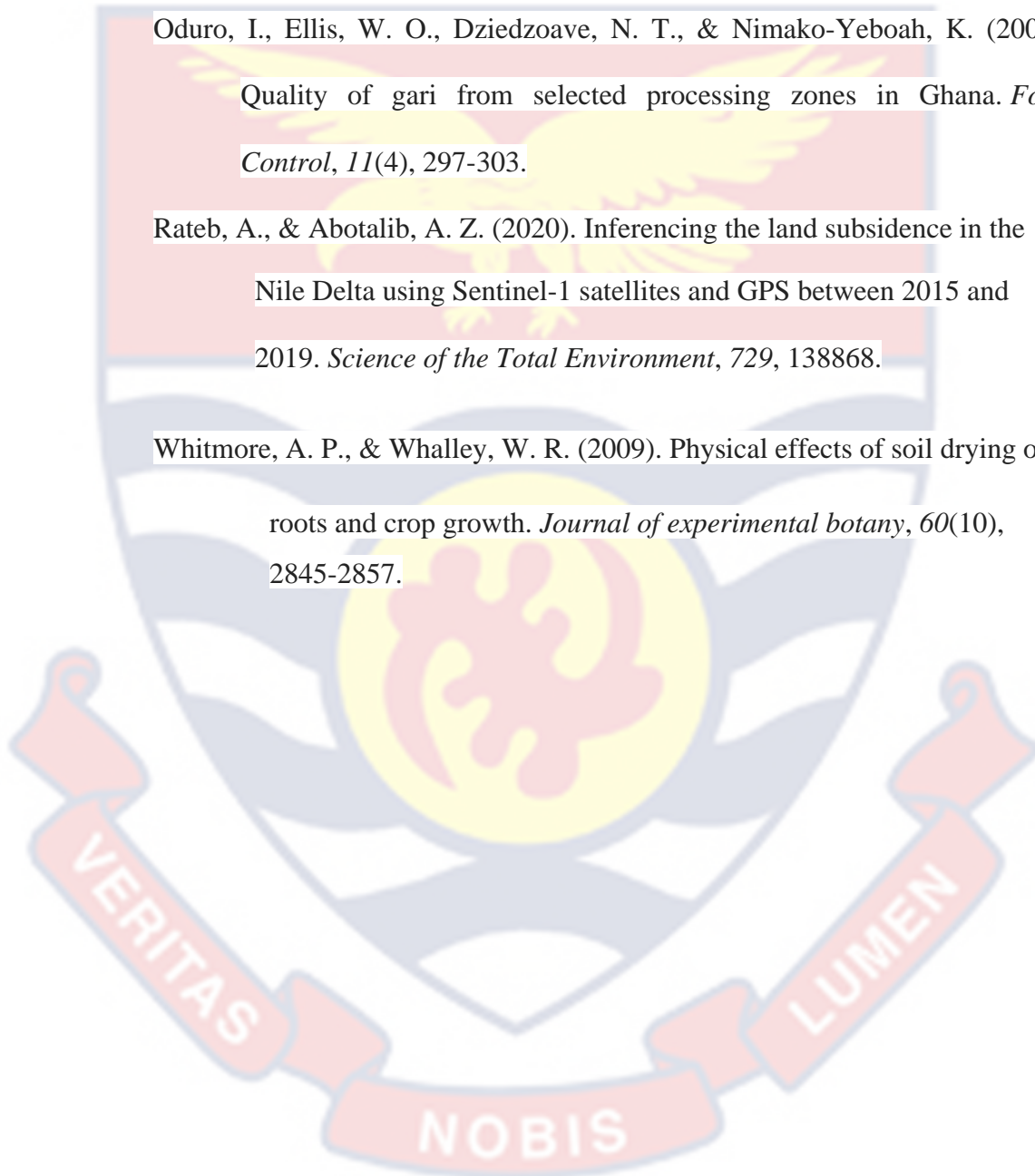
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APPENDIXES

APPENDIX A

QUESTIONNAIRE ON THE QUALITY OF EDUCATION

Dear Respondent,

I am conducting research on *the quality of education between public and private schools in the Sagnarigu Municipality*. This questionnaire seeks to elicit the views of teachers and head teachers on how they feel the standard of education is. I humbly request you to participate in this survey to provide information that will help me complete this research. Participation in the survey is voluntary and confidentiality is assured. No individual data will be made public. Please **do not** write your name nor school on this questionnaire and respond to the statements by a tick (✓) in the corresponding box on the right side of the statements that best applies to you.

SECTION A: DEMOGRAPHIC INFORMATION

1. What is your sex?: Male () Female ()
2. What is your professional qualification? Degree () Med ()
M.Phil. () others.....
3. Do you teach in public or private school? Public () Private ()

Please respond to the statements below using the scale of: Strongly Disagree (1), Disagree (2), Agree (3) and Strongly Agree (4)

SECTION B: AVAILABILITY AND ADEQUACY OF TEACHING AND LEARNING RESOURCES					
s/n	Statement	1	2	3	4
4	There are enough spacious classrooms for teaching, learning and examination in my school.				
5	Classrooms are adequately furnished for the comfort of pupils and teachers in my school.				
6	There exist a functional and well-furnished guidance and counselling coordinator's office in my school.				
7	There exists a well-stocked library for pupils and teachers to do further reading.				
8	My study school has health official for pupils and teachers who provide first aid for emergency cases.				
9	My school has enough teaching and supporting staff for smooth running of the school.				
10	We have all textbooks and other related materials for all subjects in our school.				
11	Most of our classrooms have sufficient chairs for both pupils and teachers.				
SECTION C: TEACHING METHODS ADOPTED BY TEACHERS					
s/n	Statement	1	2	3	4
12	I use the discussion method.				
13	I use the expository method.				
14	I ask students to read their modules at home and				

	present what they read during face to face.				
15	I use the inquiry method.				
16	I use the discovery method.				
17	I use the role-play method.				
18	I use the lecture method.				
19	Projects are often given to students.				
20	I use a field trip as a teaching strategy				
21	I use Comparative learning				
SECTION D: SUPERVISORY PRACTICE OF HEADTEACHERS					
s/n	Statement	1	2	3	4
22	Ensure that the classroom priorities of teachers are consistent with the goals and direction of the goal				
23	Review student work products when evaluating classroom instruction				
24	Conduct informal observations in classrooms on a regular basis				
25	Point out specific strengths in teachers instructional practices in post-observation feedback				
26	Point out specific weakness in teachers' instructional practices in post-observation feedback				
27	Make clear who is responsible for coordinating the curriculum across grade levels				
28	Draw upon the results of school-wide testing when making curricular decisions				

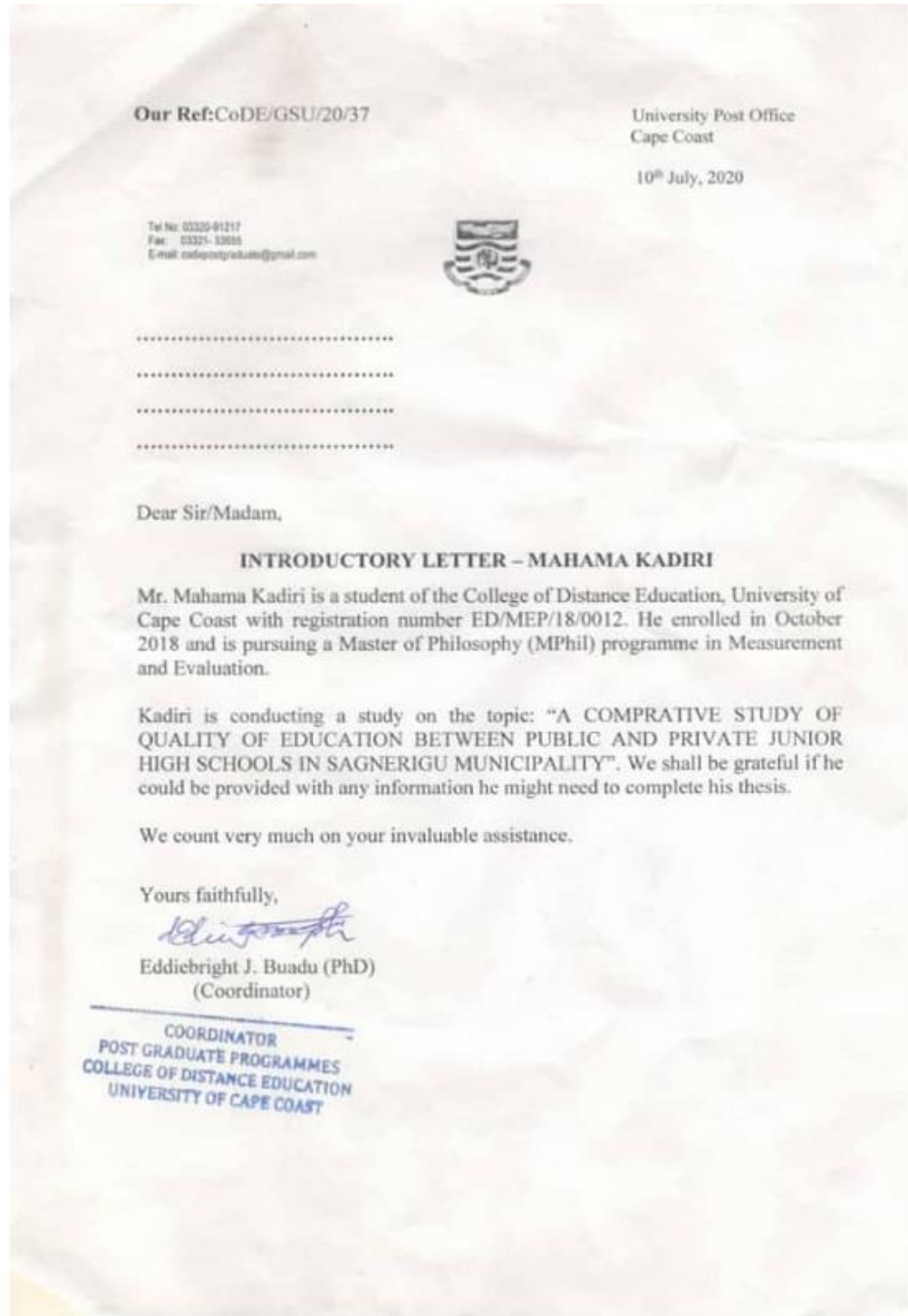
29	Monitor the classroom curriculum to see that it covers the school's curricular decisions				
30	Assess the overlap between the school's curricular objectives and the school's achievement tests				
31	Participate actively in the review of curricular materials				
32	Meet individually with teachers to discuss student progress				
33	Discuss academic performance results with the staff				
34	Use tests and other performance measure to assess students' progress				
35	Inform teachers of the school's performance results in written form				
36	Reinforce superior performance by teachers in staff meetings, newsletters, and/or memos				
37	Compliment teachers privately for their efforts or performance				
38	Acknowledge teachers' exceptional performance by writing memos for their personal files				
39	Reward special efforts by teachers with opportunities for professional recognition				
40	Create professional growth opportunities for teachers as a reward for special contributions to the school				

SECTION E: MEASURES TO ENHANCE THE QUALITY OF BASIC SCHOOL EDUCATION					
s/n	Statement	1	2	3	4
41	The school should provide time for teachers for professional development				
42	The school should organise staff development activities for teacher competence in areas such as peer observation, mentoring and pupil's assessment.				
43	GES should collect and circulates information on professional development programmes in the various school.				
44	MoE and GES should have a separate budget for the professional development of teachers.				
45	There should be periodic workshops on subject matter, methodology and other education related topics.				
46	Education stakeholders have to pay periodic visits to the schools.				
47	Teachers should make teaching and learning more fun than a rigorous schooling.				
48	There should be introduction and well-equipped technology for teaching and learning.				

Thank you.

APPENDIX B

INTRODUCTORY LETTER



Scanned with CamScanner

APPENDIX C

PRELIMINARY ANALYSIS

Reliability test

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.853	.942	46

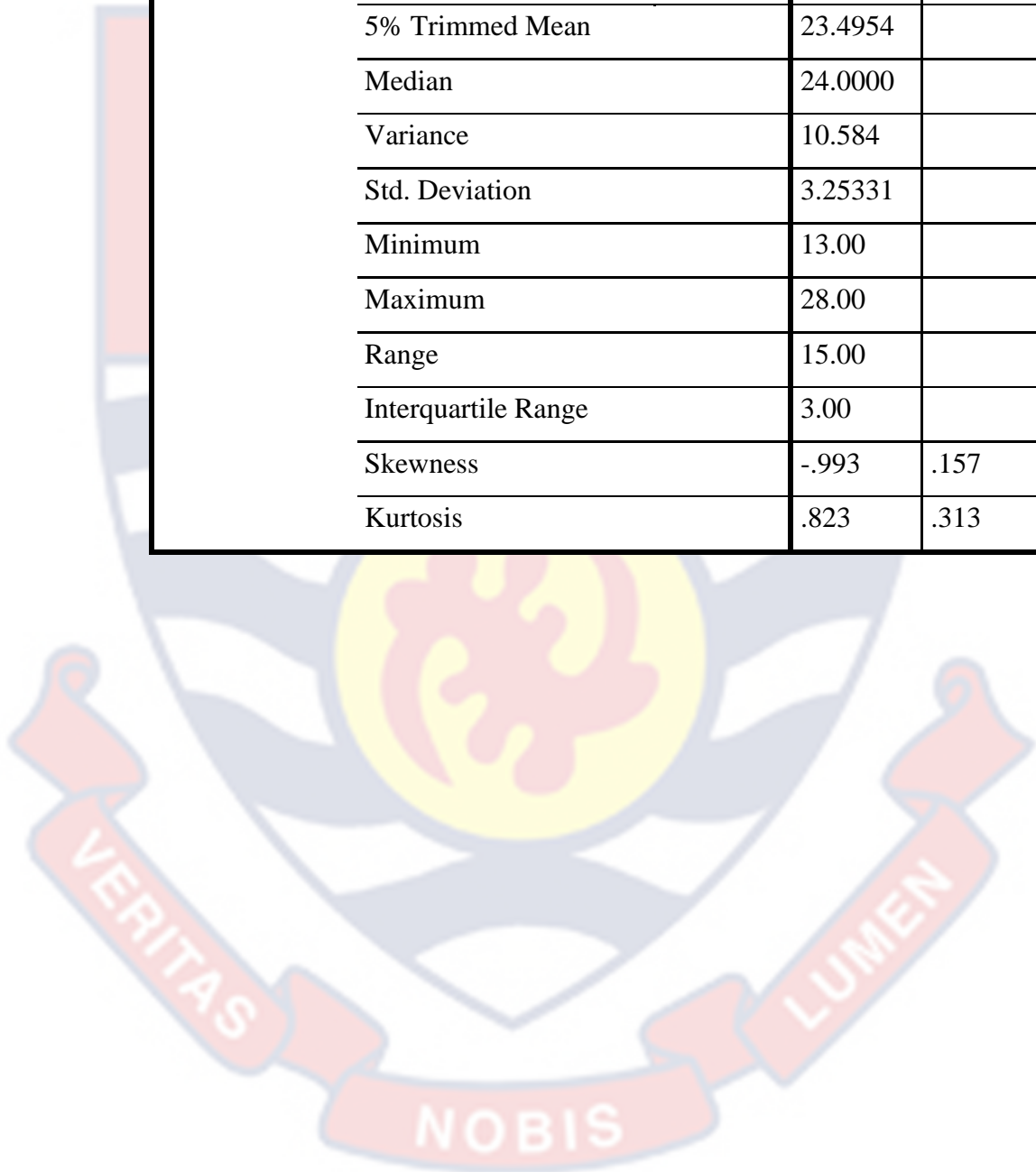
Normality test

Descriptives

	Statistic	Std. Error
Total_aviability Mean	16.4333	.26849
95% Confidence Interval for Mean	Lower Bound Upper Bound	
	15.9044 16.9622	
5% Trimmed Mean	16.0926	
Median	15.0000	
Variance	17.301	
Std. Deviation	4.15944	
Minimum	9.00	
Maximum	30.00	
Range	21.00	
Interquartile Range	6.00	

	Skewness	1.188	.157
	Kurtosis	1.162	.313
Total_teaching_	Mean	24.6458	.33290
methods	95% Confidence Lower Interval for Mean Bound	23.9900	
	Upper Bound	25.3016	
	5% Trimmed Mean	24.7639	
	Median	25.0000	
	Variance	26.598	
	Std. Deviation	5.15731	
	Minimum	12.00	
	Maximum	57.00	
	Range	45.00	
	Interquartile Range	5.00	
	Skewness	.356	.157
	Kurtosis	5.809	.313
Total_superviso	Mean	57.4458	.65567
ry_practices	95% Confidence Lower Interval for Mean Bound	56.1542	
	Upper Bound	58.7375	
	5% Trimmed Mean	57.4769	
	Median	57.0000	
	Variance	103.177	
	Std. Deviation	10.15761	
	Minimum	35.00	
	Maximum	101.00	
	Range	66.00	
	Interquartile Range	16.00	
	Skewness	.085	.157
	Kurtosis	.325	.313

total_measures	Mean	23.2917	.21000
	95% Confidence Interval for Mean	Lower Bound 22.8780	
		Upper Bound 23.7054	
	5% Trimmed Mean	23.4954	
	Median	24.0000	
	Variance	10.584	
	Std. Deviation	3.25331	
	Minimum	13.00	
	Maximum	28.00	
	Range	15.00	
	Interquartile Range	3.00	
	Skewness	-.993	.157
	Kurtosis	.823	.313



Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Total_aviability	.168	240	.000	.894	240	.000
Total_teaching_methods	.133	240	.000	.896	240	.000
Total_supervisory_practices	.081	240	.001	.964	240	.000
total_measures	.190	240	.000	.916	240	.000

a. Lilliefors Significance Correction

Independent Samples Test result

Independent Samples Test

		Levene's Test for		t-test for Equality of Means						
		Equality of		t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
		Variances							F	Sig.
Total_	Equal	1.867	.173	-2.372	238	.019	-3.91282	1.64989	-7.16308	-.66256
supervisorypractice	variances assumed			-2.597	76.402	.011	-3.91282	1.50678	-6.91358	-.91206
s	Equal variances not assumed									



ANOVA test

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Total_aviability	Between Groups	621.989	4	155.497	10.402	.000
	Within Groups	3512.944	235	14.949		
	Total	4134.933	239			
Total_teaching_methods	Between Groups	85.990	4	21.497	.806	.523
	Within Groups	6270.906	235	26.685		
	Total	6356.896	239			
Total_supervisory_practices	Between Groups	1511.057	4	377.764	3.835	.005
	Within Groups	23148.239	235	98.503		
	Total	24659.296	239			

ANOVA



Quality_Education

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6011.188	4	1502.797	4.043	.003
Within Groups	87344.212	235	371.677		
Total	93355.400	239			



APPENDIX D

INSTITUTIONAL REVIEW BOARD (IRB) APPROVAL

UNIVERSITY OF CAPE COAST COLLEGE OF EDUCATION STUDIES ETHICAL REVIEW BOARD		UNIVERSITY POST OFFICE CAPE COAST, GHANA
Our Ref: <u>CES-ERB/UCC.edu/15/21-106</u> Your Ref:		Date: <u>16th September, 2021</u>
<p style="text-align: right;">Dear Sir/Madam,</p> <p style="text-align: center;"><u>ETHICAL REQUIREMENTS CLEARANCE FOR RESEARCH STUDY</u></p> <p>The bearer, <u>Mahamir Kadir</u>, Reg. No. <u>ED/060/18/0012</u> is <u>M.Phil. /Ph.D.</u> student in the Department of <u>Education and</u> <u>Psychology</u> in the College of Education Studie University of Cape Coast, Cape Coast, Ghana. He /She wishes to undertake a research study on the topic:</p> <p style="text-align: center;"><u>A comparative study of the quality of education</u> <u>in public and private junior high schools</u> <u>in the Saganigwa Municipality.</u></p> <p>The Ethical Review Board (ERB) of the College of Education Studies (CES) has assessed his/her proposal and confirm that the proposal satisfies the College's ethical requirements for the conduct of the study.</p> <p>In view of the above, the researcher has been cleared and given approval to commence his/her study. The ERB would be grateful if you would give him/her the necessary assistance to facilitate the conduct of the said research.</p> <p>Thank you. Yours faithfully,</p> <div style="text-align: center;">  Prof. Linda Dzama Forde (Secretary, CES-ERB) </div>		
<p><u>Chairman, CES-ERB</u> Prof. J. A. Omotosho jomotosho@ucc.edu.gh 02443784739</p> <p><u>Vice-Chairman, CES-ERB</u> Prof. K. Edjah kedjah@ucc.edu.gh 0244742357</p> <p><u>Secretary, CES-ERB</u> Prof. Linda Dzama Forde lforde@ucc.edu.gh 0244786680</p>		