

UNIVERSITY OF EDUCATION, WINNEBA

**FACTORS INFLUENCING TEACHERS' USE OF ASSESSMENT IN THE
IMPLEMENTATION OF THE STANDARDS-BASED CURRICULUM**



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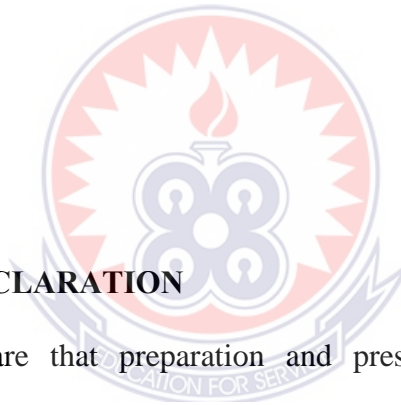
DECLARATION

STUDENT'S DECLARATION

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

SIGNATURE:

DATE



SUPERVISOR'S DECLARATION

I hereby declare that preparation and presentation of this work was supervised in accordance with the guidelines for supervision of thesis as laid down by the University of Education, Winneba.

Paul Kobina Effrim (PhD) (Supervisor)

SIGNATURE:

DATE

DEDICATION

To my brothers and sister, my friends and my head teacher



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GLOSSARY

AaL	Assessment as Learning
AfL	Assessment for Learning
AoL	Assessment of Learning
CCEA	Council for the Curriculum Examination and Assessment
CPD	Continuous Professional Development
GES	Ghana Education Service
MoE	Ministry of Education
NaCCA	National Council for Curriculum and Assessment
OECD	Organization for Economic Co-operation and Development
T-TEL	Transforming Teaching, Education & Learning
ZPD	Zone of Proximal Development



ABSTRACT

The purpose of the study was to look at factors influencing teachers' use of assessment in the implementation of the Standards-based Curriculum in the Ayensuano District, Ghana. The study adopted the cross-sectional survey design located in the quantitative research approach. The study was underpinned by the positivist research paradigm. Data was gathered through a questionnaire. The simple random sampling technique was used to aid in selecting 216 respondents for the data collection. The data were analyzed through the computation of descriptive statistics such as frequencies, percentages, means and standard deviation and the Chi-square statistics using Stata. It emerged from the findings that public primary school teachers hold a nuanced perspective on assessment, emphasizing its role beyond simply improving learning outcomes. The study also found out that public primary school teachers in the Ayensuano District possess a strong understanding of the concept of assessment; yet, they face challenges when attempting to incorporate it into the Standards-based curriculum. Furthermore, the study revealed that public primary school teachers predominantly employ a variety of assessment strategies to enhance their assessment practices. These strategies encompass the principles of Assessment of Learning (AoL), Assessment for Learning (AfL), and Assessment as Learning (AaL), aligning with the guidelines established in the standards-based curriculum. The study again found that teachers use of assessment was impeded by curriculum content overload, heightened pressure to cover the entire curriculum in preparation for end-of-term and year examinations, insufficient support from policymakers, and a lack of essential learning and teaching resources. Lastly, the study revealed that male and female public primary school teachers hold distinct views or experiences in their use of assessment and both male and female teachers consistently use assessment strategies, with gender not significantly influencing them in the standards-based curriculum implementation. The study recommended that the district assembly and educational directorate adopt a collaborative approach to assessment practices, provide support and resources for teachers, ensure alignment with the Standards-based curriculum, and conduct regular training programmes for educators, emphasizing the need for integrated assessment approaches.

CHAPTER ONE

INTRODUCTION

1.0 Background to the Study

Education systems worldwide are continually evolving to meet the demands of the 21st century, and one significant shift is the adoption of Standards-Based Curricula (SBC) (Dahnial, 2021; Addai-Mununkum & Setordzi, 2023). The SBC emphasizes clearly defined learning objectives, outcomes, and assessments aligned with specific standards. This approach aims to enhance the quality and consistency of education by providing a framework for curriculum development and delivery (Boon, Johnson & Thompson, 2020). Scholars have established that Standards-based education not only defines what learners should know and be able to do but also necessitates a robust assessment system to gauge the attainment of these standards (Sharma, 2015; Herman, 2016).

In line with this Graber and Oh (2019) asserted that despite its potential benefits, successful curriculum implementation depends largely on the effective use of assessment by teachers. Summative assessments are being criticized more and more widely in the educational community worldwide for their detrimental effects that do not enhance learning and teaching and that they ought to be minimized (Kapambwe, 2010; Ishaq, Rana & Zin, 2020). The general discontent with summative assessment procedures has caused educators all over the world to focus more on integrated assessment approaches as a dependable learning and teaching tool for improving learners' academic performance (Looney, 201; Ishaq et al., 2020). Consequently, there is currently a strong push for the use of assessment for learning (AfL), assessment as learning (AaL), and assessment of learning (AoL)

methodologies and approaches in educational interventions, such as teacher professional development programmes and modifications to classroom instruction (Alonzo, 2016; Van der Nest, 2018; Park & Yin, 2023).

According to a number of studies, several countries and organizations are currently developing integrated assessment policies and programmes to encourage students to pursue lifelong learning (Brennan, 2018; Tan, Kwek, & Wong, 2020; Winkler, 2022). Assessments are created to support learners' learning as well as to evaluate it and not necessarily making judgment. In other words, assessments are not only intended to assess the standard which learners have reached but form an integral part of the curriculum and learning experience. Boud (2000) is of the view that instead of concentrating on the final product or results, assessments should now track learners' learning progress. Herman (2013) established that, in order to enhance learners' learning, assessment must be interwoven with instruction and concentrate on the learner's developmental characteristics rather than only being measurement-oriented. In a similar vein Bassaw, Bordoh and Eshun (2013) pointed out that, for instruction to be effective, teachers must continuously assess their students to get data about their learning and comprehension so that the curriculum can be modified. Bassaw et al (2014) argued that the traditional paper-and-pencil assessment method, which emphasises details, standards, and quick results, needs to be replaced by more sustainable methods that help teachers support students in becoming more active learners who not only manage their own learning but also assess themselves for life after the programme of study.

Due to this fact, the Ministry of Education (MoE) in collaboration with National Council for Curriculum and Assessment (NaCCA) developed the National Pre-tertiary Education Curriculum Framework which placed more emphasis on the

importance of assessment (i.e. assessment of, assessment for and assessment as learning) with the aim of producing learners who are problem solvers, have the ability to think critically and have both the confidence and competence to participate fully in the Ghanaian society as responsible local and global citizens. NaCCA consequently suggested a number of assessment techniques, including tests, exams, portfolios, projects, observations, peer and self-assessment, conferencing, use of success criteria, effective teacher questioning and the use of appropriate feedback, in order to evaluate learners' learning in Ghana. These strategies, according to Addai-Mununkum (2020), were meant to be applied at all phases of the learners' growth, in keeping with contemporary worldwide trends of how teachers incorporate assessment into the curriculum to enhance the learning of learners.

Despite the praiseworthy nature of these improvements, questions remain regarding the strategies being used by teachers to actually apply these assessments in Ghanaian classrooms (Oduro, 2015; Songnalle, 2019). This is due to the fact that, Addai-Mununkum (2020) in his study also found that per the objective-based curriculum, the assessment practices mainly focused on preparing learners to pass examinations which motivated facilitators to spend most of their instructional periods teaching to test. In a similar vein, Ababio and Dumba (2013) study found that among Ghanaian educators, pen-and-paper testing continues to be the most common continuous assessment method. According to Bassaw et al (2014) the belief among educators is that assessments must be completed with a standard paper and pencil in order to assign grades. Additionally, Oduro (2015) noted that classroom assessment has come to signify testing and that teachers in Ghana utilize a battery of tests to gauge their learners' development. Numerous researches have made a declaration that teachers in Ghana interpret integrated assessment as continual and frequent testing

because of a lack of knowledge (Hayford, 2008; Oduro, 2015, p. 92; Sundeme, 2019; Agbene, Atepor & Baidoo, 2023).

Scholars have suggested that a re-examination of the assessment strategies is necessary if Ghana is to transition to a knowledge-based society (Addai-Mununkum, 2020; Agbene, Atepor & Baidoo, 2023). Addai-Mununkum, (2020) has purported that, to better meet the challenges of the twenty-first century, education must be redesigned to foster critical thinking and problem-solving skills, communication and collaboration, creativity and imagination that will be required to change the culture and practices of traditional memory-based learning. According to Bennett (2015), education must transition from traditional assessment methods to integrated assessment, where teachers are encouraged to collect data on students' learning to guide instructional decisions, in order to successfully implement 21st-century learning. Bennett (2015) further indicated that for learning to be both successful and meaningful, teachers should encourage active learning, keep lines of communication open with students, and use integrated assessment approaches to give timely feedback. Amua-Sekyi (2016) explained that, assessment comprises all the experiences or activities learners and teachers goes through to gather data that can be used to effect a positive change in the learning process.

There are different approaches to assessments which have been highlighted in various studies. These approaches to assessments reflect three different focuses of learning conceptions depending on its goal, approach and duration. These are assessment for learning, assessment as learning and assessment of learning (Matovu & Zuairi, 2014; Berry, 2013; McMillan, 2015). Amua-Sekyi (2016) posited that assessment of learning is used to determine learners' level of achievement in a programme of study or how successfully a programme has performed and mostly, it's

administered at the end of a course or programme. Okyere et al. (2018) were also of the view that, assessment of learning emphasis on how the set learning outcome or goals have been successfully accomplished or achieved by the learner at the end of the instructional process. Assessment of learning focuses on gauging how much a learner has learned in order to verify their accomplishments or give them grades.

Assessment for learning is the process of seeking and interpreting evidence for use by learners and their teachers to decide learners' current progress in learning, how they have learnt and how teachers can assist them by providing ongoing information on their strengths and weaknesses (NaCCA, 2019). According to NaCCA (2019), the main idea behind the use of assessment for learning is to provide useful feedback to learners and teachers so as to enhance effective learning and teaching process. The ability of learners to reflect on their development in connection to personal and academic goals and assessment criteria is what Berry (2013) refers to as "assessment as learning". The strategies used in the three main assessment approaches includes setting learning targets and success criteria, the use of formative feedback, peer and self-assessment, classroom discussion, and analysis of test scores. These activities, along with the data sources gathered from learner-teacher interactions, are what set AoL, AaL, and AfL apart. They allow teachers to modify their lesson plans to better meet the needs of individual learners, giving those opportunities for deeper learning and activities to support struggling learners (Dessie, 2015).

Among the assessment methods used in Ghana are continuous assessments, which were included into the country's educational system in 1987(Asare, 2015), which in 2008 according to Awoniyi (2016) gave way to school-based assessment. It has been established that, when it comes to assessment, educators must make decisions about how best to meet the diverse learning needs of their learners, use their

judgement about what knowledge learners possess, and learn how to share decision-making about instruction and learning with parents, learners, and colleagues (Songnalle, 2019; NaCCA, 2019).

Various scholars have revealed that, in Ghana, most teachers have positive knowledge and attitude towards assessment, however; only few of them were reported to have actually initiated such practices during the implementation of the curriculum (Bassaw et al., 2014; Songnalle, 2019; Addai-Mununkum, 2020). Consequently, it is natural to wonder and ask questions, if Ghanaian educators who use assessment adhere to the necessary procedures and eventually incorporate the assessment results into their daily instructions as outlined in the Standards-based curriculum in order to enhance learners' learning? Taking into account the importance of assessment in improving learners' learning, instructional practices, and enhancing learner-teacher interactions in learning and teaching, researchers have emphasized the importance of researching the factors that influence teachers' use of assessment and how well they integrate assessment results into curriculum implementation in order to improve learners learning (Mouza, 2016; Thompson & William, 2017; Khairani & Quyen, 2017; Stronge, 2018).

The global research need for assessment integration into primary school instruction in Ghana calls for the investigation of factors influencing teachers to integrate assessment in their classrooms. There is evidence globally that teachers do not integrate assessment into their daily instruction (Hallinger, Heck & Murphy, 2014; Awoniyi, 2016; Thompson & Wiliam, 2017; Dunn & Mulvenon, 2019). Study conducted by Guskey and Link (2019) revealed that in classrooms, teachers used assessments primarily to assign grades. Apart from the influence of teachers' knowledge and skills as well as their perception on classroom assessment practices,

researchers have found that their demographic characteristics also influence their use of classroom assessment in the classroom (Adeyemi, 2010; Koloiki- Keaikitse, 2012; Alkharusi; 2011; Nandzo, 2021).

It was revealed in a study conducted in Ghana that the majority of Ghanaian teachers have a difficult time using peer or self-assessment and therefore grade their students' work instead (Ntiamoah Ntim, 2021; Amua-Sekyi, 2016). It is imperative to underscore that there is a high probability of these global challenges, particularly among public primary school teachers, existing in Ghana. In accordance with the use of integrated assessment approaches in instruction, this study seeks to investigate the factors influencing public primary school teachers' utilization of assessment in the context of the Standards-Based Curriculum in the Ayensuano District in the Eastern Region of Ghana.

1.1 Statement of the Problem

The world's educational systems have changed dramatically, with many nations implementing standards-based curricula to improve student learning and teacher effectiveness (Alhashmi et al., 2022; Miller, 2023). In the context of Ghana, the implementation of a standards-based curriculum represents a pivotal shift in educational strategies. Nevenglosky (2018) asserted that, effective assessment use by teachers is a crucial aspect of successful curriculum implementation.

However, despite the recognition of assessment's importance, various factors influence teachers' utilization of assessment tools, impacting the successful execution of standards-based curricula (Lund & Veal, 2013; Sharma, 2015; Gogerty, 2016). The researcher, with 12 years of teaching experience in Ghana's public basic schools, found that most teachers, particularly in the Ayensuano district, fail to effectively incorporate assessment into daily instruction. Class tests are typically administered by

teachers using paper and pencil, and the results are added to the end-of-term examination results so that teachers can assign grades to their learners. In light of this, it seems that the teachers do not understand the guidelines for assessment as outlined in the Standards-based Curriculum introduced by the Ghanaian education system in 2019 for basic schools. To determine learners' responses to instruction, teachers are supposed to use multiple assessment strategies to identify the strengths and weaknesses of learners (Agbene et al., 2023; Addai-Mununkum, 2020).

Through personal interaction with teachers in the Ayensuano district, it came to light that these teachers do not incorporate assessment into their instruction but only use summative assessment (AoL) all the time, and even when formative assessments (AfL and AaL) appear, they contradict the reasons for their use. It has been claimed by several scholars that integrated assessment approaches (AoL, AfL, and AaL) improve learners' academic performance and help them bridge the gap between their learning and their academic expectations (Chen, et al., 2018; Lam, 2020; Oo, 2020; Abbasian, Ghorbanpour & Mohseny, 2021). The most common method of evaluating learners' learning in Ghana's public primary schools continues to be tests (Amoaddai et al., 2019; Angrist et al., 2021; Bordoh et al., 2021). Similarly, Songnalle (2019) showed that current assessment practices do not provide accurate estimates of students' learning as a result of the use of tests.

There is considerable confusion among educators regarding the true meaning of integrating AoL, AfL and AaL, in instruction as suggested by Lubbe (2020). The concept and use of assessment as outlined in the Standards-based curriculum are unclear among Ghana's public primary school teachers, particularly in the Ayensuano district. Studies worldwide have indicated that teachers do not seem to comprehend the integrated assessment approach and its application in instruction. This

corroborates with a study by Bouchaib (2016) which revealed that teachers lack best practices in testing and assessment and have insufficient knowledge and abilities to accomplish assessments. Ng (2018) conducted a study on uncovering roles and obstacles of assessment for learning and assessment as learning in English language classrooms in Hong Kong. The study revealed that contextual factors largely hindering English teachers' implementation of the two assessment practices are attributable to lack of motivation to modify their existing assessment practices out of their conservative conceptualization of assessments, low metacognitive awareness as well as level of English proficiency of local students, and large class sizes in local classrooms.

Is it accurate to assume that Ghanaian teachers comprehend the assessment concept as defined in the Standards-based curriculum and how to put it into practice in their classrooms? Regretfully, assessment in the classroom is a challenge for the majority of instructors, according to research on assessment practices in most African nations (Kanjee, 2020; World Bank, 2013). Osman (2021) conducted a study in Ghana to examine the classroom assessment practices of basic school teachers and their demographic characteristics that influence their assessment practices in the Sissala East Municipality in the Upper West Region of Ghana. Findings from the study revealed that teachers mostly employ traditional assessment methods than alternative assessment tools due to the teachers' inadequate knowledge on the alternative assessment tools. Findings from the study again indicated that gender, age, assessment training, teaching experience and class teaching level impacted the teachers' use of assessment methods. It was recommended among other issues that regular in-service training in assessment be conducted for teachers for to be up-to-date

and also develop their skills and use of appropriate alternative classroom assessment practices.

Eunice et al. (2020) also conducted a study to evaluating the use of Assessment for learning strategy by basic school teachers in Ghana. The study found significant difference between demographic variables (such as teaching division, teaching experience and gender) and the use of assessment for learning strategy. Female teachers demonstrated greater skills with respect to providing interactive assessment that gives immediate feedback and direction to students than their male teacher counterparts. The study recommended for continuous professional development (PD) session to be introduced for basic school teachers by Ghana Education service on effective use of formative assessment. As part of his study of senior high school mathematics teachers' understanding of School-Based Assessment and its challenges in ten senior high schools in the Cape Coast Metropolis, Awoniyi (2016) discovered that the majority of teachers still did not understand School-Based assessment guidelines because they had not yet seen their students' test scores as a way to identify their strengths and weaknesses and to remediate them. In light of these findings, the researcher recommended that school-based assessment guidelines be used for the development of test items, for administration, for the scoring of the tests, and for the use of the results in enhancing student learning.

In this regard, Ghanaian teachers continue to face challenges in integrating assessment in their instruction. Based on this literature, Ghanaian teachers continue to experience difficulties in using formative evidence from students' learning to modify their instruction to facilitate classroom learning (Songnalle, 2019). Accordingly, Balial et al. (2019) suggested that further research be done on how educators use the information they obtain from students' assessment processes to guide their education.

This shows why this study should be conducted among public primary school teachers in Ghana, particularly in the Ayensuano district. An inappropriate effect on learners' learning could be caused by this inadequate knowledge and understanding. Thus, it is imperative to do research to increase the ability surrounding the elements that affect teachers' use of assessment as specified in the Standards-based curriculum.

It is currently unknown, as far as the researcher is aware, whether or not teachers in public primary schools in Ayensuano district of Ghana integrate assessment effectively in their daily instruction to enhance learners' learning because of the variables influencing their use. In light of this inadequate comprehension and application of integrated assessment strategies, it was suggested that further research be done on the variables influencing teachers' assessment-related practices in order to strengthen their grasp of this area (Bonner, Chen & Torres Rivera, 2018; Moges, 2018; Baah-Duodu et al., 2020; Enu, 2021). Apart from the research gap identified, a careful analysis of literature has underscored that numerous studies have been conducted on factors influencing basic school teachers use of assessment in the western world but very limited of these studies have been conducted in Ghana specifically, with regards to assessment as outlined in the Standards-based curriculum (Nandzo, 2019; Baidoo-Anu & DeLuca, 2023; Baidoo-Anu, 2023). Furthermore, conflicting results on teachers' use of assessment by gender in implementing the Standards-based curriculum are shown by pertinent literature in Ghana (Kwan, 2019; Songnalle, 2019; Nandzo, 2021, Kanjee, 2020). The current study sought to set the record straight to establish if gender differences exist in the perceptions of teachers and whether gender-based differences exist in the prevailing assessment strategies that are often used by public primary school teachers to implement the standards-based curriculum. After considering the issues highlighted above, including teachers'

lack of knowledge about assessments worldwide, their inability to incorporate assessments into their daily lessons and create rubrics for the various types of assessments, and inconsistent findings in the literature, among other things, it is necessary to conduct a scientific investigation into the factors influencing public primary school teachers' use of assessments in implementing the standards-based curriculum in the Ayensuano district in Eastern Ghana.

1.2 Purpose of the Study

The purpose of the study is to investigate the factors influencing public primary school teachers' use of assessment in the implementation of the Standards- based Curriculum in Ayensuano district in the Eastern region of Ghana.

1.3 Objectives of the Study

The study sought to achieve the following objectives:

1. ascertain the perception of public primary school teachers in the use of assessment in the implementation of the standards- based Curriculum in the Ayensuano district.
2. establish the knowledge level of public primary school teachers in the use of assessment in the implementation of the standards- based Curriculum in the Ayensuano district.
3. find out the prevailing assessment strategies public primary school teachers use in improving assessment in the implementation of the standards-based curriculum in the Ayensuano district.
4. identify the perceived challenges public primary school teachers encounter in the use of assessment in the implementation of the standards- based Curriculum in the Ayensuano district.

1.4 Research Questions

The following research questions guided the study:

1. What are the perceptions of public primary school teachers regarding the use of assessment in the implementation of the standards- based curriculum in the Ayensuano district?
2. What is the knowledge level of public primary school teachers in the use assessment in the implementation of the standards- based Curriculum in the Ayensuano district?
3. What are the prevailing assessment strategies public primary school teachers' uses in improving assessment in the implementation of the standards-based curriculum in the Ayensuano district?
4. What are the perceived challenges public primary school teachers' encounter in the use of assessment in the implementation of the standards- based Curriculum in the Ayensuano district?

1.5 Hypothesis of the Study

1. **H₀:** There is no statistically significant difference in perception of male and female public primary school teachers in the use of assessment in the implementation of the standards- based curriculum in the Ayensuano district.
H₁: There is a statistically significant difference in perception of male and female public primary school teachers' use of assessment in the implementation of the Standards- based Curriculum in the Ayensuano district.
2. **H₀:** There is no statistically, a significant gender-based difference in the prevailing assessment strategies public primary school teachers' use in

improving assessment in the implementation of the standards-based curriculum Ayensuano district.

H₁: There is a statistically significant gender-based difference in the prevailing assessment strategies public primary school teachers' use in improving assessment in the implementation of the standards-based curriculum in the Ayensuano district.

1.6 Significance of the Study

Curriculum developers, designers, policy makers as well as educators and curriculum implementers know how essential the use of assessment is to learners and teachers (facilitators). Albeit the numerous curriculum reforms made, the effective use of assessment in curriculum implementation to improve learning seems very challenging. Hence, the findings from this study are intended to help curriculum implementers to identify the gap in their use of assessment thereby serving as a guide to improve their knowledge and skills to integrate proper assessment strategies for effective implementation of the curriculum. Findings of this study will also bring to bear on school leaders the essence to engage in continuous discussion with implementers with regards to the use of assessment to improve learning. This can motivate implementers to team up and conduct research and to promote professional training centers on the effective use of assessment to enhance effective curriculum implementation.

Moreover, the results of this research will inform policy makers, teacher training institutions and other significant players within the education sector about the need to evaluate the relevance of pre-service and in-service assessment training in order to explore the need to tailor proper assessment practice into daily instructions. And upon completion, the suggestions from the research, will serve as an effective

framework for developing professional training that lays much emphasis on the use of assessment “of”, assessment “as” and assessment “for” learning. The findings will also inform curriculum developers and designers, policy makers, educators, school leaders, teachers (facilitators) and other concerned stakeholders about the current use of assessment in our various educational institutions and the significant contributions on learners' learning. This will bring to bear the use of assessment (assessment of, as and for learning) by facilitators so as to improve professional training on the use of assessment for effective curriculum implementation.

Further, the findings from this research will add new knowledge to existing assessment theory and its practices most especially in the Ghanaian context. In Ghana, previous studies conducted on assessment as earlier stated, have mainly focused on summative assessment, continuous evaluation of learners’ learning, marking, and grading but not on teachers’ use of assessment in daily instruction to improve learners’ learning. Notwithstanding these assertions, this study can bring a positive change in theory and teachers’ use of assessment in daily instructions for effective curriculum implementation.

Finally, the study will serve as empirical data for future researchers, decision makers and curriculum developers and designers in the area of assessment of, assessment as and assessment for learning.

1.7 Delimitations of the Study

The study was theoretically delimited to the widely recognized assessment approaches in current literature, namely, Assessment of Learning (AoL), Assessment for Learning (AfL) and Assessment as Learning (AaL) which reflects three different focuses of learning conceptions. The study was also delimited to the use of cross-sectional survey design. The study was geographically delimited to all public primary schools

from basic one to basic six in the Ayensuano District. The study was also delimited to perception of public primary school teachers on the use of assessment based on gender, the knowledge level of public primary school teachers in the use of assessment, gender-based differences in the prevalent strategies public primary school teachers use in improving assessment and the perceived challenges public primary school teachers encounter in the use of assessment.

1.8 Limitations of the Study

In the course of the research, it was realized that some of the respondents were unable to complete and submit the questionnaires despite the researcher's repeated attempts to reach them. The development incurred additional expenses for the researcher (for instance, funds and time) and slowed the pace of the project. Also, the happening reduced the sampled participants from 216 to 196. Nonetheless, the researcher collected enough data for the study.

1.9 Operational Definition of Terms

Standards-based curriculum: A curriculum that is developed by looking at the standards (district, state, or national); identifying the skills, knowledge, and dispositions that students should demonstrate to meet these standards; and identifying activities that will allow students to reach the goals stated in the standards.

Zone of Proximal Development: the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers

Assessment: is a process of determining whether the goals and objectives of a course or program has been successfully achieved, and how to devise an effective remediation to meet the said goals and objectives.

Basic competences: What a learner should know and be able to do as the outcome of teaching and learning.

Feedback: It is a comment or information that learners receive from a teacher, from other learners, or from learners themselves upon reflection, on the product of a learning task.

Peer assessment: involves learners' assessing each other's work, through reflection of the goals and what it means to achieve them.

Assessment of learning (AoL): is used to determine learners' level of achievement in a programme of study or how successfully a programmed has performed and mostly, it's administered at the end of a course or programme.

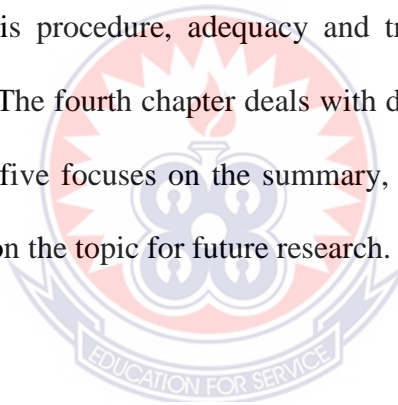
Assessment for Learning (AfL): is the process of seeking and interpreting evidence for use by learners and their teachers to decide learners' current progress in learning, how they have learnt and how teachers can assist them by providing ongoing information on their strengths and weaknesses

Assessment as learning (AaL): is generally considered a sub-set of assessment for learning (AfL). It can be broadly defined as learners' capacity to reflect upon their works-in-progress relating to personal, academic goals or assessment criteria

Portfolio assessment: is a collection of learner work linked to learning standards. This body of work is often accumulated over a long period of time to reflect what has been taught and learned.

1.10 Organization of the Study

This research comprises five main chapters. Chapter one covers the background to the study, the statement of the problem, the theoretical framework, the conceptual framework, the purpose of the study, the objectives of the study, research questions, significance of the study, limitations of the study, delimitation and operational definitions of terms. The chapter two deals with the literature review on the topic, which is congregated under concepts and the empirical studies. Chapter three focuses on methodology. It highlighted the research paradigm, the research design, and study area, the population of the study, sample and sampling techniques, the research instrument, validation of the research instrument, data collection procedure, data analysis procedure, adequacy and trustworthiness of the data and ethical considerations. The fourth chapter deals with data presentation, interpretations and analysis. Chapter five focuses on the summary, conclusions, recommendations, and suggestions made on the topic for future research.



CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Overview

This chapter deals with the review of related literature of the study. The chapter includes empirical and conceptual review. The theoretical review also captures and involves the behaviourist theory of learning and the constructivist theory of learning. The review focuses on the following strands:

1. The concept of assessment
2. The widely recognized approaches of assessment in current literature
3. The perception of teachers on the use of assessment
4. The knowledge level of teachers in the use of assessment
5. The prevailing assessment strategies teachers use in improving assessment
6. The perceived challenges teachers' encounter in the use of assessment
7. Summary of the literature review

2.1 Theoretical Framework

The theoretical framework of the study was underpinned by the behaviorist theory of learning and the constructivist theory of learning. In quantitative studies, one uses theory deductively and places it toward the beginning of the plan of study. With the aim of testing or verifying a theory rather than developing it, the researcher advances a theory, collects data to test it, and reflects on the confirmation or disconfirmation of the theory by the results (Creswell, 2017). The theory becomes a framework for the entire study, an organization model for the research questions or hypotheses and for the data collection procedure (Creswell, 2017). Assessment may be practiced in many different ways depending on our views of learning. As supported

by Cowie, Moreland and Otrell-Cass (2013), all assessments are based on learning perspective.

Weegar and Pacis (2012) in their study indicated that behaviorism and constructivism are learning theories which stem from two philosophical schools of thought which have influenced educators view of learning in this 21st century. Ng'andu et al. (2013) also asserted that there are two main perspectives in learning theories namely Behaviorism and Constructivism. The most widely applied educational theories are behaviorism and constructivism (Panda, 2020). Behaviorism theory states that learning occurs after a behaviour undergoes a noticeable transformation. In most cases, this change is brought about by variations in the environment. Alternatively, the guiding principle of the theory of constructivism is that we learn in order to pursue certain meanings (Jia, 2010).

2.1.1 Behaviourist theory of learning

Behaviourism theory states that learning occurs after a behaviour undergoes a noticeable transformation. In most cases, this change is brought about by variations in the environment. Hayford (2007) in a study conducted indicated that, behaviorist learning theory has a long tradition in education policies in Ghana. He indicated that many aspects of general and special education such as curriculum, pedagogy and assessment have been shaped by the principles of behaviorist learning theory. Although theories of learning have been very influential in educational practice, one can emphatically opine that the behaviorist theory of learning has had the most outstanding influence compared to the constructivist learning theory (Ng'andu et al., 2013). They further argued that most of the notable concepts on which the constructivist theory is based have some links with behaviorist concepts. In view of this, the behaviorist educational theory holds weight as a traditional guided learning

model through which the teacher guides learning. Learners are motivated extrinsically and stimuli are provided to promote effective instruction (Sidney, 2015). The behaviorist theory of learning was developed by four (4) renowned psychologists; Ivan Pavlov (1849-1936), Burrhus Frederick Skinner (1904-1990), John B. Watson (1878-1958) and Edward Lee Thorndike (1874-1949).

The origins of behavioral learning theories may be traced back to the late 18th and early 20th century with associative learning principle (Bennett & Gitomer, 2009). Behaviorism comprises individual learning theories that have a shared common assumption within them (Peel, 2005). This traditional view of learning is most popularly associated with the work of Pavlov, Watson, Skinner and Thorndike. All of them emphasize the observable behaviour and the power of the external environment to determine what is learned rather than the individual. For them, the learning environment is the determinant factor for learning to occur (James, 2006). He further explained that, Learning is viewed as the conditioned response to external stimuli. Rewards and punishments, or at least the withholding of rewards, are powerful ways of forming or extinguishing habits. Praise may be part of such a reward system. These theories also take the view that complex wholes are assembled out of parts, so learning can best be accomplished when complex performances are deconstructed and when each element is practiced, reinforced and subsequently built upon.

From the behaviourist perspective, learning has nothing to do with the acquisition of new behaviour (Wubante, 2020). The consequences of one's actions serve as reinforcement for taught behaviour. For instance, if learners are rewarded for doing extra work, they're more likely to repeat such behaviour. The behaviourist theory of learning says that learning can only be said to have taken place when there is a change in the outward behaviour of the learner (Cherry, 2014). Behaviourism

theory view learning and education as the change in behaviours of an individual and throughout the process, it involves some exploration, trial and error until a positive event occurred (Burhan Uddin et al., 2022). The foundation of behaviorism, from Cherry (2014), suggested that all behaviours are learned through conditioning and that how we react to environmental cues determines our behaviours. Behaviourist don't take into account what a learner is going through internally. Consequently, it is impossible to immediately witness what is happening within the learner. The behaviorist argues that there is no need to consider the internal or mental processes of the learner, because they are considered to be too subjective (Cherry, 2014). Brau et al. (2020) conceptualized behaviorism as the study of how controlled modifications to a subject's environment affect the subject's observed behaviour.

As well as this theory states, Behaviourism is based upon the principle of reinforcing required behaviour with rewards and deterring unwanted behaviour with punishments, learners' assessment is generally used as the vehicle for applying these rewards and punishments (Harlen, 2006a). Shepard (2015) contend that the behaviourist view that learning is brought through stimulus and response association and the complex associations between response and stimulus are built up gradually through the teaching inputs. The behavioral learning theory focuses on the observable behaviour rather than the covert or mental processes of the learners (Stobart, 2008). The main feature of behaviourist view of learning is that learning should be considered in terms of evidence of learner's behaviours or actions. Behaviorists are of the view that, learning does not take place in a vacuum but rather within the environment as a result of observation of cultures (Plotkin 2003 as cited in Qasi, 2007).

In teaching and learning, knowledge is a discrete, multi-layered package that allows teachers to teach progressively as learners acquire increasingly complex ideas (Bell and Cowie, 2002). Hence, teachers must control the environment by initiating rewards, reinforcement and punishments in an effort to encourage the desired behaviours in the learner. Learners are acted upon by their environment, forming associations between stimuli and changing behaviour based on those associations (Brau & Robinson, 2022). Adair-Hauck et al. (2006) further indicated that the role of the teacher is to state objectives in relation to learners' age, transmit it and measure the objectivity and clarity of transmission using valid tests of content mastery. Further consequences of the study indicate that there must be incentive in order to initiate some response and such incentive may either be positive or negative (Wubante, 2020). From the behaviorist perspective, teachers' use of assessment mostly constitutes the traditional method of conducting assessment which focuses on paper and pencil exams, termly, semester or yearly based (Dessie, 2015). Considering teachers' use of assessment in this form is a way of measuring the extent a learner has achieved a targeted objective thereby making judgment about the change in observable behaviour (Dysthe, 2008).

One of the outstanding features of behaviourist learning theory is that teachers teach to test or exams contrary to the followers of constructivism learning theory who believed that learners construct and build knowledge for themselves. It is worth noting that the main focus of the behaviourist in the teaching and learning process is on rote learning and teachers use of assessment on the memorization of concepts, principles and formulas for examination purposes (Taber, 2011). Consequently, the role of the teacher is to prepare learners adequately to be able to make a quick and accurate response to instruction. Adherent to the behaviourist approach assessment

progress is measured through unseen timed tests with items taken from progressive levels in a skill hierarchy (Hayford, 2007). In accordance with behaviourist, learners' performance is typically evaluated as either right or wrong, with bad performance being made up for by the continued application of the incorrect aspects or, occasionally, by further deconstruction and a return to fundamental abilities. This view is endorsed by Dessie (2015) who suggests that teachers' use of assessment is not necessary for internal modification but rather for the purpose of selecting, ranking and controlling. Taber (2011) in his study made an assertion that, for a learner to have a mastery of targeted objectives, constant repetition and practice is very essential in the teaching and learning process. From the behaviorist perspectives assessment techniques constitute objective tests such as true- false, short answer, matching, multiple-choice and restricted essay questions (Fautley & Savage, 2008).

The general consensus among behaviorists is that assessment and instruction should be treated as two distinct entities when implementing curricula. Nonetheless, the issue of coupling instruction and assessment comprehensively as a way of assessing learners were answered by constructivists' views of learning that build on the work of Piaget, Vygotsky, and other cognitive theorists (Bennett & Gitomer, 2009). This system aims at motivating students who demonstrate positive learning behaviours. Weegar and Pacis (2012) reaffirm that educationists who use this theory occasionally employ a punishment regime to discourage negative learning behaviours. The two types of conditioning are the most important elements of this theory (Weegar and Pacis, 2012).

2.1.2 The constructivist theory learning

After a thorough investigation into cognitive development—or, more specifically, how thinking and understanding change with age—by the Swiss

psychologist Jean Piaget and the Russian psychologist Le Vygotsky, the constructivist learning theory was born. The constructivists typically hold the view that, learning occurs when people create new knowledge rather than just re-producing it. Constructivists view learning as a search for meaning (Weegar & Pacis, 2012). Krahenbuhl (2016) opined that education in this 21st century is mostly dominated by the constructivism approach. Kara (2019) also indicated that the constructivist learning theory in recent years plays a vital role in the curriculum implementation process. In the teaching and learning process, the constructivist learning theory presently has become a well-established learning theory.

Piaget and Vygotsky were strong proponents of constructivism which viewed learning as a search for meaning and described elements that helped predict what learners understand at different stages of development (Rummel, 2008). Constructivism, as established by Ahmad et al. (2020) is the study of how a learner constructs knowledge. That is, an individual's knowledge is derived from his or her interactions with the outside world and personal experiences. Notwithstanding this assertion, learners assimilate new ideas and assign meaning to those ideas with regards to their prior experiences, beliefs and attitudes (Stavredes, 2011). Bada (2015) is of the view that, Constructivism is an active learning theory in which the learner synthesizes prior information and experiences to produce new knowledge. Constructivists maintain that knowledge acquisition has been damaged with uncertainty (Jia, 2010). Panda (2020) is also with the view that in the teaching and learning process learners are the bedrock. Hence the role of the teacher is to guide and motivate learners in their knowledge construction.

Philosophically, the focus of constructivism is on experiences. From the constructivists' perspective, knowledge is acquired through exploration and

adjustment of the mind to certain situations of the universe. Besides, teachers must create a vacuum for learners to exhibit their competences in finding solutions to problems in the teaching and learning process (Panda, 2020). The underlying tenet of constructivism, in contrast to behaviorism, is that humans learn in order to pursue particular meanings. Le Cornu and Peters (2009) pointed out that, besides its enormous significant contribution over the years in the learning process; it has also helped teachers' self- development. In the teaching and learning process, the teachers act as facilitators and learners as discoverers (Liu & Chen, 2010).

The constructivism learning theory can be categorized into two approaches namely; cognitive constructivist and social constructivist (Heritage, 2010). Ahmad et al. (2020) also added that two types of constructivism have been introduced. That is; the cognitive constructivist and the social constructivist learning theory.

2.1.3 Cognitive constructivism learning theory

Contrary to behaviorists' conception of learning as a stimulus-response process, cognitive constructivists consider what happens in the learner's thinking during instruction to be extremely important. Consequently, learning is a thoughtful, active, and connected process of mental creation that involves interactions with the environment (Heritage, 2010). As Piaget indicated, the world can be sensed by assimilating new information into our prior knowledge (Schema) and by accommodating our prior knowledge into the new information (Swan, 2005). As contended with behaviourist, cognitivist emphasis on the mind of the individual (Bennett & Gitomer, 2009). Cognitivists are of the view that in the teaching and learning process, learners must go beyond memorization of facts to know what, how and why to be prepared to enter into the global competitive market (Dessie, 2015). In more detail, this refers to the capability to combine knowledge, skills, and techniques

in ways that are effective for deciphering and resolving problems in practical settings or in real-life circumstances.

With this approach, learners play a pivotal role during instruction while the teacher acts as a facilitator (Heritage, 2010). James (2006) further argued that essential elements of the teaching and learning process include prior knowledge, deductive and inductive reasoning, self-monitoring, and self-regulation. Since knowledge under the constructivist view of cognition refers to more than the accumulation of isolated pieces of information or facts, learning in this situation is nearly entirely a consequence of the learner's interpretation of events. In their study, Ertmer and Newby (2013) found that the cognitive constructivist approach does not allow for the necessary outcomes of an educational setting to be determined by either the components of the instructions or contextual "cues". Hence, instruction must take into account how learners' access, organize, change, practice, store, and retrieve knowledge. In order to ascertain what learners know and when and how they apply that knowledge to solve problems, an important aspect of this perspective is the assessment process (Dysthe, 2008).

Unlike the old method of assessing learners from a cognitivist perspective, assessment is more than just a technique the teacher employs at the conclusion of a lesson or school year when it comes to the implementation of a curriculum. Ideally, is a method of capturing and analyzing data minute-by-minute throughout the lesson with the goal of enhancing learning and obtaining a complete picture of a learner's development (Dessie, 2015). In other words, teachers must properly use assessment strategies in order to improve learners' learning in their daily instructions.

For learners to be able to accept and absorb new material, teachers must be able to draw on the previously acquired competencies of their learners and ensure the

effective and efficient use of feedback (Ertmer & Newby, 2013). From the cognitive constructivist point of view, in order to devise new methods, tactics, techniques, and skills for effective teaching and learning, a teacher must be aware of the variations between each individual learner. Underhill (2006) supported the argument that, in the teaching and learning process, giving continuous constructive feedback to learners and enhancing the practice of self- assessment is very essential with the cognitive constructivist learning theory. Therefore, integrated AfL and AaL in daily instructions inspires learners to unearth their competences to consistently construct and reconstruct their knowledge in response to feedback. Hence effective use of feedback in assessment plays a significant role in learners' learning.

Among cognitive constructivists, assessment and instruction should not be treated as two distinct entities when implementing curricula. Rather, instruction and assessment should be coupled comprehensively as a way of assessing learners. As a result, teachers must place more emphasis on learning through understanding and application than on memorizing simple information in their assessment practices. This would help learners to be able to compete in the global economy.

2.1.4 Social constructivism learning theory

In the course of social interactions in the teaching and learning process, this theory takes into account the cultural and social context that may have an impact on learners' cognitive growth. From the social cognitivists' perspective, teaching and learning occurs in a social environment where discussions, dialogue and problem-solving activities exist (Ramsook & Thomas, 2016). As learning is viewed as a social phenomenon, this means that teachers must incorporate cooperative and collaborative teaching and learning methodologies into their everyday activities. In the social constructivist paradigm, learning takes place through interactions between the learner,

the teacher, and the tasks in the social environment, where the learner is both molded by and shaped by the community of practice (James, 2006). How learners make sense of information and deal with issues during the teaching and learning process depends on their unique personalities and social contexts (Cowie, 2012). Individuals learn best when they actively construct their own learning. In light of this, opportunities are provided for learners to build on existing knowledge and understanding in order to construct new information and understanding (Cole, 2009).

Social Constructivist is of the view that during instructions, teachers must take into consideration the learner's previous knowledge and also create a vacuum for learners to exhibit their knowledge (Amineh & Asl, 2015). To this end, teachers should use learner-centered pedagogies and offer the right learning materials to support learners in making their own discoveries. Moreover, if the curriculum is to be implemented effectively, teachers must therefore establish a calm atmosphere that will encourage learners to develop solid critical thinking and problem-solving skills. Swan (2005) further stated that according to Vygotsky, an individual's social context, where they live and actively engage in activities, is where they acquire their high-order cognitive thinking and skills. As a result, learners should actively engage in social interactions in order to broaden their knowledge in numerous areas of learning.

With this paradigm, Vygotsky viewed social interactions with the outside world as a source of cognitive development and learning as a way to generate knowledge. He thought that by dealing with children in their zone of proximal development, parents and teachers can help them learn (ZPD). Children display higher levels of competencies within the zone of proximal development than they do outside of it. Dessie (2015) thought that teachers needed to establish a serene environment in the zone of proximal development in order to excite learners and

encourage them to interact, think critically, and solve real-world problems. However, for learners to develop the desired competencies, teachers must implement differentiated instructional strategies and scaffolding techniques. ZPD was defined by Vygotsky (1978) as the difference between the level of actual development as measured by independent problem-solving and the level of potential development as measured by problem-solving under adult supervision or in collaboration with more competent peers. Havnes (2008) argues that in this theory, instruction is viewed as an apprenticeship process in which learners engage with peers and teachers to solve real-world issues (pp.102-109). That is, in order for learners to compete in the global economy, they must study from knowledgeable and well-trained personnel and develop relevant experiences, skills, and information.

Numerous studies done revealed that the social constructivist learning perspective offers a strong theoretical framework for assessment (Cowie, Moreland, and OtrrelCass, 2013). In light of this, AfL and AaL should offer a strong theoretical framework for the social constructivist learning paradigm. It is worth noting here that social constructivists view assessment for and as learning as an effective way of creating teacher – learner interactions in the teaching and learning process. In this sense, the use of assessment for and as learning involves cooperative and collaborative learning pedagogies between learners and teachers instead of being an individualistic pedagogy (Bell & Cowie, 2002). Within the social constructivism theory of learning, assessment is seen as collaborative, cooperative, dynamic and interactive between learners and teachers, and among learners (Dessie, 2015). Due to this assertion, teachers' use of assessment should not mainly focus on the traditional method of assessing learners but rather focus on the various competencies' learners

can exhibit by jointly working with their teachers within the “zone of proximal development.”

Gioka (2008) in his study indicated, teachers' use of assessment within the social constructivism theory of learning plays a significant role in helping learners to identify their “zone” (p. 146). As such for effective teaching and learning to take place, learners and teachers in their classroom practice must cultivate the habit of change so as to understand the use of assessment (Dessie, 2015). Willis (2011) research evidence suggests that for the social constructivist teachers use of assessment enhance learners to have a mastery of concepts as they are made to take active part in the teaching and learning process (p. 402). Cowie et al (2013) also added that teachers' use of assessment plays a significant role in learners' character formation (p. 17).

In relation to the social constructivist theory of learning, language plays a crucial part in the teaching and learning process in advancing learners' cognitive development (Fautley & Savage, 2008). Hence, one of the outstanding features of social constructivism theory is considering learning as social in nature where meaning is derived through language use within the social context. This was also evident in a study conducted by Dysthe (2008) which suggested that in assessment practice, the language used collaboratively with a teacher or peer enables learners to recognize their potentials. In accordance with the social constructivist learning theory, a teacher's role in the effective implementation of AfL and AaL calls for the sharing of learning objectives and assessment criteria, the provision of constructive oral and written feedback, the provision of enough time for self- and peer-assessment, and the fostering of fruitful conversation. Havnes (2008) emphasized that, from the standpoint

of social constructivist, assessment has a crucial role in bridging the gap between education and the workplace and the larger society.

Dessie (2015) noted in his study that there has been a paradigm shift from using a single measure to using several assessment approaches to develop learners' learning profiles; from measuring only low-level abilities and knowledge to assessing high level cognitive thinking and skills. From the perspective of the social constructivists, Black and Williams (2018) also noted that there has been a paradigm change from individual to mixed method assessment, from a teacher-centered assessment strategy to a learner-centered assessment approach. The paradigm shift in assessment practice occurs when it moves from assessment of learning to assessment for and as learning.

2.2 The Concept of Assessment

For effective teaching and learning to take place, teachers' use of assessment is very vital in every educational institution. Most research conducted on assessment, especially in this 21st century, has laid much emphasis on teachers' use of assessment in improving learners' learning in the teaching and learning process (Chan et al., 2022). There has been a lot of research and findings produced over the years relating to the definition of assessment. Several researchers and theorists defined assessment differently; however, many different perspectives on assessment overlapped with others' views. Assessment can be viewed, conceptualized, and defined from many different theoretical and ideology perspectives.

NaCCA (2019) established that assessment involves gathering and analyzing data about learners in order to inform decision-making that will enhance their learning. Kelter (2018) explained that assessment is a process of determining whether the goals and objectives of a course or program have been successfully achieved, and

how to devise an effective remediation to meet the said goals and objectives. McMillian (2018) defines assessment as the process of gathering, analyzing, and using data about learners learning to inform instructors' choices in a number of ways. Yetkin (2017) also conceives of assessment as the systematic collection of information about learners learning so that teachers can monitor that learning. In line with these, in order for instructors to track learners' attainment of the desired learning competencies, assessment aids in collecting data regarding learners' performance to improve teaching and learning. The data collected enables teachers to devise varied methods, strategies, techniques and skills to improve learning. Besides, assessment is related to learners' performance, both in terms of quantity and quality and consequently to teaching and learning. Dunlosky et al. (2013) posited that assessment is about gathering information about learners with regards to their learning progress. Marriott and Lau (2008) also argued that assessment does not necessarily entail the collection of data, but is also a process used to appraise learners' knowledge, understanding, abilities or skills and should be entangled with a course of study's intended outcomes.

Taken into consideration, a teacher's use of assessment must be a series of actions that should be conducted before, during and after the teaching and learning process for the purpose of identifying the strengths and weaknesses of individual learners with appropriate remediation to enhance learners' learning. The use of assessment also aids facilitators to obtain feedback about learners' understanding of the knowledge, skills and content delivered and thus, determine the level of core competencies achieved in order to provide an effective remediation. Nitko (2001) cited in Okyere and Larbi (2019) indicated assessment involves collecting information purposely to make decisions on learners' learning, curricula, programmes, and

educational policy. Brown (2011) also describes assessment as a mechanism of interpreting information regarding learners' achievement using a range of approaches or practices. In the teaching and learning process assessment as an essential tool creates a link between learners' and facilitators (Amua-Sekyi, 2016). Phamotse et al. (2011) were also of the view that assessment helps figure out what learners have learnt and also serves as a medium of accountability in instructions. In general, the use of assessment provides evidence about learners', the learner, learning process, learning outcomes, educational institutions, and programmes to teachers, learners, administrators and other educational stakeholders (Mundia, 2010). Assessment is an integral part of teaching and learning and teachers need to identify aspects of learning using informal and formal methods to determine with learners what to do next to improve learning (Earl, 2013). By incorporating assessment into daily instruction, learners are appropriately prepared for lifelong learning and can function independently.

Hinging on the nature, purpose, level, and context of the assessment, it may contribute to other areas of education and training (Ghaicha, 2016). Mellati and Khademi (2018) indicated that for effective teaching and learning to take place, teachers' use of assessment should be in line with the instructional goals to improve learners learning. That is to say for the purpose of gauging learners' progress and determining the efficacy of their instruction; teachers must be able to design and conduct accurate and reliable assessment. Bastian et al. (2016) added that in order to improve teaching and learning, teachers should be able to share assessment results with learners and their parents in class.

Research has shown that teachers' use of assessment has significant impact on learners' academic achievement, motivational beliefs, classroom teaching activities,

and self-regulation skill (Alkharusi, 2013). Hence, the teacher factor plays an important role in the classroom assessment process; that is, teachers' attitudes, tendencies, perspectives on teaching, beliefs about the teaching-learning process, and knowledge and skills related to assessment contribute significantly to the classroom assessment practices (Acar-Erdol & Yildzli, 2018).

2.3 Assessment Approaches

There are different approaches to assessments which have been highlighted in various studies in the literature. These approaches to assessments in literature reflects three different focuses of learning conceptions depending on its goal, approach and duration. These are assessment for learning, assessment as learning, and assessment of learning (Matovu & Zuairi, 2014; Berry, 2013; McMillan, 2015).

2.3.1 Assessment of learning (AoL)

Assessment of learning is also the same as summative assessment (NaCCA, 2019). It describes the stage that learners have reached in the teaching and learning process as well as the knowledge and skills they have acquired through time. Assessment of learning serves as a means to gauge learners' development and overall success. Assessment of learning as established by Matovu and Zuhairi (2014) is parallel to summative assessment when tailored in the teaching and learning process. Broadfoot (2007) also in a study conducted, made a classification of assessment into three approaches and assessment of learning was among them. In the study, he put assessment of learning in place of summative assessment. Amua-Sekyi (2016) also posited that assessment of learning is used to determine learners' level of achievement in a programme of study or how successfully a programme has performed and mostly, it's administered at the end of a course or programme. The

term also represents the assessment conception of measurement in which judgments of learners' performances are taken at the end of instruction (Berry, 2013). In addition to what has already been stated, assessment of learning is an evaluation that involves determining what learners have learned and the study plan of action at the conclusion of a certain course. Okyere et al. (2018) were also of the view that, assessment of learning emphasis on how the set learning outcome or goals have been successfully accomplished or achieved by the learner at the end of the instructional process. Assessment of learning focuses on gauging how much a learner has learned in order to verify their accomplishments or give them grades. It is also used to classify learners and communicate these judgments to others (Sanga, (2016).

Teacher's use of assessment of learning should serve as a standard for determining learners' level of conceptual understanding rather than necessarily serving as a means of determining a learner's learning needs and offering feedback for growth in that ability. Herrera et al. (2015) view assessment of learning as a kind of evaluation which informs teachers of learners' success or failure in their learning process based on numerical scale. A numerical scale is the only parameter which may not reflect learners' learning competencies at a given point in time (McClam & Sevier, 2010). Examinations at the end of terms or semesters, as well as external exams, are frequently used to evaluate learners' usage of learning assessment. Examinations with multiple choice, open-ended questions, and short responses are used to measure the effectiveness of learners learning in the use of assessment of learning approach. The MoE (2018) and NaCCA (2019) backed the requirement that projects, portfolios, end-of-term examinations, and final exams be used to measure the effectiveness of learners learning in Ghana's various educational institutions.

With the use of assessment of learning, teachers play a pivotal role and also do not actually allow them to make daily reflections on their own practices and how to renegotiate their teaching in accordance to learners' needs. Therefore, in light of the above definitions, assessment of learning can be explained as the process of taking stock of learners' level of achievements of the desired core competencies of a programme of study or how successfully a programme has been implemented. Assessment of learning serves as the foundation with respect to most educational practices in providing the rightful certification to learners based on their level of achievements at the end of an instruction (Acheampong & Kwapong, 2021). To show how a learner performed on a test, the results of their performance in the assessment are made public. Teachers' use of assessment of learning must provide a fair report on learners' achievements (Fabiano et al., 2018). Brown and Remesel (2017) found that assessment of learning paradigm serves three main purposes; reporting learners' progress and attainment; summing up the achievement for certification, selection, and placement purposes; and providing data for ascertaining the quality and effectiveness of a school, system and teacher. NaCCA (2019) expresses a similar sentiment that assessment of learning is to evaluate learners' development and achievement. In summary assessment of learning gives a clear-cut indication on how learners have achieved the expected core competences in a programme of study. Dixson and Worrell (2016) indicated that assessment of learning focuses on the use of extrinsic motivation, giving information on learners' achievements, ranking of learners as well as providing certification and awarding qualification. The use of assessment of learning is more reliable than other forms of assessments, and not easily affected by a specific assessment or assessor (Pepper, 2013).

Notwithstanding, the use of assessment of learning can positively or negatively influence the attainment of useful core competencies and skills. In spite of that Thorsen (2014) is of the view that assessment of learning contributes significantly to learners learning and performance regardless of their cognitive ability, socioeconomic status and gender.

2.3.2 Assessment for learning (AfL)

In contrast to the assessment of learning, in assessment for learning, the focus is shifted from summative to formative evaluation, from making judgments to producing descriptions that may be applied to the subsequent learning stage. Assessment for learning is the process of seeking and interpreting evidence for use by learners and their teachers to decide learners' current progress in learning, how they have learnt and how teachers can assist them by providing ongoing information on their strengths and weaknesses (Chan et al., 2022). Briggs et al. (2012) were also of the view that, the role of assessment for learning in teaching and learning is vital since it is a dynamic, frequently tacit process reliant on learners' discoveries, expert knowledge, and experiences. During instruction, teachers' use of assessment for learning helps them to collect data for different purposes thereby aiding them to modify the learning for learners (Earl, 2013). To enhance teaching and learning, it is utilized to gather data on the learning process and individual learner. Lam (2018) explained that teachers use assessment for learning as an investigative tool to find out as much as they can about what learners know and can do, and what confusion, preconceptions or gaps they might have. Assessment for learning is perhaps the only assessment that offers instructors timely information in the course of the instructional process that is useful to influence learners' learning outcomes (Andersson, 2015). From Okyere et al. (2018) perspective, assessment for learning is considered as a tool

use to monitor learners learning and also to determine challenges learners encounter in order to make the necessary adjustments to improve learners learning in the teaching and learning process.

When used appropriately throughout the teaching and learning process, assessment for learning gives teachers helpful feedback during instruction so they may judge how well learners have learned. Chan et al. (2022) also established that, the main idea behind the use of assessment for learning is to provide useful feedback to learners and teachers so as to enhance effective teaching and learning. The use of effective feedback is very essential in the use of assessment for learning. Ensuring effective feedback helps learners to identify their strength and weakness in learning and improve on them. Feedback involves more than just giving learner's grades on their work; it also involves engaging them in conversation and having in-depth discussions with them to better understand those mental processes that underlie their achievement (Amua-Sekyi, 2016). López-Pastor and Sicilia-Camacho (2017) also added that, one benefit of the use of assessment for learning is that it creates room for learners to receive constructive and immediate feedback, which enables them to devise effective remediation actions to enhance their learning. McCarthy (2017) further asserts that assessment for learning enables teachers to teach lessons in accordance with learners' needs thereby selecting appropriate learning resources and also using varying techniques, skills, methods or strategies to enhance effective teaching and learning.

In the implementation of the curriculum, the use of assessment for learning guides implementers to inquire about what learners already know, and to understand the challenges they face (Lekwa et al., 2017). According to Black and William (2018), assessment for learning focuses on questioning learners in a manner that will

increase their idea development and boost their morale to partake in effective learning. In the teaching and learning process teachers use assessment for learning purposely aimed at assisting weak learners in meeting their needs and aspirations and also building learners' ability to learn and cope with the challenges encountered in their learning (Acheampong and Kwapong, 2021).

Learners who participate in assessment for learning are better equipped to think critically, solve problems effectively, ask insightful and thought-provoking questions, and assume full accountability for their own learning. According to Brookhart (2013) in the use of assessment for learning, four major indicators help improve learners learning which are; designing of the assessment task; asking of questions that will enhance learners critical thinking skills, giving meanings to learners' ideas and concepts; and also ensuring effective feedback. Acheampong and Kwapong (2021) added that another indicator that promotes learner-centred pedagogy and helps improve learners learning in the case of assessment for learning is instructors creating a room for learners to provide feedback on the kind of assessment initiated. In the teaching and learning process, instructors' continuous use of assessment for learning enables learners to make a proper reflection on their achievements and also look for appropriate remedies to improve their learning (Andersson, 2015). Okyere et al. (2018), in their study further made an assertion that teachers use of assessment for learning in their daily instruction helps learners to acknowledge their mistakes, be more experimental and develop more desirable higher cognitive skills. Harris et al. (2017) acknowledges that instructors continuous use of assessment for learning entices learners to be responsible for their learning needs.

In addition to the methods employed in the assessment for learning approach, self-assessments, peer assessments, and informal data collection are used in the

evaluation for learning approach. Lekwa et al. (2017) were of the view that teachers use of assessment for learning help them to diagnose learners' previous knowledge and to recognize certain issues of concern (examples; dilemmas, pre-conceptions, conceptions, and misconceptions) in the teaching and learning process. Reports from some studies conducted, established that the use of assessment for learning has minute significant contribution in improving learners learning and teachers' pedagogical practices (i.e., Carnell, 2016; Ratnam-Lim & Tan, 2015), while other studies also confirmed that the use of assessment for learning ensure inclusive and opportunities for all learners (Fabiano et al., 2018; McLaughlin & Yan, 2017; Pryor, 2015; Wilson, 2017). Panadero et al. (2018) have also noted that the use of assessment for learning creates a vacuum to motivate and commit learners to learn with zeal. Assessment for learning occurs not at the end of the curriculum implementation process but rather before and during the learning process, frequently more than once. It usually takes the form of observation, worksheets, questioning in class, learner-teacher conferences and other suitable mechanisms that could give credible information about learners which will be of essence for their day-to-day planning and lesson delivery (Earl, 2013). Rohaya et al. (2014) showed that assessment for learning should be tailored in planning of everyday activities, thereby carefully designing the targeted learning outcomes, teaching strategies and assessment criteria.

Therefore, to respond to new information, teachers' daily and weekly planning needs to be adaptable. If assessment for learning will be effective and well operationalized, teachers have to create a serene and conducive learning environment and avoid closed ended questioning in the classroom so that best practices can result in higher quality information gathered to assess learners (Abbas & Saad, 2013). Chan et al (2022) also highlighted; effective questioning technique is a crucial feature of

assessment for learning which plays an essential part in learners learning to improve decision-making function and ability to develop reasoning.

2.3.3 Assessment as learning (AaL)

The concept of assessment as learning emerged from a study by Earl (2003) on how teachers use classroom-based assessment to improve learners learning under the auspices of assessment reforms. Earl (2013) established that the motive behind the use of assessment as learning is to broaden the scope of assessment for learning by focusing on the role of the learner as a vital indicator linking assessment and instruction. Assessment as learning can be projected as a subset of assessment for learning (Lam, 2018). Dann (2014) is also with the notion that assessment as learning is undertaken as an aspect of assessment for learning. The ability of learners to reflect on their development in connection to personal and academic goals and assessment criteria is what Berry (2013) refers to as “assessment as learning”. Berry (2013) further opined that teachers’ use of assessment as learning ensures active participation of learners in instructions thereby playing the central role in the teaching and learning process. Earl (2013) indicated that assessment as learning being a subset of assessment for learning empowers learners to develop self- awareness, knowledge and skill to become problem solvers, critical thinkers, independent learners and self-monitoring assessors.

From this perspective, the learner makes meaning of information, connects it to existing knowledge, and considers the techniques and skills necessary to advance their learning while acting as an active, engaged, and critical assessor. In order to increase their learning, learners can better themselves by recognizing their own errors with the aid of assessment as learning and by simultaneously picking up on other learners learning strategies. Matovu and Zubairi (2014) have made an additional point

that teachers that employ assessment as learning encourage learners to examine their own learning and use the results to further their learning. Assessment as learning enables learners to self-regulate their own learning, thereby making meaningful decisions about how to initiate feedback and engage with the learning priorities of the classroom (Dann, 2014).

In order to improve their learning, learners are urged to actively participate in the monitoring process through self-evaluation and self-reflection in the assessment as learning (AaL) practice. As further indicated, the use of assessment as learning enables learners to make self-assessment, seek feedback from their peers and teachers, and reflect on how these take them to the next step of learning (Chappuis & Stiggins, 2020). Through self-evaluation and self-reflection, learners are required to actively participate in the monitoring process in the assessment as learning approach in order to enhance their learning. In the assessment as learning approach, learners are expected to acquire; cognitive knowledge and cognitive regulation skills (Earl & Katz, 2008). Sadler (2010) conceptualized this metacognitive competence as the intrinsic knowledge without which learners cannot achieve the desired level of task performance, even if they are able to regulate themselves. Hawe and Dixon (2014) also pointed out that it is impossible to develop self-reflective practices that fully enrich writing without practicing evaluative and productive background knowledge. Therefore, it is essential to increase learners' knowledge of cognitive growth and cognitive regulation in order to properly integrate assessment as learning into teaching and learning.

Self-regulated learning supports the notion of autonomous learning as an active, personal and constructive process that allows learners to critically evaluate their own learning. Assessment as learning, in particular, is founded on a belief that

for learners to become self-motivating and able to bring their talents and knowledge to bear on the decisions and problems that make up their lives, can't just wait for the teacher (or politicians, or salespeople, or religious leaders) to tell them whether or not the answer is "right" (Earl, 2013). In the teaching and learning process, teachers' use of assessment as learning enables learners to make self- assessment on themselves (McDowell *et al.*, 2011).

Lam (2014) asserted that although assessment as learning is theoretically situated in the notions of self-regulated learning and metacognition, not every learner neither has the ability to self-regulate nor becomes motivated to perform self-reflection. In other words, in order to close learning gaps; teachers must consider teaching learners how to plan, monitor, and review their own learning as well as how to use feedback. Because internal feedback that directs learning is likely to result from external formative feedback (from peers, teachers, or other sources), feedback is crucial to assessment as learning (Lam 2016). Despite this guided self-regulation, teachers must avoid forcing learners to meet success criteria without question. If they do, assessments as learning will only serve to turn learning into rituals of criteria compliance, which are likely to take the place of learning (Torrance 2012). Similarly, Paris and Paris (2001) cited in Butler (2011) argued that the transmissivity view of self-regulated learning only promoted conformity to instructed self-regulated learning strategies taught by the teacher. As a result, learners are only governed by others and are not given any autonomy to develop self-regulatory competence.

Portfolio assessment is a collection of learner work linked to learning standards. This body of work is often accumulated over a long period of time to reflect what has been taught and learned. To assist learners to practice assessment as learning in portfolio-based classrooms, teachers can encourage them to self-monitor

their writing development regularly, persistently and systematically through semi-structured self-assessment forms. Once learners get used to self-monitor their learning, teachers can use more open-ended self-assessment forms, journal entries with prompts, and double-entry writing logs which record both learning events and reflective moments simultaneously. Moreover, teachers could adopt assessment activities that mimic school-based or extensive writing evaluations and are referenced by rubrics. After carefully studying relevant evaluation rubrics, learners are likely to develop a greater understanding of what and how they are assessed as a result. With the help of these rubrics, students may put assessment expectations into context and, in turn, form sound evaluations that help them close learning gaps. Teachers can use assessment as learning to help learners develop self-critical thinking and self-monitoring skills in writing. They can ask learners to choose their preferred portfolio contents and modes of presentation (i.e., paper portfolios or e-portfolios) by mutual agreement.

2.4 Perception of Teachers on the Use of Assessment

It is important to understand teachers' use of assessment during instruction in addition to the reasons, perceptions and strategies (Yao, 2015). Greenstein (2010) and Stiggins (2010) further states that teachers need to have a good understanding of assessment in order to apply a balanced approach to curriculum assessment (i.e., AoL, AfL and AaL). Research has evidence that teachers' perceptions, beliefs and approaches to learners' learning and knowledge-building can influence their classroom practices, especially when it comes to using assessment (Yung, 2006, p. 3; Cheung et al, 2006, p. 210; Weaver, 2006, p. 380; Gulikers et al., 2013, p. 122). Teachers perceive themselves as basically capable of administering appropriate assessment, although they acknowledge that some assessment practices, such as test

construction, can be complex and confusing even for those with the essential skills (Scott et al., 2011; Al-Malki & Weir, 2014). William and Thompson (2008) found that normally, teachers who are inexperienced and unskilled in administering effective assessment perceive new types of assessments more difficult to initiate than traditional paper-and-pencil tests.

With the widespread use of performance-based assessments, teachers are more motivated to assess learner's competencies or performance. Majority of teachers at all grade levels used tests to assess learners' performance. Mellati and Khademi (2018) found that teachers' assessment procedures typically do not adhere to a high tendency for meaningful learning and have little bearing on their instructional aims. A further point made by Mellati and Khademi (2018) is that most teachers considered classroom assessments as a necessary tool in their teaching rather than a means of improving teaching. Contrary to Mellati and Khademi (2018), some studies indicate that teachers detest tests and with the opinion that it causes unnecessary stress and fatigue to learners' (Gotch, 2012; Dayal & Lingam, 2015; Dinther et al., 2015). A study conducted by Ounis (2017), revealed that teachers motive behind assessment practice is to assess the advancement or progress of learners learning. Gebril (2014) also argued that in the teaching and learning process, teachers perceive oral assessment in feedback to be one essential element that enables them to recognize the strength and weaknesses of learners.

Yao (2015, p. 53) in his study established that teachers' considered assessment and teaching to be separate processes. He added, other teachers were also of the view that the two processes often overlap or run concurrently and that assessment can only support teaching and learning if the two processes occur simultaneously. As reported by Yahaya et al (2020) most teachers perceived that the changes in the education

system as well as the curriculum has given them extra workload since they have to run with administrative matters and deliver the curriculum content and assess learners at the same time. Another finding from Moges (2018) indicated that teachers' have the perception that it is assessment that enables them to use different assessment strategies to improve learners learning. Similarly, the majority of teachers view feedback as a conversation between themselves and their learners that identifies flaws develops appropriate remediation and enhances teaching and learning (Moges, 2018). Results from Der and Shepherd (2015) study revealed that teachers perceive assessment as a plan of action impose on them without the necessary input from curriculum developers, policymakers and other abled educational stakeholders involved

2.5 Teachers' Knowledge on Assessment

Knowledge of assessment can be conceptualized as having an understanding of what learners learned, how well they learned it, where they struggled, and the ability to devise appropriate approaches or methods, strategies, techniques, or skills to improve teaching and learning. There is evidence that teachers with limited assessment knowledge fail to integrate assessment into their everyday practices and regard assessment as an instrument for accountability, viewing assessment and instruction as distinct entities (Jones & Moreland, 2005). On the contrary, teachers with good assessment knowledge are able to understand learners' ideas and understanding of assessment practices and questions, and are able to offer learners' appropriate feedback to improve their learning (Marshall & Drummond, 2006). It is established that teachers administer assessment purposely for ranking learners but not to improve learners' learning because of their insufficient knowledge about effective assessment practices (Alkharusi, Aldhafri, Alnabhani & Alkalbani, 2012). As reported

by Koh (2011) pre-service and in-service teachers most often have little or insufficient knowledge regarding assessment practices. Most teachers in various educational institutions in Ghana have insufficient knowledge about assessment especially; integrating it in their daily instructions. This was made clear in a study by Kankam et al. (2014), which claimed that teachers were not familiar with the use of assessment (i.e., formative assessment), much alone how to adjust it to instruction, and that they failed to involve learners in the assessment process. Teachers' use of assessment is influenced by their orientations towards teaching and learning (Izci, 2016).

It has been established by researchers that performance-oriented teachers are more likely to use traditional (summative) assessment strategies such as tests and checklists, while learning-oriented teachers are more likely to use assessment strategies such as peer reviews and self-assessment (Butt, 2010; Berry, 2010). A study conducted by Heritage (2011) also identified insufficient practice of assessment among classroom teachers. From his comprehensive study, he reported that teachers' practices of classroom assessment largely focused on memorization of simple facts, giving of marks, and competition among learners rather than improving learning and instruction. They observed that those teachers have inadequate knowledge on assessment, pressure on standardized tests and also negative perception of teachers about learners in the curriculum implementation. Similarly, Oduro (2015) established in his study that Ghanaian teachers always complain of insufficient professional development opportunities in pre-service and in-service training on the various assessment practices.

2.6 The prevailing strategies teachers adopt to improve assessment

By using appropriate assessment strategies, techniques or methods teachers can enhance their instructional activities, increase learners' motivation and improve

their performance (Mellati & Khademi, 2018). Thomas (2012) also posited that in the teaching and learning process, classroom assessment strategies are very vital in gathering data about learners' performance. Thomas (2012) further stated that, these strategies can be classified into two; teacher-centred and learner-centred strategies. According to Sambel et al. (2019), in order to improve learners' learning teachers' assessment strategies are very vital in the teaching and learning process.

The study highlighted on the following prevalent strategies teachers use in improving assessment:

2.6.1 Learning targets and success criteria

Setting learning goals for learners are the fundamental strategy teachers' use in entire assessment process. (CCEA, 2007, p. 8; Moss & Brookhart, 2009, p. 24). The purpose of assessment is to guide learners in developing their own learning skills. Therefore, in order to develop the necessary competencies and skills, learning objectives and success criteria must be clear to the learner (Dessie, 2015)). Learners can only achieve learning goals if they understand them, take responsibility for them and evaluate their progress against them (Black & William, 2018). Dessie (2015) pointed out that, sharing goals and success criteria increases learners' motivation. Various studies conducted has established that consistently, learners' who share learning goals are more focused, motivated and accountable for their learning (Dessie, 2015). Dessie (2015) further explained that, clear goals and success criteria must therefore, be set in assessment and instruction in order to increase learning effectiveness. Havnes et al. (2012) in their study also contend that writing on the board or communicating learning objectives and success criteria to learners is not enough for them to comprehend and accomplish the expected learning outcomes as most teachers and leaders believed and practiced. As a result, teachers should use

appropriate assessment tasks to share learning goals and standards, actively engage learners in the assessment process beginning with planning and additional activities (Havnes et al., 2012, p. 22).

2.6.2 Formative feedback

It is well known that feedback play a significant role the teaching and learning process and central to the practice of assessment (Atjonen, 2014). Atjonen (2014) again indicated that repeated feedback is a technique which enhances transparency and fairness in the assessment process. Feedback should be given in three ways: from learner to teacher whereby the teacher receives response to learner challenges, from teacher to learner so that the teacher can judge the learner understands level, and from learner to learner so that learners can assist and support each other (Atjonen, 2014). Feedback can be both verbal and written (e.g., on the board) and timed (Black et al., 2011b, p. 74). Feedback can be obtained from learners themselves, from peers, from books and from teachers (Gamlem and Smith, 2013, p. 150). Nevertheless, giving and using this feedback successfully depends on the classroom environment in which teaching and learning occur (Heritage, 2011, p. 19). For feedback to be effective, a more interactive and collaborative learning environment is necessary (Dessie, 2015). Havnes et al. (2012) added that feedback should motivate learners to improve their performance in subsequent assessment tasks. The main purpose of giving feedback is to encourage learners to express their views and to help them critically evaluate the nature of their opinions (Black & William, 2018). “Providing effective feedback also enhances students' ability to self-regulate their learning” (Swaffield, 2011, p. 435), develops intrinsic motivation and self-esteem, inspires confidence and hope (Gioka, 2008, p. 147). Effective feedback helps bridge gaps and promotes dialogue between teachers and peers as well as learners’ (Heritage, 2010, pp. 4-6) According to Bruno

and Santos (2010) effective feedback increases learner self-sufficiency and motivation, develops learners' self-regulation and cognitive learning strategies, promotes deep learning and increases flexibility and persistence, and provides learners with concrete strategies for the next stages of learning. Dessie (2015) added that, effective feedback emphasizes on the nature of the learner's work, the procedures and strategies used to complete the task, instead of the learner themselves. Consequently, appropriate or productive written and oral feedback is an important tool of assessment that allows learners to learn from assessment (Gioka, 2008). In general, “without effective assessment strategies, which involve high-quality feedback to learners being embedded within daily instruction, the personalized learning agenda becomes a dream that will never be realized” (Dessie, 2015, p. 160).

2.6.3 Peer and self-assessment

Peer and self-assessment are also of increasing interest to researchers. According to Atjonen (2014), the most challenging issue is to get learners to think about the purpose of their work. Due to this, learners come to understand their work and develop metacognitive skills. Tamjid and Birjandi (2011) are also of the view that, integrating self-assessment and peer assessment in instruction improves learners' autonomy and ability to learn. Tamjid and Birjandi (2011) added that, peer assessment is an important complement to self-assessment. This is because it allows learners to criticize the work of others, which would not be taken seriously if the teacher commented on it. Collaboration with peers is also valuable because it involves the exchange of language that learners' naturally use and learners can learn by taking on the role of another teacher or examiner (Black et al., 2011). In order to enhance effective teaching and learning through assessment, learners need to participate in peer and self-assessment (Lee, 2017, p. 157). Cooperation between learner to learner

and teacher in the assessment process is essential for shared responsibility in the learning process (Heritage, 2010, p.14; Heritage, 2011, pp. 18-19).

2.6.4 Learners Motivation to Learn

In the teaching and learning process motivation is an important emotional component (Velayutham, Aldridge and Fraser, 2011, p. 2161). Several studies have shown that motivation influences teachers assessment practices (Cauley and McMillan, 2010, p. 4-5; Harlen, 2010, p. 42; Velayutham et al., 2011, p. 61). Velayutham et al. (2011) further pointed out that, motivation is vital for learners' engagement, achievement, learning strategies and critical thinking in instruction. Research shows that "motivation can be a predictor of academic achievement" (Taylor et al., 2014). Other studies have drawn attention to motivation as an instrument that help improves learners learning in this contemporary world and to adjust to changing life situations (Harlen & Crick, 2003; Harlen, 2006; Moss & Brookhart, 2009). They also argue that motivation is a key factor in developing learners' capacity for effective lifelong learning. When learners are highly motivated, they devote more time and energy to each activity (Nicol & Macfarlane, 2006; Irons, 2008), and are more successful in their studies (King, 2006, p. 33) and apply their acquired knowledge, skills and insights in their lives outside school (Fautley & Savage, 2008). In spite of that, learners' "motivation for learning is highly influenced by a variety of external and internal psychosocial factors" (Harlen & Crick, 2003, p. 173). Hence teachers must play an important role in motivating or demotivating learners to learn (Cauley & McMillan, 2010).

2.7 The Perceived Challenges Teachers Encounter in the use of Assessment

It is obvious that teachers' use of assessment has become one of the most optimistic teaching and learning approaches for improving learners learning. Various study conducted shows that when learners are fully involved in the assessment process, it helped them to improve on their academic performance, develops metacognition, promotes motivated learning and positive self-esteem (DeLuca et al., 2012). In spite of all these, there are still significant barriers to the use of assessment. Several researchers have identified the following as some of the cited perceived difficulties teachers face while using assessment in the teaching and learning process:

2.7.1 Teacher professional development

Numerous studies have shown that teacher quality is an important determinant in enhancing quality education. (Yung, 2006; Moss & Brookhart, 2009) and professional learning to enhance teacher quality is an important element of educational reform (Harlen, 2010, p. 127). Professional learning is therefore an important element in ensuring meaningful and sustained change in teacher assessment practices (Moss a& Brookhart, 2009; Harlen, 2010; Gardner, 2010). For this reason, the Assessment Reform Group brochure states that teacher professional development is one of the basic principles of effective assessment (Dessie, 2015). Therefore, policy makers, curriculum designers, curriculum developers, school headmasters and administrators need to design sustained and continuous professional development programmes that address key areas of teaching and learning through pre- and in-service training (Harlen, 2003, p. 40; Stiggins, 2009) to enhance teachers knowledge on assessment (William, 2006) and to accomplished the require goal of assessment (William et al., 2004), therefore rely heavily on the knowledge, skills and professional experience of the teacher (Harlen, 2010). However, many countries' educational

authorities, curriculum designers, and curriculum developers undervalue the importance of giving teachers the skills and information required for effective assessment procedures. Stiggins (2009) argues that teachers and new school administrators enter the profession with little or no pre-service preparation in assessment that would help them improve teaching and learning.

Majorities of teachers and learners as established by Moss and Brookhart (2009, p. 9) wrongly administer assessment during instructions, having been trained to use programmes and methods or approaches recommended by external experts and presented at unique seminars or workshops. As a result, rather than encouraging learners to build on prior knowledge and understanding to generate new ideas, teachers frequently employ easy assessments to measure memorization of information (Kubitskey et al). Moss and Brockhart (2009) again, argue that most teachers have different interpretations on the use of assessment; as a sequence of tests designed to assess learners' knowledge, a programme or method that complements what learners' have already taken and are already doing, and a means of improving the curriculum rather than improving on learners learning. Dessie (2015) is of the view that this misunderstanding undermines the effectiveness of the use of assessment and that it cannot be used to improve learners' learning. In line with this, Stobart (2008) also opined that these misconceptions present teachers with a dilemma when administering effective assessment practice. The development of self-regulated learners, which are essential for meeting modern society's demands, becomes difficult as a result (Dessie, 2015). Instead, all levels of education must be provided with a clear definition and understanding of the concepts underlying assessment reform (Yung, 2006).

For assessment to be effective, teachers have to undergo proper assessment training. This includes developing strategies for asking strategic questions in class.

Teachers also need to collect data, strategically plan classroom questions and prepare their own and other learners' assessments. Giving descriptive, timely, clear and concise feedback is another aspect of it (see Moss & Brookhart, 2009; Stiggins, 2009; Baird, 2011; Harren (2003). Several studies have indicated that, teachers who participate in appropriate professional development activities use assessment effectively to support learning (Mansell, James, & ARG, 2009); make it possible for learners to actively participate in assessment practices (Dessie, 2015); encourage them to share their experiences; make the community feel safe (Kubitskey et al., 2006); and have shown the capacity to embrace and implement new technologies (Swaffield, 2009).

School leaders, curriculum developers and designers, and other concern educational organizations should therefore create the chance for teachers to update their knowledge and experience on the use of assessment by having consultation with colleagues, adhering to appropriate practices, spending time with other schools, evaluating their own practice, attending conferences and seminars, and learning from other relevant studies conducted (Akerson, McDuffie & Morrison, 2006; Stiggins, 2009; Bennett & Gitomer, 2009; Harlen, 2010) and to provide assessment-based professional development courses at all educational levels (Montgomery, 2010). In order to increase successful teaching and learning, Nusche et al. (2013) determined that policy makers and researchers should focus on teachers' assessment knowledge and skills. To conclude Dessie (2015) pointed out that, curriculum developers and designers and, instructors can collaborate to create solutions for bridging the gap between theory and practice in the use of effective assessment.

2.7.2 Teachers' perception towards assessment

Several researches have unveiled that, perception and belief teachers' hold on approaches to learning and construction of knowledge has a great influence on their practice of assessment (Gulikers et al., 2013). Osman, Bordoh and Eshun (2021) also hold the view that how teachers perceive assessment can negatively affect their assessment practices. It is obvious that there is diversity in the approach or techniques teachers use in their assessment practices due to their notion on assessment during instruction (Moiinvaziri, 2015). This means useful assessment techniques have developed as a result of teachers' optimistic views about assessment, such as the concept that it enhances learners' learning. However, teachers' negative perceptions of assessment as being unrelated to learners' learning can greatly influence how well they accept changes in how they are assessed and used by schools (Brown & Hirschfeld, 2008).

Dayal and Lingam (2015) also added that how teachers perceive assessment can also affect their assessment practice and their usage. The assumptions that teachers make about the nature of the subject matter, teaching, and learning process are based on their own experiences and perspectives (Dysthe, 2008). Moss and Brookhart (2009) also suggest that teachers' beliefs about their teaching decisions can affect learners' achievement, motivation and even the entire teaching and learning process. Brown, Lake, and Mathers (2011) found that socio-political and cultural priorities influence teachers' perceptions and that, therefore, there is diversity in teachers' perceptions from society to society. As Brown, Lake and Mathers (2011) argued, teachers' perceptions of assessment need to be taken into account in order to properly evaluate their practice and, if necessary, find ways to improve it. There is

therefore a need to identify how teachers, especially in Ghana, think about and use assessment.

2.7.3 Teachers' orientations

Teachers' use of assessment is influenced by their orientations towards teaching and learning (Izci, 2016). A study conducted by Berry (2010) pointed to two different orientations of teachers that influence assessment practices. The first is the achievement-oriented teachers who focus on the acquisition and retention of knowledge. The second type is the learning-oriented teachers who focus on learners understanding and conceptual change. It has been established by researchers that performance-oriented teachers are more likely to use traditional (summative) assessment strategies such as tests and checklists, while learning-oriented teachers are more likely to assessment strategies such as peer reviews and self-assessment (Butt, 2010; Berry, 2010). Izci (2016) further indicated that teachers' uncertainty orientation influences their attitudes towards the use of assessment because assessment compels "teachers to be tolerant of and flexible towards uncertainty and to take risks" p. 2545.

Research by Apau (2021) carried out in Ghana indicated that teachers were not given sufficient training in the new Standards-based curriculum. Conclusion can be drawn from the literature that teachers' who are able to adhere to uncertainty during instruction effectively administer assessment to improve learners' learning.

2.7.4 Time and crowded curriculum

Various studies conducted have established that teachers have the required skills and knowledge to administer effective assessment during instruction but do not use them due to curriculum overload and insufficient time during instructions (Box, 2008; Sutton, 2010; Hall, 2002). Box (2008) again contends that pressure on teachers

to cover the whole curriculum in preparation of learners for end-of-year examinations affects their assessment practices. Besides, the influence of the compulsory curriculum in schools has been found to be another indicator that pressures teachers to priorities curriculum content over learners' learning (Sutton, 2010). Izci (2016) opined that teachers' inability to integrate appropriate assessment practices in their daily instructions is as a result of the insufficient time, the need to complete the entire curriculum content and extra workload. Therefore, to address these difficulties, policy makers, curriculum designers, and other education ministries should devise ways to lessen the pressure on teachers to cover the entirety of the curriculum, eliminate time restraints, and motivate them to use the proper assessment procedures.

2.6.5 Class size

Research on assessment practices has shown that teachers adapt their assessment practices to the nature of the class being assessed (Duncan & Noonan, 2007; Koloï-Keaikitse, 2012; Susuwele-Banda, 2005). Research on assessment shows that class size influences how learners are assessed (Gibbs & Simpson, 2004; Masole, 2011). Teachers believe that large class sizes reduce the quality of assessment and may lead learners to misconduct. A finding from a study conducted by Masole (2011) reveals that, teachers admit that large class sizes reduce the performance of the learners they teach. Reducing class size is seen as a way to improve assessment and learners learning (Susuwele-Banda, 2005). On account of this, large class size led to inappropriate use of assessment tools and materials, insufficient teacher attention during assessment, insufficient teacher time, inadequate tools and resources, and negative teacher attitudes towards assessment (Masole, 2011).

2.7.6 Teaching and professional experience

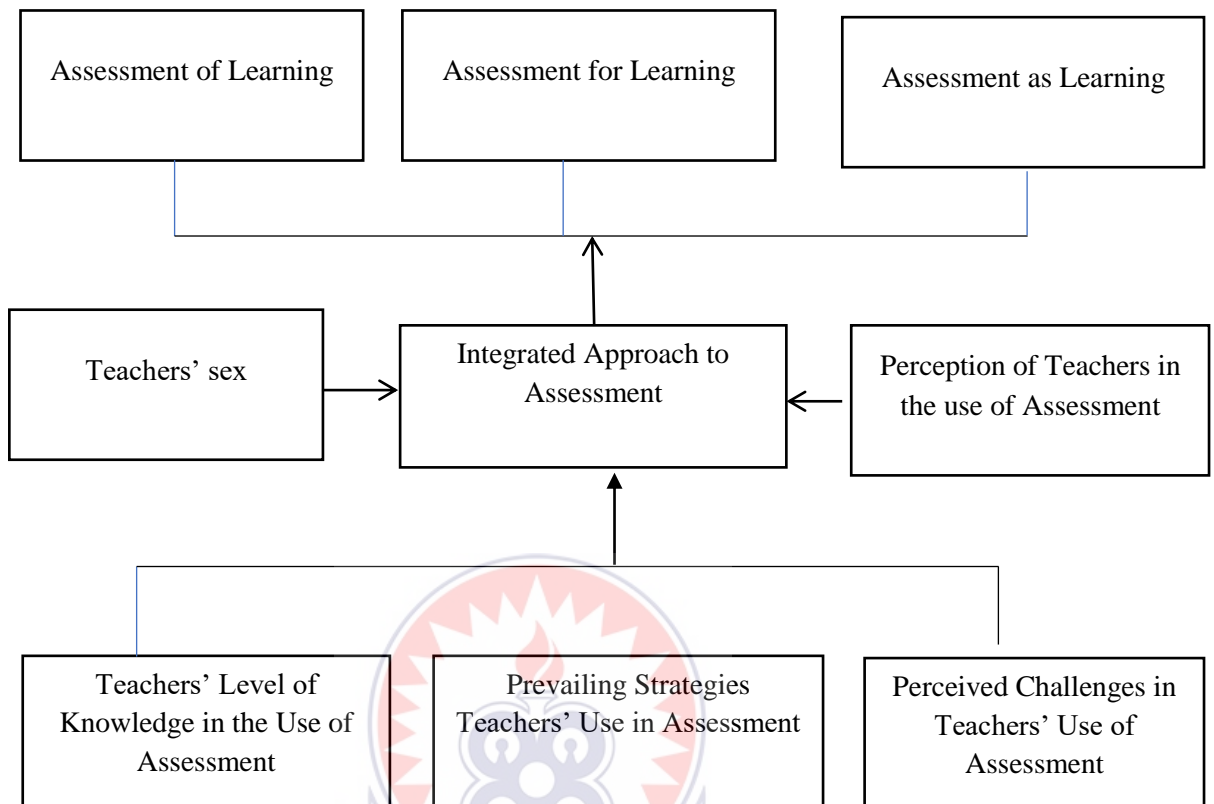
The amount of education and experience of teachers, as established by Sach (2011), can have a beneficial or negative impact on how they do assessments. Sach (2011) further added that, teachers with more teaching experience, such as being abreast with curriculum content, experience in working with learners and experience in teaching the subject are more likely to use appropriate assessment strategies in their assessment practice. On the contrary, teachers with much experience on the use of traditional form of assessment (summative) are unlikely to use integrated approaches to assessment in their daily instructions (Marsh, 2007). In line with this, James and Pedder (2006) contend that, teachers' professional experiences, such as participation in professional development programmes, conferences and professional learning environments; have been found to positively influence their assessment practices. Gardner et al. (2011) also argued that professional learning experiences encourage teachers to adapt to changes situations to improve learners learning.

2.7.7 School support

Teachers' successful implementation of integrated approaches to assessment requires effective assistance and collaboration from their associates and school leadership, e.g., principals, head teachers and heads of department (Falchikov & Boud, 2008; Butt, 2010; Leahy et al., 2005). In particular, research with teachers indicates that the support and encouragement teachers receive from their associates is important in embracing, making amendments and reflecting on their effective use of assessment (Izci, 2016). Nonetheless, studies have revealed that school headmasters and school leaders have low level of knowledge and desired attitudes towards the use of assessment and pressure teachers to use traditional forms of assessments to improve school performance in large-scale external

examinations (Tierney, 2006; Falchikov & Boud, 2008).

2.8 Conceptual Framework



Source: Researcher's own Construct, (2022)

Figure 1: Teachers' integrated approach to assessment in the implementation of the Standard based curriculum

Figure 1 illustrates the description of the variables interacting with each other in the conceptual framework. The diagram depicts that, teachers' perception; gender, knowledge level in the use of assessment can influence the effective use of assessment in the teaching and learning process.

It is also evident from Figure 1 the strategies teachers' use and the challenges they encounter in the use of assessment impede or influence teachers' effective use of assessment in the teaching and learning process.

2.9 Empirical Review

Teachers' use of assessment was evident in Osma (2021) study. The study examined basic school teachers' classroom assessment conceptions in the Sissala East Municipality in the Upper West Region of Ghana. This study was designed using a mixed methods approach, consistent with the interpretation of Creswell and Creswell (2018), Creswell and Plano Clark (2018) incorporating qualitative data to refine the quantitative results. Findings from Osman (2021) study showed that mainly, teachers administer assessment of learning methods than integrating different form of assessment. The study also indicated that, teachers' use of assessment is influenced by sex, age, training in assessment, teacher experience and class level. It was recommended that National Council for Curriculum and Assessment (NaCCA), Ghana Education Service (GES) should regularly organize assessment based training and Professional Development programmes for both pre-service and in-service teachers to stay abreast of new trends, improve their skills and use appropriate integrated assessment approaches in the teaching and learning process.

Again, Yao (2015) conducted a study to examine teacher perceptions of classroom assessment. Interviews were conducted in schools visited by the researcher, who observed the lessons of most of the teachers interviewed in the study. In this study, a focus group approach was used to gather teachers' perceptions. Results from the interview of the study revealed that majority of the participants explained assessment as an attempt by teachers to monitor learners' learning. The findings also indicated that few teachers were quick to respond that the two often overlapped or occurred simultaneously. They found that assessment could only support teaching and learning if both activities were taking place at the same time. The results also confirmed that teachers value project-based assessment, which gives learners the

chance to solve real-world problems. They also enjoy group-based assessments where learners have the opportunity to collaborate and learn from each other. Lastly, the teachers admitted that in their use of assessment they were challenged by the need to choose assessment items for different levels of learners, as well as the need to develop assessments from topics that may be demanding to complete before the assigned instructional period.

Also, Asibey, Senyefia and Kusi (2020) conducted a study to evaluate the use of Assessment for learning strategy by basic school teachers in Ghana. A survey approach was used to carry out the study. The study developed 16 text items for the questionnaire based on the characteristics, strategies and principles of assessment for learning. The sample consisted of 100 respondents randomly selected from 132 primary school teachers with a confidence interval of 95%. The Assessment for Learning Questionnaire (ALQ) was used to collect data from the respondents. The results revealed that there were significant differences in teachers' demographic variables likewise their use of assessment by primary school teachers. Findings from the study also indicated that significant gender difference occurred in their assessment practices; female teachers had more experience with interactive assessment and giving immediate feedback and guidance to learners' than male teachers. The results from the study again pointed out that in terms of instructions, classroom teachers made better use of assessment to improve learners' learning than did teachers of other subjects. The findings also indicated that primary school teachers with more than four years of teaching experience used assessment more often than their colleagues with less than four years of teaching experience. In this respect, they showed a greater ability to use different learners' effective feedback to inform decisions on groupings, teaching methods and teaching materials than the latter.

In addition, strategies teachers' use to improve their assessment practices was evident in a study conducted by Oli (2021). The study was about different classroom assessment strategies and feedback practices by college instructors on a cross-sectional study. The study adopted the quantitative- descriptive and cross-sectional research design. The simple random sampling technique was used in selecting the respondents. Findings from the study showed that, the strategies instructors mostly use in their assessment practices includes, class recitation, seatwork and teacher made quiz which was confirmed by their own learners. The study indicated that, after the evaluation has been done on the various teachers' use of assessment; it came to light that instructors provide feedback to learners to rectify important issues and assist learners on how to overcome their challenges and also improve on their learning. In addition, the instructors affirmed that they orally provided feedback to learners especially when there is too much load on them. The findings from the study also pointed out that, notwithstanding the academic training levels of instructors, subjects taught likewise employment status, all of them carry out the same feedback approaches. From the findings of the study, it came to light that the different assessment strategies instructors' use and provision of effective feedback has positively helped learners to improve on their learning. Engaging learners in self-reflection and timeless forms of assessment practices had also helped IT instructors in the use of assessment. It was concluded from the study that a comprehensive study is needed on the different assessment strategies of college instructors as it is likely to affect the academic success of learners.

Similarly, Awonyi (2016) studied on senior secondary mathematics teachers' understanding of school-based assessment and its challenges in the Cape Coast Metropolis. The study employed a descriptive research design involving a sequential

mixed methods strategy using questionnaires and interviews. The sample consisted of 110 teachers from 10 high schools in Cape Coast, 12 of whom participated in the interview sessions. Findings from the study established that teachers were not familiar with School-Based Assessment principles and were not aware of new paradigm shift from traditional way of assessment practices to integrated assessment approaches. Furthermore, it was found that the majority of teachers did not recognise learners' test scores as an instrument of identifying their strengths and weaknesses and providing remediation. The findings also revealed that 20% of teachers admitted that inadequate assessment materials was an inhibitor to the effective implementation of integrated assessment approaches. Virtually, the entire interviewees also expressed concern that insufficient time was also an inhibitor to their successful implementation of integrated assessment approaches to improve teaching and learning.

Finally, Matovu and Zuhairi (2014) conducted a study to explore some of the factors influencing assessment practices among university academic staff in Uganda. A quantitative approach was used in the data collection and analyses procedure. University academic staff in Uganda of 321 was chosen for the purpose. The data obtained from the respondents were also collected using the Assessment Practice Inventory Modified Scale. The research questions that were hypothesized as the factors influencing the assessment practices of the University Academic Staffs in Uganda were, academic levels, type of university attended, specialization, class size and assessment-based training. Findings from the Matovu and Zuhairi (2014) study showed that model academic levels and assessment-based training were identified as the major indicators in the use of assessment by the university academic staffs. These findings were obtained using multiple regression analysis. With regards to the results revealed in the study, it was recommended that adequate trainings, workshops and

seminars should be given on regular basis in the area of assessment by the university to have deeper understanding on assessment strategies and its significant contribution in teaching and learning and also, make sure their academic staffs climb higher in academic levels.

2.10 Summary of Literature Review

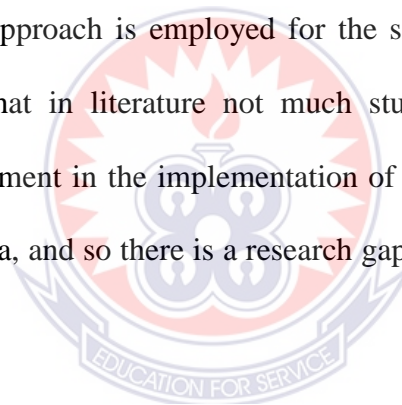
Researchers have developed various definitions of the term “assessment” (NaCCA, 2019; Amua-Sekyi, 2016; McMillian, 2018; Yetkin, 2017). Many have conceptualized assessment based upon the nature of supporting and promoting meaning learning. Research shows that classroom assessment is an important aspect of the teaching and learning process and that by incorporating it into classroom practice, meaningful learning outcomes can be achieved (Stiggins et al., 2006). Therefore, if the assessment practices of teachers are not well organized or initiated, it can negatively affect learners’ performance to large extent (Tosuncuoglu, 2018).

The Behaviorist theory of learning and the Constructivist (i.e., cognitive constructivist and social constructivist) theory of learning formed the theoretical review. The Behaviourism theory establishes that learning occurs after behaviour undergoes a noticeable transformation as a result of variations in the environment. The Alternatively, the guiding principle of the theory of constructivism is that we learn in order to pursue certain meanings. The Cognitive Constructivism learning theory sees learning as how people make sense of their experiences. The Social Constructivism learning theory takes into account the cultural and social context that may have an impact on learners' cognitive growth.

The conceptual framework constituted variables like teachers’ sex, integrated assessment approaches. Perception of teachers in the use of assessment, teachers’ level of knowledge in the use of assessment, prevailing strategies teachers use in

assessment and the perceived challenges in teachers use of assessment. The empirical review encompasses teachers' use of assessment, teachers' perception in the use of assessment, teachers' level of knowledge in the use of assessment, assessment strategies teachers' use in assessment and the perceived challenges that impede the teachers' use of assessment.

Research has evidence that teachers' demographic characteristics, perceptions, beliefs and approaches to learners' learning and knowledge-building as well as the strategies the use the challenges the encounter can influence their classroom practices, especially when it comes to using assessment (Yung, 2006; Cheung et al, 2006; Weaver, 2006; Gulikers et al., 2013). The cross-sectional survey design located in the quantitative research approach is employed for the study and discussed in the next page. It was found that in literature not much study on the factors influencing teachers' use of assessment in the implementation of the standards-based curriculum has been done in Ghana, and so there is a research gap on teachers' use of assessment of in Ghana.



CHAPTER THREE

METHODOLOGY

3.0 Overview

This chapter covers the methodology used in the study. It is structured around the philosophical worldview (research paradigm), the research approach, the research design, study area, population of the study, sample and sampling technique, instrumentation, validity of the instrument, reliability of the instrument, data collection procedure, data analysis procedure and ethical consideration.

3.1 Philosophical Worldview

A research paradigm which is also called philosophical worldview is a set of assumptions about how the issue of concern to the researcher should be studied (Henn, Weinstein & Foard, 2016). It involves the beliefs that influence how study findings are understood and interpreted. The researcher is aligned to the positivist point of view in terms of paradigm which states that the only acceptable method for advancing knowledge and human understanding should be through experimentation, observation, and reason based on experience (Kivunja & Kuyini, 2017). The positivist paradigm holds the viewpoint based on scientific research procedures. Deductive reasoning, the creation and testing of hypotheses, the provision of operational definitions and mathematical equations, computations, extrapolations, and expressions are aligned to this paradigm's research in order to reach conclusions (Kivunja & Kuyini, 2017).

Based on quantifiable results, this research paradigm seeks to explain phenomena and offer predictions. The positivist paradigm is frequently linked to the quantitative research approach, where the goals are to anticipate, control, and

generalize the results using experiments, questionnaires, or other approaches (Kamal, 2019).

3.2 Research Approach

Per the philosophical underpinning of the study, the researcher adopted the quantitative research approach. Quantitative research deals with the investigation of phenomena through the gathering of numerical data and use of mathematical, statistical, or computational methods (Creswell, 2017). The positivism paradigm is the foundation of quantitative research, which supports methods based on statistical breakdown and other techniques like inferential statistics, hypothesis testing, mathematical explanation, experimental and quasi-experimental design randomization, blinding, structured protocols, and questionnaires with a limited range of prearranged answers (Slevitch, 2011).

Both variables and hypotheses are necessary for achieving quantitative research objectives because they are quantifiable and cannot be separated from one another. Variables are ideas with variations that can take many different forms, whereas hypotheses are unproven assumptions or assertions about how variables relate to one another.

3.3 Research Design

The cross-sectional survey design was adopted for the study in making a quantitative inquiry to look at teachers' use of assessment in the implementation of the standards-based curriculum in the Ayensuano District of the Eastern Region of Ghana. A cross-sectional survey design is one that produces a 'snapshot' of a population at a particular point in time (Creswell & Creswell, 2018). The epitome of cross-sectional survey design is a national census in which a representative sample of

a population consisting of individuals of different ages, different occupation, and different educational and income levels residing in different parts of the country is interviewed on the same day (Cohen, Manion, & Morrison, 2018). More typically in education, cross-sectional survey design involves indirect measures of the nature and rate of changes in the physical and intellectual development of samples of teachers drawn from representative age levels. The single 'snapshot' of the cross-sectional survey design provides researchers with data for either a retrospective or a prospective enquiry (Cohen, Manion & Morrison, 2018). A cross-sectional survey design can examine attitudes, beliefs, and opinions by which individuals think about issues, whereas activities are their actual behaviours (2012).

According to Hall (2011) cross-sectional survey design can be conducted using any mode of data collection, including mailed questionnaires, self-administered questionnaires, electronic mail, Web data collection, or a mixture of data collection modes. A variety of sampling frames can also be used to select potential respondents for cross-sectional research design: random-digit dialing frames, lists of addresses or (landline) telephone numbers, lists of cell phone numbers, lists of businesses or other establishments and area probability frames (Hall, 2011). This design has the advantage of measuring current attitudes or activities. It also provides information in a short amount of time, such as the time required for administering and collecting information (Creswell, 2012).

In the context of this study, the approach helped to quantify data that were collected on the perception of public primary school teachers on the use of assessment; teachers' level of knowledge in the use of assessment; strategies teachers employ in the use of assessment; as well as the perceived challenges teachers encounter in the use of assessment.

3.4 Population

Population includes all elements that meet certain criteria for inclusion in a study (Burns & Grove, 2017). Polit and Hungly (2004) also referred to population as an aggregate or totality of all the objectives, subjects or members that conform to a set of specifications. The population for the study includes all public primary school teachers in the Ayensuano District from Kindergarten to Basic nine. The population is estimated at 864. However, the accessible population for this study includes 432 public primary school teachers from basic one to Basic six. Four hundred and ninety-one were males while 141 were females. Data from the District Directorate of the Ghana Education Service (2022) showed that there are 432 teachers in the 63 public primary basic schools in the Ayensuano District. The researcher focused on the primary school teachers from basic one to basic six because they are relevant for the study and can provide all the necessary information concerning the perception they have on the use of assessment, their level of knowledge on the use of assessment, the prevalent assessment practices as well as the perceived challenges they encounter in the use of assessment in the implementation of the standards- based curriculum.

3.5 Sample and Sampling Techniques

The quality of a piece of research stands or falls not only on the appropriateness of the methodology and instrumentation but also by the suitability of the sampling strategy that has been adopted (Cohen et al., 2018). There are 63 public primary basic schools in the Ayensuano District in the Eastern of Ghana. There were 432 public primary school teachers from basic one to basic six in the Ayensuano District that were used for the study.

The simple random sampling technique (Lottery method) was used to select 216 teachers out of 432 teachers from basic one to basic six in the study. The simple

random sampling was used to select three out of six teachers from each school to respond to the questionnaire. Pieces of papers which equal the total number of teachers in each school were designed by the researcher. In the first school for instance, three pieces of paper with inscription “Yes” whilst the other paper was captioned “No”. The pieces of paper were folded and put in a box. The box was spun several times to ensure the pieces of paper were well mixed to affirm each teacher having the opportunity of being selected. The teachers were allowed to pick the papers at random. Teachers, who selected the pieces of paper which had “yes” responses, were enrolled as study respondents for the study. This process was then repeated in the other schools. Two hundred and sixteen (216) teachers were selected from the population. 104 were females while 112 were males.

The decision in using basic one to basic six and excluding kindergarten teachers was strategic and grounded in the specific scope of the study. The primary rationale lies in the distinctive pedagogical methods, curriculum structures, and developmental needs associated with early childhood education, as highlighted by researchers (Pea, 2018; Kolb, 2014; Neuman & Roskos, 2005; Kraft-Sayre & Pianta, 2003). By narrowing the focus to primary school teachers, the researcher aimed to provide a more targeted examination of the challenges and facilitators pertinent to the implementation of the Standards-based Curriculum in the context of formal elementary education.

This approach aligns with prior research methodologies that similarly delimited their investigations to specific grade levels to achieve depth and specificity (Ball & O’Connor, 2016; Howard & Hoffman, 2018). The omission of kindergarten teachers allows for a more nuanced exploration of factors influencing assessment

practices within the parameters of the study, ensuring a more comprehensive understanding of the issues faced by educators in the Ayensuano District.

3.6 Instrumentation

The researcher self- designed a structured questionnaire for the data collection parted into two; open- ended and closed- ended questions. The first part being open-ended questions comprised the demographic information of respondents which focused on their sex, age, academic qualification, teaching status, and years of teaching experience. The second part being closed- ended questions focused on items section B-E which required respondents to indicate whether they strongly disagree, disagree, agree or strongly agree to the individual items. A questionnaire is a printed self-reported form designed to elicit information that can be obtained through the written response of the subjects (Burns & Grove 2017). The information obtained through a questionnaire is similar to that of an interview, but the questions tend to have less depth (Burns & Grove 2017). A cost-effective way to rapidly gather copious amounts of information from a huge number of people in a relatively short amount of time is to use self-administered questionnaires, where you are not required to hire surveyors to conduct in-person interviews. A questionnaire could be answered more easily and quickly by participants (Ary et al., 2006). The researcher chose the questionnaire because the respondents are literates and therefore could read and respond to the items.

The questionnaire used for the study consisted of five sections; A-E consisting of 59 items. Section A comprised five items which focused on the demographic characteristics of the respondents. Section B comprised of ten items relating to perception of teachers regarding their use of assessment. Section C had ten items relating to teachers' level of knowledge in the use of assessment. Section D consisted

of twenty items relating to the prevalent strategies teachers use in improving assessment. Section E comprised fourteen items which dealt with perceived challenges teachers encounter in the use of assessment. The items from section B-E were on a 4-point Likert scale: Strongly agree (SA), Agree (A), Disagree (D) and strongly Disagree (SA) weighted 1, 2, 3 and 4 respectively.

3.7 Validity and Reliability of Instrument

Validity refers to the degree to which evidence and theory support the interpretation of the test scores entailed by use of tests. The validity of an instrument is the extent to which it does measure what it is supposed to measure. The instrument was given to an expert in the Department of Educational Foundations to scrutinize and ensure that the questionnaire met face, content and construct validity. Per the expert impression, the items were deemed aligned to the construct being investigated.

The term reliability points to the level of internal consistency or stability over time of a research instrument. Therefore, for a research instrument to be reliable, it must be capable of yielding consistent results when used more than once to collect data from two samples that have been drawn randomly from the same population (Mugenda & Mugenda, 2003). In line with this, the questionnaire was pre-tested in three selected public primary schools in the Suhum Municipality which include; Presbyterian Model Basic School, Suhum Experimental M/A Basic School and Suhum Roman Catholic Basic School. These schools were selected because they exhibit similar characteristics.

The questionnaire for the teachers consisted of five sections i.e., section A, B, C, D & E covering various relevant areas such as demographic information, the perception of teachers regarding the use of assessment, teachers' level of knowledge in the use of assessment, the gender-based differences in the prevalent strategies

teachers use in improving assessment as well as the perceived challenges teachers encounter in the use of assessment. The Cronbach's alpha of 0.81 was obtained for the teachers' questionnaire. De Vellis (2012) deemed this reliability coefficient of 0.81 for the teachers' questionnaire to be reasonable. Therefore, the instrument was considered reliable and appropriate to collect the relevant data to answer the hypotheses posed. Additionally, Frankel and Wallen (2000) suggested that reliability should be at least 0.70 and ideally greater for research purposes. Moreover, the supervisor of the researcher provided guidance to the researcher by selecting the appropriate method for assessing the reliability of the instrument. Again, the supervisor, reviewed the research design, and offered suggestions to improve the instrument's consistency and stability. With this, the instrument used in this study could be said to be of good quality capable of collecting useful data for the study. The queries that came out of the item analyses were catered for. The reliability of the instrument was determined using Statistical Software for Data Science (Stata) version 17. All these actions were taken to ensure that the instrument was capable of collecting quality and useful data for the study.

Table 1: Reliability Co-efficient of Pre-test Instrument

No.	Name of Scale	No. of Items	Cronbach's alpha
1	Perception of teachers regarding the use of assessment	10	.75
2	Teachers' level of knowledge in the use of assessment	10	.75
3	Gender-based major differences in the prevailing teachers' use of assessment	20	.78
4	Perceived challenges teachers encounter in the use of assessment	14	.76

From Table 1, the reliability co-efficient of the scale obtained ranged from 0.75-0.81 after the pre-test. Ideally, these reliability coefficients obtained great indicators for collecting useful data for the study since they were not below 0.7

Table 2: Reliability Co-efficient of Final Instrument

No.	Name of Scale	No. of Items	Cronbach's alpha
1	Perception of teachers regarding the use of assessment	10	.81
2	Teachers' level of knowledge in the use of assessment	10	.77
3	Gender-based major differences in the prevailing teachers' use of assessment	20	.80
4	Perceived challenges teachers encounter in the use of assessment	14	.78

From Table 2, at the end of the final data collection, the reliability coefficients obtained ranged from 0.77- 0.81; an indication of good reliability

3.8 Data Collection Procedure

The researcher obtained an introductory letter from the head of Department of Educational Foundations of the University of Education, Winneba to obtain permission from the appropriate authorities of the selected schools to enable access to conduct the study. The instruments were self-administered in order to ensure a high return rate. The consent of the teachers was sought for before administration of the questionnaire to the sampled respondents. The purpose of the study was explained to the respondents by the researcher. The data collection exercise was conducted within a period of one month. In order to ensure a high return rate, the researcher ensured that questionnaires were given out and retrieved on the same day.

3.9 Data Analysis

To address the research questions and hypotheses formulated to guide the study, quantitative techniques were employed in the analysis of the data. Specifically, research questions one, two, three and four were analyzed using descriptive statistics, that is, frequencies and percentages, mean and standard deviation. The researcher chose descriptive statistics since it allows for the presentation of data in a way that is clear and relevant, which in turn facilitates easier interpretation of the aforementioned data set (Loeb et al., 2017). It provides the foundation for comparing variables with inferential statistical tests. The foundation for comparing variables using inferential statistical tests is also provided. The research questions answered by the teachers were constructed on 4-point Likert Scale; 4= strongly Agree (SA), 3= Agree (A), 2= Disagree (D) or 1= Strongly Disagree (SD).

The four –point Likert scale was reduced to a two-point Likert scale in order to enable easier analysis of data and discussion of results. Strongly Agree and Agree were merged to be Agree whiles Strongly Disagree and Disagree were also merged to be Disagree. According to DeCastellarnau (2018), a two-point Likert scale simplifies the response options, making it clearer for both researchers and readers. This simplicity can enhance the interpretability of results, especially when dealing with complex or nuanced topics (DeCastellarnau, 2018). Caskurlu et al. (2017) also added that, when presenting results to a broader audience, a two-point Likert scale can enhance communication efficiency. It simplifies visualizations and makes it easier for diverse stakeholders, including those with limited statistical expertise, to understand the key findings (Smith, 2023).

Data for hypothesis one and two were analyzed using Chi-square. In a contingency table, the chi-square test statistic can be used to assess whether there is

any difference between the study groups in the proportions of the relevant risk factor (Rana & Singhal, 2015). To ascertain whether there is any difference between the study groups, the researcher performed the chi-square test statistic. It was also used in comparing the observed values in the data to the expected values.

In the analysis of Likert scale data, the researcher used means of means and means of standard deviation. This is because Likert scale data are typically treated as ordinal, representing the order or rank of responses rather than continuous measurements (Harpe, 2015). Harpe (2015) further argued that, as such, the use of critical values based on assumptions of normal distribution may not be appropriate but rather means of means. Research has indicated that means provide a more straightforward approach to summarizing and comparing the central tendencies of ordinal data (Norman, 2010). Artino and Sullivan (2013) explained that, means offer a pragmatic compromise by allowing a summary measure while acknowledging the ordinal nature of the data. Means offer a straightforward and easily interpretable summary of central tendencies, which can be valuable when communicating results to a diverse audience (Biber & Egbert, 2023). Biber and Egbert (2023) added that this simplicity enhances the accessibility of findings, especially in applied or interdisciplinary research contexts.

Standard deviation is a robust measure of dispersion, indicating how spreads out the responses are around the mean (Gupta et al., 2019). The researcher also used Standard deviation in the analysis of data because, from Gupta et al. (2019), in Likert scale analysis, where ordinal data are often treated as if they represent intervals, the standard deviation provides valuable information about the extent to which responses vary. Norman (2010) added that, standard deviation allows for the identification of highly variable or contentious items, aiding researchers in pinpointing areas of

disagreement or ambiguity. In line with this Sullivan and Artino (2013) supported that while means provide a central tendency, they alone may not capture the entire picture of respondents' sentiments. The standard deviation complements the mean by offering a measure of precision (Sullivan & Artino (2013). In cases where Likert scale items are used to measure a construct or attribute, the standard deviation contributes to the assessment of reliability (Gadermann, Guhn & Zumbo; 2019; Harpe, 2015).

In the presentation of the data analysis, the means of means and means of standard deviation were generated by calculating the average score for each participant across the four research questions. Specifically, for each participant, I computed the mean and standard deviation value of their responses. This process resulted in individual mean and standard deviation scores representing the average response for each teacher. Subsequently, I calculated the overall mean by averaging these individual means and standard deviation. This approach offers a consolidated and representative measure of teachers' collective responses to the key aspects addressed in the research questions (Field, 2018).

3.10 Ethical Consideration

The researcher has a moral obligation to strictly consider the rights of the respondents, who are expected to provide knowledge for this investigation (Streubert & Carpenter, 2011). The researcher requested for permission to conduct the study from the Head Department of Educational Foundations in the Faculty of Educational Studies in the University of Education. A written permission was obtained from the Department of Educational Foundations in the Faculty of Educational Studies in the University of Education, Winneba. Written permission (informed consent) sought from respondents for the questionnaire administration.

Polit and Hungler (2004) states that, confidentiality means that no information that the respondent divulges is made public or available to others. The anonymity of a person or an institution is protected by making it possible to link aspects of data to a specific person or institution. Confidentiality and anonymity were guaranteed by ensuring that the data obtained were used in such a way that no one other than the researcher knows the source (Lodico, Spaulding & Voegtle, 2006). In this study, no, actual respondent names were attached to the information obtained rather, serial numbers were used.

In this study, the researcher made sure that no information was shared when respondents reported their experiences. The participants were told they may opt out of the study whenever they wanted to. The right was explained to them prior to engaging in the study, before the interview.



CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.0 Overview

The purpose of the study was to look at teachers' use of assessment in the implementation of the standards-based curriculum. This chapter presents data in an attempt to answer the stated research questions. This chapter is structured into two sections, the first section focused on the demographic characteristic of the respondents, the second section deals with the presentation of data in relation to the research questions.

4.1 Demographic Characteristics of Respondents

This section presents the demographic characteristics of teachers sampled for the study. The demographic information of the respondents was based on sex, age range, and academic qualification, teaching status and teaching experience.

Table 3 shows the sex distribution of the respondents of the study. Majority of the respondents 112(51.8%) were males while a minority of the respondents 104(48.2%) were females.

Table 3 shows the demographic data of the respondents in relation to their sex.

Table 3: Sex of Distribution the Respondents

Sex	Frequency	Percentage (%)
Male	112	51.8
Female	104	48.2
Total	216	100.0

Source: Field data, 2022.

From Table 3, the sex distribution of the respondents indicates, that out of 216 respondents, 112(51.8%) of them were males whereas 104(48.2%) were females. It could be inferred from the data that there were males dominated.

Table 4: Age Distribution of Respondents

Age Range	Frequency	Percentage (%)
20-29	86	39.8
30-39	102	47.2
40-49	20	9.3
50-59	8	8
Total	216	100

Source: Field data, 2022.

Data from Table 4 suggests that the most of the respondents, 102 (47.2%) were in the age range of 30-39 years, 86(39.8%) respondents fell in the ages of 20-29, while the few of the respondents totaling 8(3.7%) were between the ages of 50-60 years, 20(9.3%) were between the ages of 40-49. It could be deduced from the table that most of the respondents selected for the study were in the middle age group.

Table 5: Academic Qualification of Respondents

Academic qualification	Frequency	Percentage (%)
Diploma	142	65.7
1 st Degree	66	30.6
2 nd Degree	8	3.7
Total	216	100

Source: Field data, 2022

Table 5 shows the academic qualification of the respondents sampled for the study. It reveals that a total of 142(65.7%) respondents were diploma certificate holders, 66(30.6%) were 1st degree certificate holders while 8(3.7%) were 2nd degree certificate holders. It could be concluded that there were a larger number of diploma holders working at the primary school level (i.e., from basic 1 to basic 6). The fact being that in Ghana, and for that matter, the minimum requirement for teaching at the Basic Education level is Diploma.

Table 6: Teaching Status of Respondents

Teaching Status	Frequency	Percentage (%)
Non-professional	8	3.7
Professional	208	6.3
Total	216	100.0

Source: Field data, 2022.

Among the respondents as indicated on table 6, 8 respondents representing 3.7% were non-professional teachers' whiles the majority of 208 respondents representing 96.3% were professional teachers.

Table 7: Year of Teaching Experiences of Respondents

Teaching Experiences	Frequency	Percentage (%)
Less than 1 year	25	11.6
1-5years	66	47.2
6-10years	46	21.3
11=20years	31	14.4
21yrs and above	12	5.5
Total	216	100

Source: Field data, 2022.

Table 7 shows the years of experience of the respondents sampled for the study. The table shows that 25(11.6%) have a working experience less than one year, the majority of 102 (47.2%) had their experience ranging from 1-5years, 46(21.3%) have a working experience from 6-10 years, 31(14.4%) have a working experience from 11-20 years whiles 12(5.5%) have a working experience ranging from 21 years and above, the lowest among the groups.

4.2 Analysis of the Research Questions

This section presents data gathered from the field in an attempt to achieve the stated research objectives.

4.3 Research Question 1: What are the perceptions of public primary school teachers about their use of assessment in the implementation of the standards-based curriculum?

The research question sought to ascertain the perception of public primary school teachers in the use of assessment in the implementation of the Standards- based Curriculum. 10 items (i.e., 1-10) were measured and constructed on 4-point Likert scale; 4= strongly Agree (SA), 3= Agree (A), 2= Disagree (D) or 1= Strongly Disagree (SD). The score for each variable was used to calculate the mean score of each individual item. The analysis was done with a standard set mean and standard

deviation from Ignacio et al. (2023). According to Ignacio et al (2023), a standard set Mean of 1.0 –1.80 = Strongly Disagree; 1.81 – 2.60 = Disagree; 2.61 – 3.40 = Neutral; 3.41-4.20 = Agree; and 4.21 – 5.0 = Strongly Agree. A standard deviation of below 1.0 indicates similarity or homogeneity in responses while a standard deviation of 1.0 or above indicates difference (heterogeneity) in responses.

Table 8: Public Primary School Teachers' Perception in the Use of Assessment

(N=216)

Items	SD F (%)	D F (%)	A F (%)	SA F (%)	Mean	SDV
Assessment can be complex and confusing	15 (6.9)	52 (24.1)	128(59.3)	21(9.7)	2.71	.733
Assessment tends to have little relevance to instructional goals	74(34.3)	86(39.8)	43(19.9)	13(6.0)	1.97	.886
Assessment does not enhance a high tendency for meaningful learning	73(33.8)	127(58.8)	9(4.2)	7(3.2)	1.76	.676
Assessment is a necessary tool in teaching rather than a means of improving teaching and learning	27(12.5)	81(37.5)	86(39.8)	22(10.2)	2.47	.840
It causes unnecessary stress and fatigue to teachers	53(24.5)	114(52.8)	26(12.0)	23(10.7)	2.08	.887
It causes unnecessary stress and fatigue to learners	53(24.5)	110(50.9)	33(15.3)	20(9.3)	2.09	.873
Assessment and instruction are separate processes	43(19.9)	79(36.5)	85(39.4)	9(4.2)	2.30	.827
Assessment can only support teaching and learning if the two processes occur simultaneously	19(8.8)	38(17.6)	119(55.1)	40(18.5)	2.83	.829
Assessment is a plan of action imposes on us without necessary input from curriculum developers, policymakers and other abled educational stakeholders involved	41(18.9)	89(41.2)	66(30.6)	20(9.3)	2.30	.882
Assessment feedback is useful in improving learners learning	9(4.2)	4(1.9)	77(35.6)	126(58.3)	3.48	.734
Means of Means/ Means of SDV					2.30	.83

Source: Field Data, 2022, KEY: %= Percentage, SD= Strongly Disagree, D= Disagree, A= Agree, SA= Strongly Agree, M= Mean, SDV= Standard Deviation.

Table 8 shows a description of the responses relating to the primary school teachers' perception in the use of assessment in the implementation of the standards-based curriculum. The means of means and means of standard deviation of the items were 2.30 and .83 respectively. The standard deviation of .83 indicates that the teachers' responses were similar (Homogeneous).

The data in Table 8 show that majority of the teachers 149(69.0%) agreed that assessment can be complex and confusing during the implementation of the standards-based curriculum while 67(31%) disagreed to this statement. Concerning assessment is a necessary tool in teaching rather than a means of improving teaching and learning, 108(50%) of the teachers disagreed to this assertion, whereas 108 (50%) of the teachers also agreed to the assertion. Many of the teachers 57(26.4%) opted to disagree that assessment can only support teaching and learning if the two processes occur simultaneously, while 159(73.6%) of the teachers agreed to this assertion. Few teachers representing 86 (39.9%) agreed that assessment is a plan of action imposed on them without necessary input from curriculum developers, policymakers and other able educational stakeholders involved, whereas, 130(60.1%) of the teachers disagreed to this statement. With regard to assessment feedback is useful in improving learners learning, 13(6.1%) of the teachers disagreed to this statement, while majority of the teachers representing 203(93.9%) agreed to this statement.

From the foregoing analysis, it could be concluded that, public primary school teachers had a positive perception about the use of assessment in the implementation of the standards-based curriculum. This is because they agreed that assessment can be complex and confusing during the implementation of the standards-based curriculum (Mean = 2.71, SDV= .733); and they are of the perception that necessary tool in teaching rather than a means of improving teaching and learning (Mean = 2.47,

SDV=.840). Also, they are of the perception that, assessment can only support teaching and learning if the two processes occur simultaneously (Mean=2.83; SDV=.829). Moreover, the teachers believed that assessment is a plan of action impose on them without necessary input from curriculum developers, policymakers and other abled educational stakeholders involved (Mean=2.30, SDV=.882). Finally, the teachers believed that assessment feedback is useful in improving learners learning (Mean=3.48, SDV=.830).

4.4 Research Question 2: What is the knowledge level of public primary school teachers in the use of assessment in the implementation of the Standards- based Curriculum?

This research question sought to establish the knowledge level of public primary school teachers in the use of assessment in the implementation of the Standards-based Curriculum. 10 items (i.e., 1-10) were measured and crafted on 4-point Likert scale; 4= strongly Agree (SA), 3= Agree (A), 2= Disagree (D) or 1= Strongly Disagree (SD). The score for each variable was used to calculate the mean score of each individual item. Data gathered in answer to this research question have been presented in Table 9. The analysis was done with a standard set mean and standard deviation from Ignacio et al. (2023). According to Ignacio et al (2023), a standard set Mean of 1.0 –1.80 = Strongly Disagree; 1.81 – 2.60 = Disagree; 2.61 – 3.40 = Neutral; 3.41-4.20 = Agree; and 4.21 – 5.0 = Strongly Agree. A standard deviation of below 1.0 indicates similarity or homogeneity in responses while a standard deviation of 1.0 or above indicates difference (heterogeneity) in responses.

Table 9: Teachers' Knowledge on the use of Assessment (N=216)

Source: Field Data, 2022, KEY: %= Percentage, SD= Strongly Disagree, D= Disagree, A= Agree, SA= Strongly Agree, M= Mean, SDV= Standard Deviation.

Items	SD F (%)	D F (%)	A F (%)	SA F (%)	Mean	SD
Assessment must be integrated in daily instructions	9(4.2)	4(1.8)	106(49.1)	97(44.9)	3.34	.718
Assessment largely focuses on memorization of simple facts, giving of marks and ranking of learners	43(20.0)	88(40.7)	59(27.3)	26(12.0)	2.31	.926
Assessment improves learners learning and instruction	9(4.2)	4(1.8)	113(52.3)	90(41.7)	3.31	.710
Assessment is use to enhance competition among learners	27(12.5)	81(37.5)	86(39.8)	22(10.2)	2.73	.931
Assessment is a tool for collecting information regarding learners learning	10(4.6)	0(0.0)	129(59.7)	77(35.7)	3.26	.688
Assessment is an instrument for accountability	13(6.0)	25(11.6)	116(53.7)	62(28.7)	3.05	.802
Assessment offer learners' appropriate feedback to improve their learning	3(1.4)	4(1.9)	83(38.4)	126(58.3)	3.53	.608
Peer assessment and self-assessment improves learners learning	6(2.8)	4(1.9)	90(41.6)	116(53.7)	3.46	.674
Assessment and instruction as separate entities	50(23.2)	78(36.1)	71(32.8)	17(7.9)	2.25	.902
Assessment compels teachers to be able to accept any uncertainty, be flexible and take risk	6(2.8)	22(10.2)	135(62.5)	53(24.5)	3.08	.672
Means of Means/ Means of SDV					3.03	.763

Table 9 shows the description of respondents' responses to items relating to the knowledge level of public primary school teachers in the use of assessment in the implementation of the Standards- based Curriculum. The means of means and means of standard deviation of the items were 3.03 and .763 respectively. The standard deviation of .763 indicates that the teachers' responses were similar (Homogeneous).

The following individual items in Table 9 attest to the fact. The data reveal that few of the teachers representing 13(6%) disagreed to the statement that assessment must be integrated in daily instructions whereas majority of the teachers representing 203(94%) agreed to the statement. With regard to assessment improves learners learning and instruction, 13(6%) of the teachers disagreed to this assertion, while majority of the teachers 203(94%) agreed to this assertion. Minority of the teachers 10(4.6%) disagreed that assessment is a tool for collecting information regarding learners learning, while 206(95.4%) of the teachers agreed to the statement. In relation to assessment being an instrument for accountability 38(17.6%) of the teachers opted to disagree, while 178(82.4%) of the teachers agreed to this notion. Concerning assessment offer learners' appropriate feedback to improve their learning 7(3.3%) teachers disagreed to the statement, while a greater number of teachers representing 209(96.7%) agreed to this statement. Most of the teachers 206(95.3%) agreed that peer assessment and self-assessment improves learners learning while 10(4.7%) of the teachers disagreed to this statement. Concerning assessment compels teachers to be able to accept any uncertainty, be flexible and take risks 28(13%) of the teachers disagreed to this assertion, while 188(87%) of the teachers agreed to this assertion.

It could be inferred from the analysis that, public primary school teachers in the Ayensuano District have high knowledge level with regards to the concept and the use of assessment in the implementation of the Standards-based curriculum. This is because, they agreed to the notion that assessment must be integrated in daily instructions (Mean = 3.34, SDV=.718). Also, they are well-informed about the fact that assessment improves learners learning and instruction (Mean = 3.31, SDV=.710). Again, the teachers agreed that, assessment offer learners' appropriate feedback to

improve their learning (Mean = 3.53, SDV=.608); and peer assessment and self-assessment improves learners learning (Mean = 3.46, SDV=.674). In addition, they acknowledge that assessment is an instrument for accountability (Mean=3.05, SDV=.802). Lastly, they have the knowledge that assessment compels teachers to be able to accept any uncertainty, be flexible and take risks (Mean=3.08, SDV=.672).

4.5 Research Question 3: What are the prevalent strategies public primary school teachers' uses in improving assessment in the implementation of the Standards-based curriculum?

This research question was intended to reveal the strategies that could be adopted to improve assessment in the implementation of the Standards-based curriculum. 20 items (i.e., 1-20) were constructed on 4-point Likert scale; 4= strongly Agree (SA), 3= Agree (A), 2= Disagree (D) or 1= Strongly Disagree (SD). The score for each variable was used to calculate the mean score of each individual item. Data gathered on it have been presented in Table 10. The analysis was done with a standard set mean and standard deviation from Ignacio et al. (2023). According to Ignacio et al (2023), a standard set Mean of 1.0 –1.80 = Strongly Disagree; 1.81 – 2.60 = Disagree; 2.61 – 3.40 = Neutral; 3.41-4.20 = Agree; and 4.21 – 5.0 = Strongly Agree. A standard deviation of below 1.0 indicates similarity or homogeneity in responses while a standard deviation of 1.0 or above indicates difference (heterogeneity) in responses.

Table 10: Prevailing Strategies Teachers use In Improving Assessment

Items	SD F (%)	D F (%)	A F (%)	SA F (%)	Mean	SD
Learning objectives and success criteria are always stated clearly to the learners	9(4.2)	34(15.7)	135(62.5)	38(17.6)	2.93	.705
Learners are train to take responsibility of their own learning	13(6.0)	45(20.8)	130(60.2)	28(13.0)	2.80	.735
AoL, AfL and AaL are tailored in instruction to create opportunity for learners to play the central role in the teaching and learning process	0(0.0)	15(6.9)	147(68.1)	54(25.0)	3.18	.536
Feedback is most often initiated to diagnose the strength and weaknesses of learners	0(0.0)	6(2.8)	106(49.1)	104(48.1)	3.45	.552
Effective feedback is frequently provided to also enhance learners' ability to self-regulate their learning.	0(0.0)	3(1.4)	137(63.4)	76(35.2)	3.33	.502
Feedback is used to provide learners with concrete strategies for the next stages of learning	0(0.0)	7(3.2)	132(61.1)	77(35.7)	3.32	.534
Peer and Self-assessment are all the time tailored in instruction to help learners come to understand their work and develop metacognitive skills	3(1.4)	13(6.0)	158(73.2)	42(19.4)	3.10	.547
Peer and Self-assessment are also used to improve learners' autonomy and ability to learn	3(1.4)	17(7.8)	141(65.3)	55(25.5)	3.14	.607
Most often, motivation is used as an instrument to help improve learners learning	6 (2.8)	0(0.0)	102(47.2)	108(50.0)	3.44	.644
Motivation is given to encourage learners to devote more time and energy to each activity	0(0.0)	7(3.2)	117(54.2)	92(42.6)	3.39	.552
Interactive and collaborative learning environment is created to ensure effective feedback.	5(2.3)	3(1.4)	109(50.5)	99(45.8)	3.39	.638
Questionings are regularly initiated to encourage learners to engage with their work and with each other.	0(0.0)	7(3.2)	144(66.7)	65(30.1)	3.26	.512
Questionings are frequently initiated to help learners direct their learning as they try to merge their prior and new information in their attempts to make sense of these ideas	0(0.0)	3(1.4)	163(75.4)	50(23.2)	3.21	.446
Most often I use portfolio to encourage learners to take more ownership and responsibility over their learning	0(0.0)	28(13.0)	156(72.2)	32(14.8)	3.01	.527
Mostly, I integrate the assessment before, during and after instruction but not necessarily at the end of instruction.	10(4.6)	31(14.4)	103(47.7)	72(33.3)	3.09	.809
Assessment is used to monitor learners learning	7(3.2)	6(2.8)	106(49.1)	97(44.9)	3.35	.693
Remediation exercise is frequently provided to assist weak learners	9(4.2)	9(4.2)	90(41.6)	108(50.0)	3.37	.755
It is frequently tailored in instruction to determine challenges learner encounter in order to make the necessary adjustments to improve learners learning	0(0.0)	15(7.0)	123(56.9)	78(36.1)	3.29	.589
Most often, a portfolio is utilized to give learners the chance to evaluate themselves and develop a more in-depth understanding of the concepts they are learning	11(5.1)	16(7.4)	152(70.4)	37(17.1)	2.99	.671
Peer and Self- assessment are again initiated to help learners take on the role of another teacher or examiner	23(10.7)	58(26.8)	87(40.3)	48(22.2)	2.74	.923
Means of Means/ Means of SDV					3.18	.62

Source: Field Data, 2022, KEY: %= Percentage, SD= Strongly Disagree, D= Disagree, A= Agree, SA= Strongly Agree, M= Mean, SDV= Standard Deviation.

Table 10 shows a description of the response concerning the prevailing strategies teachers use in improving assessment. The means of means and means of standard deviation of the items were 3.18 and .62 respectively. The standard deviation of .62 indicates that the teachers' responses were similar (Homogeneous).

The following conclusions could be drawn for the individual items in Table 10. Majority of the teachers representing 201(93.1%) agreed that AoL, AfL and AaL are tailored in instruction to create opportunity for learners to play the central role in the teaching and learning process, whereas 15(6.9%) of the teachers disagreed to this statement. A total number of teachers representing 210(97.2%) agreed that feedback is most often initiated to diagnose the strengths and weaknesses of learners while 6(2.8%) teachers disagreed with this statement. Many of the teachers 213 (98.6%) agreed that effective feedback is frequently provided to also enhance learners' ability to self-regulate their learning, while few of the teachers 3 (1.4%) disagreed to this statement. With regards to feedback is used to provide learners with concrete strategies for the next stages of learning most of the teachers representing 209(96.8%) agreed to this assertion, whereas, 7(3.2%) of the teachers disagreed to this assertion.

Concerning most often, motivation is used as an instrument to help improve learners learning, 210(97.1%) teachers agreed to this statement, while 6(2.9%) opted to disagree. The majority of teachers totaling 209(96.8%) chose to agree that motivation is given to encourage learners to devote more time and energy to each activity, while minority of the teachers amounting to 7(3.2%) disagreed with the statement. The majority of the teachers representing 208(96.3%) agreed that they create interactive and collaborative learning environment to ensure effective feedback, while 8(3.7%) of the teachers decided to disagree with the statement. Regarding the

statement that questionings are regularly initiated to encourage learners to engage with their work and with each other, majority of the teachers 209(96.8%) agreed, while 7(3.2) of the teachers disagreed to the statement. Most of the teachers totaling 213(98.6%) agreed that questionings are frequently initiated to help learners direct their learning as they try to merge their prior and new information in their attempts to make sense of these ideas, whereas 3(1.4%) of the teachers disagreed to this notion.

A considerable number of teachers amounting to 203(94%) agreed that assessment is used to monitor learners learning, whereas, 13(6%) of the teachers disagreed to this statement. Concerning remediation exercise being frequently provided to assist weak learners, 198(91.6%) of the teachers agreed while 18(8.4%) disagreed to the statement. Marginal number of teachers totaling 201(93%) agreed that assessment is frequently tailored in instruction to determine challenges learners encounter in order to make the necessary adjustments to improve learners learning, whereas 15(7%) of the teachers chose to disagree with the statement.

With regard to the prevailing assessment strategies public primary school teachers' use in the implementation of the standards-based curriculum, it was evident from the data analysis that majority of public primary school teachers agreed that AoL, AfL and AaL are tailored in instruction to create opportunity for learners to play the central role in the teaching and learning process (Mean=3.18, SDV=.536).

Also, the teachers agreed that, mostly they initiate feedback to diagnose the strength and weaknesses of learners (Mean=3.45, SDV=.552). In addition, the teachers agreed that effective feedback is frequently provided to also enhance learners' ability to self-regulate their learning (Mean=3.33; SDV=.502). With regards to feedback is used to provide learners with concrete strategies for the next stages of learning the teachers agreed to the statement (Mean=3.32, SDV=.534). Again, the teachers agreed that

most often they use motivation as an instrument to help improve learners learning (Mean=3.44, SDV=.644) and also provide motivation to encourage learners to devote more time and energy to each activity (Mean=3.39, SDV=.552). Majority of the teachers agreed that they create interactive and collaborative learning environment to ensure effective feedback (Mean=3.39, SDV=.638).

Notwithstanding that, the teachers agreed that questionings are regularly initiated to encourage learners to engage with their work and with each other (Mean=3.26, SDV=.512). Besides, the teachers agreed that questionings are frequently initiated to help learners direct their learning as they try to merge their prior and new information in their attempts to make sense of these ideas (Mean=3.21, SDV=.446). Likewise, the teachers agreed that assessment is used to monitor learners learning (Mean=3.35, SDV=.693). Furthermore, the teachers frequently provide remediation exercise to assist weak learners (Mean=3.37, SDV=.755). Finally, the teachers agreed that assessment is frequently tailored in instruction to determine challenges learner encounter in order to make the necessary adjustments to improve learners learning (Mean=3.29, SDV=.589).

4.6 Research Question 4: What are the perceived challenges public primary school teachers' encounters in the practices of assessment in the implementation of the Standards- based Curriculum?

This research question was to identify the perceived challenges impeding the use of assessment in the implementation of the Standards- based Curriculum. 14 items (i.e., 1-14) were measured and crafted on 4-point Likert scale; 4= strongly Agree (SA), 3= Agree (A), 2= Disagree (D) or 1= Strongly Disagree (SD). The score for each variable was used to calculate the mean score of each individual item. The analysis was done with a standard set mean and standard deviation from Ignacio et al.

(2023). According to Ignacio et al (2023), a standard set Mean of 1.0 –1.80 = Strongly Disagree; 1.81 – 2.60 = Disagree; 2.61 – 3.40 = Neutral; 3.41-4.20 = Agree; and 4.21 – 5.0 = Strongly Agree. A standard deviation of below 1.0 indicates similarity or homogeneity in responses while a standard deviation of 1.0 or above indicates difference (heterogeneity) in responses.

Table 11: Perceived Challenges Teachers Encounter in the use of Assessment

Items	SD F (%)	D F (%)	A F (%)	SA F (%)	Mean	SD
Inadequate pre-service training programmes on the use of assessment	3(1.4)	22(10.2)	132 (61.1)	59(27.3)	3.14	.641
In adequate in-service continuous professional development programmes on the use of assessment	9(4.2)	7(3.2)	138(63.9)	62(28.70)	3.17	.677
Difficulty giving descriptive, timely, clear and concise feedback to improve learners learning	16 (7.4)	46(21.3)	123 (56.9)	31(14.4)	2.78	.779
In adequate teacher orientation on the use of integrated approach to assessment strategies.	0(0.0)	28 (13)	143(66.2)	45 (20.8)	3.07	.577
Curriculum content overload	0(0.)	20(9.3)	91(42.1)	105 (48.6)	3.39	.652
Insufficient time during instructions	4(1.9)	19(8.8)	113(52.3)	80(37.0)	3.24	.688
Pressure on teachers to cover the whole curriculum in preparation of learners for end-of- term and year examinations.	0(0.0)	3(1.4)	76(35.2)	137(63.4)	3.62	.514
Extra administrative roles	0(0.0)	26(12.0)	125(57.9)	65 (30.1)	3.18	.624
Nature of the class being assessed	(0.0)	3(1.4)	144 (66.7)	69(31.9)	3.30	.491
Inadequate support from policy makers	0(0.0)	12 (5.6)	73(33.8)	131(60.6)	3.55	.600
Negative perception of teachers in the use of Integrated approach to assessment	7 (3.2)	68(31.5)	100(46.3)	41(19.0)	2.81	.775
Inadequate teaching and learning resources	0(0.0)	7(3.3)	83(38.4)	126 (58.3)	3.55	.560
Difficulty initiating self and peer assessment strategies	3(1.4)	35(16.2)	149(69.0)	29(13.4)	2.94	.591
Principles and ideas underpinning assessment reforms are not clearly defined and understood at all levels	6 (2.8)	34(15.7)	113 (52.3)	63(29.2)	3.07	.746
Means of Means/ Means of SDV					3.20	.640

Source: Field Data, 2022, KEY: %= Percentage, SD= Strongly Disagree, D= Disagree, A= Agree, SA= Strongly Agree, M= Mean, SDV= Standard Deviation.

Data in Table 11 reveals that, the public primary school teachers encounter a lot of challenges in the use of assessment in the implementation of the standards-based curriculum. The means of means and means of standard deviation of the items were 3.20 and .640 respectively. The standard deviation of .640 indicates that the teachers' responses were similar (Homogeneous). The following individual items in Table 11 attest to this fact.

Table 11 suggests that, 196(90.7%) of the teachers agreed that the curriculum content is overloaded, while a smaller number of the respondents totaling 20(9.3%) disagreed with this statement. 193(89.3%) of the teachers agreed that there is insufficient time during instructions, while, 23 (10.7%) of the teachers disagreed to this statement. All most all respondents 213(98.6%) agreed that there is always pressure on teachers to cover the whole curriculum in preparation of learners for end-of- term and year examinations, while a minority of the respondents, 3(1.4%) disagreed to this assertion. Concerning the nature of the class being assessed, most of the teachers totaling 213(98.6%) agreed to this statement, while minority of the respondents amounting to 3(1.4%) disagreed to this statement. With regards to the statement, inadequate support from policy makers, 204(94.4%) of the teachers agreed, while, 12(5.6%) of the teachers disagreed to this statement. Finally, most of the respondents numbering, 209(96.7%) agreed that there are inadequate teaching and learning resources, while 7(3.3%) respondents disagreed to this statement.

It could be inferred from the analysis that, curriculum content overload (Mean=3.39, SDV=.652), insufficient time during instructions (Mean=3.24, SDV=.688), pressure on teachers to cover the whole curriculum in preparation of learners for end-of- term and year examinations (Mean=3.62, SDV=.514), nature of the class being assessed (Mean=3.30, SDV=.491), inadequate support from policy

makers (Mean=3.35, SDV=.600), and inadequate teaching and learning resources (Mean=3.55, SDV=560) were the predominant perceived challenges public primary school teachers encounter in their use of assessment in the effective implementation of the Standards-based curriculum.

4.7 Analyses of Hypotheses

4.7.1 Gender and Public Primary school teachers' perception in the use of assessment In the Implementation of the Standards- Based Curriculum

Several studies have suggested that, perception of public primary teachers is a key towards enhancing learners learning. However, little is known with regards to both male and female teachers concerning whether or not there are differences in the perception of public primary school teachers in their use of assessment in the implementation of the Standards-Based curriculum. Therefore, this research hypothesis sought to probe further to unearth, answer this question, and add to literature. This research hypothesis sought to find out whether or not there was a statistically significant difference in the perception of public primary school teachers use of assessment in the implementation of the Standards-Based curriculum in the Ayensuano District of the Eastern Region. Chi-square test was used in the analysis. Findings from the study are presented in Table 11

Table 12: Chi-Square Test on Perception in the use of Assessment in the Implementation of the Standards- Based Curriculum by Male and Female Public Primary School Teachers

Sex	N	Df	Chi-Square value	p-value
Male	112	8	27.702	0.001
Female	104			

Source: Field Data, 2022

** Significant at p= 0.05 (2-tailed)

From Table 12, the data show that there is a statistically differences in the perception in the use of assessment by male and female public primary school teachers in the implementation of the Standards- Based Curriculum ($p=0.001$, $p < 0.05$). Therefore, the null hypothesis which state that there is no statistically significant difference in perception of male and female public primary school teachers in the use of assessment in the implementation of the Standards- based Curriculum is rejected, and the alternate hypothesis is accepted.

4.7.2 Gender and prevailing assessment strategies public primary school teachers' uses in improving assessment in the implementation of the Standards-based curriculum

This research hypothesis sought to find out whether or not there was a statistically significant difference in the prevailing assessment strategies in the use of assessment by male and female public primary school teachers in the Ayensuano District in the Eastern Region. The Chi-square test was used in the analysis. Findings from the study are presented in Table 13

The data in Table 13 shows Chi-square test on the gender-based major differences in the prevailing assessment strategies public primary school teachers' use in improving assessment in the implementation of the Standards-based curriculum.

Table 13 Chi-square test on Prevailing Assessment Strategies Used by Male and Female Public Primary School Teachers In improving Assessment

Gender	N	Df	Chi-Square value	p-value
Male	112	6	11.880	0.065
Female	104			

Source: Field Data, 2022

** Significant at $p= 0.05$ (2-tailed)

It is observed from Table 13 that there is no statistically significant gender difference with regards to the prevailing assessment strategies public primary school teachers use in improving assessment in the implementation of the Standards-based curriculum ($p=0.065$, $p > 0.05$). Therefore, the null hypothesis which states that there is no statistically significant difference in the prevailing assessment strategies used by male and female public primary school teachers in improving assessment in the implementation of the Standards-based curriculum is accepted, and the alternate hypothesis is rejected.

4.8 Discussion of Findings

4.8.1 Overview

This current chapter discusses the data with reference to relevant literature in an attempt to explore the deeper meanings of the responses, and understand the phenomenon. In this chapter, the findings of the interview were grouped to answer the relevant research questions posed in chapter one. These research questions are:

The study seeks to answer the following questions:

1. What are the perceptions of public primary school teachers regarding the use of assessment in the implementation of the standards- based curriculum in the Ayensuano district?
2. What is the knowledge level of public primary school teachers in the use assessment in the implementation of the standards- based Curriculum in the Ayensuano district?
3. What are the prevailing assessment strategies public primary school teachers' uses in improving assessment in the implementation of the standards-based curriculum in the Ayensuano district?

4. What are the perceived challenges public primary school teachers' encounter in the use of assessment in the implementation of the standards- based Curriculum in the Ayensuano district?

Part 1: What are the perceptions of public primary school teachers regarding the use of assessment in the implementation of the standards- based curriculum in the Ayensuano district?

It emerged from the study that, majority of the teachers' perceived assessment to be complex and confusing during the implementation of the Standards-based curriculum. This finding resonates with several researchers that have confirmed that teachers perceive themselves as basically capable of administering appropriate assessment, although they acknowledge that some assessment practices, such as test construction, can be complex and confusing even for those with the essential skills (Scott et al., 2011; Al-Malki & Weir, 2014). William and Thompson (2008) found that normally, teachers who are inexperienced and unskilled in administering effective assessment perceive new types of assessments more difficult to initiate than traditional paper-and-pencil tests. Concerning teacher's perceptions of assessment as a necessary tool in teaching rather than a means of improving teaching and learning, the majority of the respondents disagreed to this item. This finding is in line with that of Mellati and Khademi (2018), who asserted that, most teachers considered classroom assessments as a necessary tool in their teaching rather than a means of improving teaching.

It was evident from the analyzed data that, majority of the respondents agreed that assessment can only support teaching and learning if the two processes occur simultaneously. Yao (2015) conducted research on pre-service English teachers' conception of assessment and their future assessment practices in a Turkish context.

The study found that, teachers' considered assessment as a plan of action imposes on them without necessary input from curriculum developers, policymakers and other abled educational stakeholders involved. Results from Der and Shepherd (2015) study revealed that teachers perceive the integrated approaches to assessment as a plan of action impose on them without the necessary input from curriculum developers, policymakers and other abled educational stakeholders involved.

To conclude, majority of respondents agreed that assessment feedback is useful in improving learners learning. According to Pierce, (2002; cited in Kırmızı & Kömeç, 2016), assessment is a crucial part of any learning and teaching activity which does not necessarily encompass decisions made on a daily basis as well as identifying the strengths and weaknesses of learners but also provides feedback to learners in promoting their learning.

Part 2: What is the knowledge level of public primary school teachers in the use assessment in the implementation of the Standards- based Curriculum?

The study identified that, the respondents have high knowledge level with regards to the concept and the use of assessment in the implementation of the Standards-based curriculum.

To begin with, it emerged from the analyzed data that, most of the respondents agreed that assessment must be integrated in daily instructions. Research shows that classroom assessment is an important aspect of the teaching and learning process and that by incorporating it into classroom practice, meaningful learning outcomes can be achieved (Stiggins et al., 2006). Airasian (2001) also asserted that, given the powerful effect of assessment on learning outcomes, researchers support the integration of assessment into teaching and learning. This assertion has called for the need for teachers to integrate assessment in their day-to-day teaching and learning activities.

Also, many of the respondents agreed to the notion that assessment improves learners learning and instruction. This finding is supported by Mertler (2003) who established that assessment should be given a priority in improving learners learning rather than emphasizing on summative testing in teacher preparation programs. The study also found that, teachers perceive assessment to be a tool for collecting information regarding learners' learning. According to Mellati and Khademi (2018), most teachers considered classroom assessments as a necessary tool in their teaching rather than a means of improving teaching. It again emerged from the analyzed data that, teachers' perceived assessment as an instrument for accountability. Literature suggests that teachers with feeble PCKs fail to fuse assessment into their practice, see assessment as an instrument for accountability and view assessment and instruction as separate entities (Jones & Moreland, 2005).

With regards to assessment offering learners' appropriate feedback to improve their learning, most of the respondents agreed to the statement. A study conducted by Marshall and Drummond (2006) on how teachers engage with assessment for learning: Lessons from the classroom indicated that, teachers with good assessment knowledge are able to understand learners' ideas and understanding of assessment practices and questions, and are able to offer learners' appropriate feedback to improve their learning. Swaffield (2011) also added that providing effective feedback through assessment enhances learners' ability to self-regulate their learning. Moreover, the study found that majority of the respondents agreed that peer assessment and self-assessment improves learners learning. Tamjid and Birjandi (2011) conducted a study on fostering learner autonomy through self- and peer assessment. The study found that, integrating self-assessment and peer assessment in instruction improves learners' autonomy and ability to learn. In order to enhance

effective teaching and learning through assessment, learners need to participate in peer and self-assessment (Lee, 2017, p. 157). In conclusion, the teachers believed that assessment compels them to be able to accept any uncertainty, be flexible and take risks.

Part 3: What are the prevailing assessment strategies public primary school teachers' uses in improving assessment in the implementation of the Standards-based curriculum?

Data analyzed pointed out that, many of the teachers agreed that, AoL, AfL and AaL are tailored in instruction to create opportunity for learners to play the central role in the teaching and learning process. In a similar vein, Abell and Siegel (2011), supported that teacher's use of assessment must be a series of actions that should be conducted before, during and after the teaching and learning process for the purpose of identifying the strength and weaknesses of individual learner with appropriate remediation to enhance learners learning. Again, majority of the respondents agreed that feedback is most often initiated to diagnose the strength and weaknesses of learners. This finding corroborates that of Gebriel (2014) who argued that in the teaching and learning process, teachers perceive oral assessment in feedback to be one essential element that enables them to recognize the strength and weaknesses of learners. The analyzed data also revealed that teachers were of the view that effective feedback is frequently provided to also enhance learners' ability to self-regulate their learning. Scholars have established that providing effective feedback also enhances students' ability to self-regulate their learning (Swaffield, 2011), develops intrinsic motivation and self-esteem, and inspires confidence and hope (Gioka, 2008). In relation to feedback is used to provide learners with concrete strategies for the next stages of learning. This finding is in relation to a study

conducted by Bruno and Santos (2010) who asserted that, effective feedback increases learner self- sufficiency and motivation, develops learners' self-regulation and cognitive learning strategies, promotes deep learning and increases flexibility and persistence, and provides learners with concrete strategies for the next stages of learning.

Concerning most often, motivation used as an instrument to help improve learners' learning, a majority of the respondents agreed to the statement. This is evident in other studies which have drawn attention to motivation as an instrument that help improves learners learning in this contemporary world and to adjust to changing life situations (Harlen & Crick, 2003; Harlen, 2006; Moss and Brookhart, 2009). The analyzed data emphasized that, many of the respondents agreed that motivation is given to encourage learners to devote more time and energy to each activity. It has been established that when learners are highly motivated, they devote more time and energy to each activity (Nicol & Macfarlane-dick, 2006; Irons, 2008), and are more successful in their studies (King, 2006) and apply their acquired knowledge, skills and insights in their lives outside school (Fautley & Savage, 2008). The analyzed data also suggested that, many of the respondents agreed to the notion that interactive and collaborative learning environment is created to ensure effective feedback. Similarly, Dessie (2015) also agreed that for feedback to be effective, a more interactive and collaborative learning environment is necessary.

Moreover, the study found that teachers frequently use questionings to help learners direct their learning as they try to merge their prior and knew information in their attempt to make sense of these ideas, as well as regularly using questioning to encourage learners to engage with their work and with each other. According to Earl (2013), teachers' use of assessment encourages learners to ask reflective questions

and consider a range of strategies for learning and for acting (p. 4). Black and William (2018) also supported that, assessment for learning focuses on questioning learners in a manner that will increase their idea development and boost their morale to partake in effective learning. Concerning assessment is used to monitor learners' learning; the analyzed indicated that most of the teachers agreed to this assertion. From Okyere et al. (2018) perspective, assessment for learning is considered as a tool use to monitor learners learning and also to determine challenges learners encounter in order to make the necessary adjustments to improve learners learning in the teaching and learning process.

Further, it emerged from the analyzed data that, many of the teachers were with the view that, they frequently provide remediation exercise to assist weak learners. Research has revealed that in the learning and teaching process, instructors' continuous use of assessment for learning enables learners to make a proper reflection on their achievements and also look for appropriate remedies to improve their learning (Andersson, 2015). Lastly, from the analyzed data, it was found that, teachers frequently tailor assessment in their instruction to determine challenges learners encounter in order to make the necessary adjustments to improve learners learning. This finding corroborates with that of Okyere et al. (2018) study which pointed out that, assessment for learning is considered as a tool use to monitor learners learning and also to determine challenges learners encounter in order to make the necessary adjustments to improve learners learning in the teaching and learning process.

Part 4: What are the perceived challenges public primary school teachers' encounters in the use of assessment in the implementation of the Standards-based Curriculum?

It was realized that, the majority of the respondents perceived curriculum content overload as one of the predominant challenges that hinders their use of assessment effectively. When asked whether pressure on teachers to cover the whole curriculum in preparation of learners for end-of- term and year examinations impede their effective use of assessment, majority of the respondents agreed that it was a challenge. Various studies conducted have established that teachers have the required skills and knowledge to administer effective assessment during instruction but do not use them due to curriculum overload and insufficient time during instructions (Box, 2008; Sutton, 2010; Hall, 2002). Box (2008) again contends that pressure on teachers to cover the whole curriculum in preparation of learners for end-of-year examinations affects their assessment practices. In connection with inadequate support from policy makers hindering their use of assessment during instruction, majority of the respondents agreed. Finally, nature of the class size being assessed and inadequate teaching and learning resources were also perceived as challenges facing public primary school teachers in the use of assessment in the implementation of the standards-based curriculum. Research on the assessment practices has shown that teachers adapt their assessment practices to the nature of the class being assessed (Duncan & Noonan, 2007; Koloï-Keaikitse, 2012; Susuwele-Banda, 2005). Masole (2011) also supported that, large class size led to inappropriate use of assessment tools and materials, insufficient teacher attention during assessment, insufficient teacher time, inadequate tools and resources, and negative teacher attitudes towards assessment.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Overview

This final chapter comprises major findings and conclusions. This chapter focused on the conclusion, recommendations of the study and suggested areas for future research.

5.1 Summary of the Study

The purpose of the study was to investigate factors influencing teachers' use of assessment in the implementation of the Standards-based curriculum in the Ayensuano district in the Eastern, Ghana. To achieve this purpose, the following research objectives were formulated to guide the study:

1. ascertain the perception of public primary school teachers on the use of assessment in the implementation of the Standards- based Curriculum.
2. establish the knowledge level of public primary school teachers in the use of assessment in the implementation of the Standards- based Curriculum.
3. find out the prevailing assessment strategies public primary school teachers' use in improving assessment in the implementation of the standards-based curriculum.
4. identify the perceived challenges public primary school teachers encounter in the use of assessment in the implementation of the Standards- based Curriculum.

To achieve these objectives, the cross-sectional survey design was employed around the following research questions:

1. What are the perceptions of public primary school teachers regarding the use of assessment in the implementation of the standards- based curriculum in the Ayensuano district?
2. What is the knowledge level of public primary school teachers in the use assessment in the implementation of the standards- based curriculum in the Ayensuano district?
3. What are the prevailing assessment strategies public primary school teachers' uses in improving assessment in the implementation of the standards-based curriculum in the Ayensuano district?
4. What are the perceived challenges public primary school teachers' encounter in the use of assessment in the implementation of the standards- based Curriculum in the Ayensuano district?

To answer these questions, the simple random sampling technique (Lottery method) was used to involve 216 respondents in the study. Questionnaire was used to gather data. Data gathered was analyzed using descriptive statistics, that is, frequencies and percentages and the chi-square test statistic. The following key findings emerged from the study.

5.2 Summary of Findings

1. It emerged from the analyzed data that public primary school teachers had the perception that, assessment is complex and confusing, assessment is a necessary tool in teaching rather than a means in improving teaching and learning, assessment can only support teaching and learning if the two processes occur simultaneously, assessment feedback is useful in improving

learners learning, assessment is a plan of action impose on them without necessary input from curriculum developers, policy makers and other able educational stakeholder involved, and assessment is a necessary tool in teaching rather than a means of improving teaching and learning.

2. Public primary school teachers in the Ayensuano District have high knowledge level with regards to the concept and the use of assessment in the implementation of the Standards-based curriculum.
3. The prevailing assessment strategies public primary school teachers' use in improving assessment in the implementation of the Standards-based curriculum were related to; the use of feedback to diagnose the strength and weaknesses of learners, frequent use of motivation as an instrument to help improve learners learning, providing motivation to encourage learners to devote more time and energy to each activity, assessment is frequently tailored in instruction to determine challenges learner encounter in order to make the necessary adjustments to improve learners learning, teachers creating an interactive and collaborative environment to ensure effective feedback to improve learners' learning and teachers frequently providing remediation exercise to assist weak learners.
4. It emerged from the analyzed data that the predominant perceived challenges public primary school teachers encounter in the use of assessment in the implementation of the standards-based curriculum included; curriculum content overload, pressure on teachers to cover the whole curriculum in preparation of learners for end-of- term and year examinations, inadequate support from policy makers and as well as inadequate teaching and learning resources.

5. There was a statistically significant difference in perception of male and female public primary school teachers' use of assessment in the implementation of the Standards- based Curriculum.
6. There was no statistically significant difference in the prevailing assessment strategies of public primary school teachers with respect to gender.

5.3 Conclusions

The following conclusions were drawn based on the findings of the study:

1. It could be concluded that public primary school teachers hold a nuanced perspective on assessment, emphasizing its role beyond simply improving learning outcomes. This underscores the importance of collaborative efforts in shaping assessment practices in primary education. In light of these, it is crucial to recognize the need for a more inclusive and participatory approach in developing assessment frameworks, ensuring that the voices of teachers and relevant stakeholders are considered for a more effective and responsive educational system.
2. It could be concluded that public primary school teachers in the Ayensuano District possess a strong understanding of the concept of assessment; yet, they face challenges when attempting to incorporate it into the Standards-based curriculum.
3. It can be concluded that public primary school teachers predominantly employ a variety of assessment strategies to enhance their assessment practices. These strategies encompass the principles of Assessment of Learning (AoL), Assessment for Learning (AfL), and Assessment as Learning (AaL), aligning with the guidelines established in the standards-based curriculum.

4. The study concluded that teachers use of assessment was impeded by curriculum content overload, heightened pressure to cover the entire curriculum in preparation for end-of-term and year examinations, insufficient support from policymakers, and a lack of essential teaching and learning resources. Recognizing and addressing these issues are crucial steps toward enhancing the successful implementation of the standards-based curriculum, fostering a more supportive environment for teachers, and ultimately improving the overall quality of education in primary schools.
5. It could be concluded that male and female public primary school teachers hold distinct views or experiences in their use of assessment in the implementation of the Standards-based Curriculum. Recognizing and addressing gender-specific perceptions is essential for promoting inclusivity and ensuring that assessment methods are implemented in a manner that resonates with the diverse perspectives of both male and female teachers in the education system.
6. It could be concluded that both male and female teachers consistently use assessment strategies, with gender not significantly influencing them. Further exploration of common practices and improvement areas can enhance assessment quality, regardless of gender differences among public primary school teachers.

5.4 Recommendations of the Study

The following recommendations were drawn based on the findings of the study:

1. The Ayensuano District Assembly and educational directorate should adopt a collaborative approach to assessment practices in public primary schools, involving active teacher participation and diverse perspectives. This would

improve the quality of education by aligning the educational system with teachers' understanding.

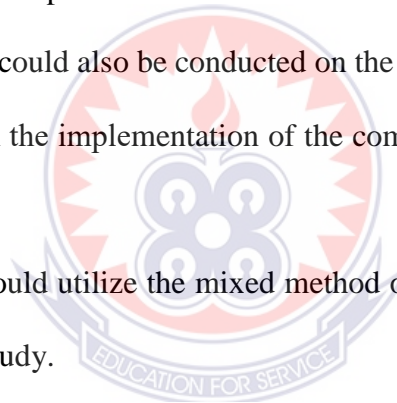
2. The Ayensuano District Assembly and educational directorate should provide support and resources to public primary school teachers in the Ayensuano District, addressing challenges in integrating assessment into the Standards-based curriculum. This includes designing professional development programmes and collaborating with educators to create resources and guidelines that facilitate the seamless integration of assessment within the curriculum framework.
3. Findings from the study also suggested that, pre-service training programmes given to pre-service teachers in the various Colleges of Education as well as the other tertiary institutions offering educational programmes still initiate the traditional assessment approaches instead of the new integrated assessment approaches as outlined in the Standards-based curriculum. Therefore, it is also recommended that for effective use of the new assessment approaches to enhance appropriate implementation of the Standards-based curriculum to improve learners' learning, Ayensuano district directorate should organize frequent training, workshops, and seminar programmes on the new integrated assessment approaches to Lecturers, Tutors and teachers of the various educational institutions especially teachers in the selected schools for the study.
4. The Ayensuano District Assembly, with support from the Parent Teachers Association should offer professional development opportunities for educators to prioritize curriculum components while ensuring quality. They

should also advocate for policy support and strategic resource allocation to improve primary education quality.

5.5 Suggestions for future Research

The study looked at teachers' use of assessment in the implementation of the Standards- based Curriculum in the Eastern region of Ghana.

1. It is suggested that further studies should be conducted on the factors influencing teachers' use of assessment in public junior high schools in the implementation of the common core curriculum.
2. Further studies could also be done on the perceived challenges teachers encounter in the implementation of the standards-based curriculum.
3. Further studies could also be conducted on the prevailing assessment strategies teachers' use in the implementation of the common core curriculum for junior high school.
4. Researchers should utilize the mixed method of data collection to enhance the quality of the study.



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APPENDICES

APPENDIX 1

**UNIVERSITY OF EDUCATION, WINNEBA
FACULTY OF EDUCATIONAL STUDIES
DEPARTMENT OF EDUCATIONAL FOUNDATIONS
QUESTIONNAIRE FOR TEACHERS**

I am Matthew Kwarteng a master of philosophy student in the Department of Educational foundation. This questionnaire is meant for collecting data on a study being conducted on the topic: *Teachers' use of assessment in the implementation of the standards- based curriculum*. As a teacher, your views are very significant in this regard. I therefore wish to solicit your assistance. Be assured that the data collected will be used solely for academic purposes. Should the data be published, your identity will not be disclosed. Taken part in this study is voluntary. However, if you decide to be part, you are kindly requested to read through the items and respond to them as frankly and objectively as possible.

Thank you for your cooperation and assistance.

SECTION A: Demographic Information

Please place a tick in the appropriate box (✓)

1. What is your sex?
 - a. Male []
 - b. Female []
2. What is your age?
 - a. 20-29 []
 - b. 30-39 []
 - c. 40-49 []
 - d. 50-60 years []
3. What is your highest academic qualification?
 - a. Diploma []
 - b. 1st Degree []
 - c. 2nd Degree []
4. What is your teaching status?
 - a. Non- professional []

- b. Professional []
5. How many teachings experience do you have?
- a. Less than 1 year []
- b. 1-5 years []
- c. 6-10 years []
- d. 11-20 years []
- e. 21 years and above []

SECTION B: Perception of Teachers on the use of Assessment

Instructions: By use of a tick (✓) please indicate the degree to which you agree with each of following statements in relation to the perception of teachers on the use of assessment using the following scale categories: Strongly Agree (SA), Agree (A), Disagree (D) or Strongly Disagree (SD) with the following statements

No.	Items	SD	D	A	SA
	Assessment can be complex and confusing				
	Assessment tend to have little relevance to instructional goals				
	Assessment does not enhance a high tendency for meaningful learning				
	Assessment is a necessary tool in teaching rather than a means of improving teaching and learning				
	It causes unnecessary stress and fatigue to teachers				
	It causes unnecessary stress and fatigue to learners				
	Assessment and instruction are separate processes				
	Assessment can only support teaching and learning if the two processes occur simultaneously				
	Assessment is a plan of action imposes on us without necessary input from curriculum developers, policymakers and other abled educational stakeholders involved				
	Assessment feedback is useful in improving learners learning				

SECTION C: Teachers' Knowledge on the use of Assessment

Instructions: Please read each of the following statements carefully and choose the response that best describes how true each statement is for you with respect to teachers' Knowledge on the use of Assessment. For each item, please answer using the following scales 4= strongly Agree (SA), 3= Agree (A), 2= Disagree (D) or 1= Strongly Disagree (SD with the following statements.

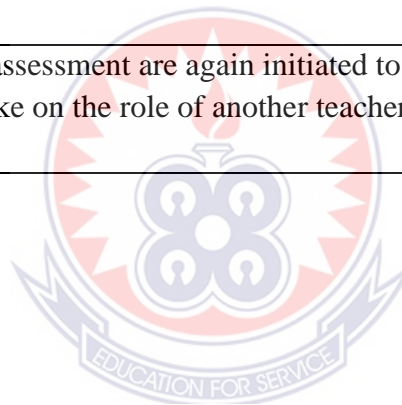
No.	Items	SD	D	A	SA
	Assessment must be integrated in daily instructions				
	Assessment largely focuses on memorization of simple facts, giving of marks and ranking of learners				
	Assessment improves learners learning and instruction				
	Assessment is use to enhance competition among learners				
	Assessment is a tool for collecting information regarding learners learning				
	Assessment is an instrument for accountability				
	Assessment offer learners' appropriate feedback to improve their learning				
	Peer assessment and self-assessment improves learners learning				
	Assessment and instruction as separate entities				
	Assessment compels teachers to be able to accept any uncertainty, be flexible and take risks				

SECTION D: Prevailing Assessment Strategies Teachers use In Improving Assessment

Instructions: Please read each of the following statements carefully and indicate to the extent to which you agree to the items in relation to the prevalent strategies teachers use in improving assessment by choosing the following responses: 4= strongly Agree (SA), 3= Agree (A), 2= Disagree (D) or 1= Strongly Disagree (SD)

1.	Learning objectives and success criteria are always stated clearly to the learners				
2.	Learners are train to take responsibility of their own learning				
3.	AoL, AfL and AaL are tailored in instruction to create opportunity for learners to play the central role in the teaching and learning process				
4.	Feedback is most often initiated to diagnose the strength and weaknesses of learners				
5.	Effective feedback is frequently provided to also enhance learners' ability to self-regulate their learning.				
6.	Feedback is used to provide learners with concrete strategies for the next stages of learning				
7.	Peer and Self-assessment are all the time tailored in instruction to help learners come to understand their work and develop metacognitive skills				
8.	Peer and Self-assessment are also used to improve learners' autonomy and ability to learn				
9.	Most often, motivation is used as an instrument to help improve learners learning				
10.	Motivation is given to encourage learners to devote more time and energy to each activity				
11.	Interactive and collaborative learning environment is created to ensure effective feedback.				
12.	Questionings are regularly initiated to encourage learners to engage with their work and with each other.				
13.	Questionings are frequently initiated to help learners direct their learning as they try to merge their prior and new information in their attempts to make sense of these ideas				

14.	Most often I use portfolio to encourage learners to take more ownership and responsibility over their learning				
15.	Mostly, I integrate the assessment before, during and after instruction but not necessarily at the end of instruction.				
16.	Assessment is used to monitor learners learning				
17.	Remediation exercise is frequently provided to assist weak learners.				
18.	It is frequently tailored in instruction to determine challenges learners encounter in order to make the necessary adjustments to improve learners learning.				
19.	Most often, a portfolio is utilized to give learners the chance to evaluate themselves and develop a more in-depth understanding of the concepts they are learning				
20.	Peer and Self- assessment are again initiated to help learners take on the role of another teacher or examiner				



SECTION E: Perceived Challenges Teachers Encounter In The use of Assessment Instructions: *By use of a tick (✓) please indicate whether you: Strongly Agree (SA), Agree (A), Disagree (D) or Strongly Disagree (SD) with the following statements regarding the perceived challenges teachers encounter in the use of assessment.*

No.	Items	SD	D	A	SA
	Inadequate pre-service training programmes on the use of assessment				
	In adequate in-service continuous professional development programmes on the use of assessment				
	Difficulty giving descriptive, timely, clear and concise feedback to improve learners learning.				
	In adequate teacher orientation on the use of integrated approach to assessment strategies.				
	Curriculum content overload				
	Insufficient time during instructions				
	Pressure on teachers to cover the whole curriculum in preparation of learners for end-of- term and year examinations.				
	Extra administrative roles				
	Nature of the class being assessed				
	Inadequate support from policy makers				
	Negative perception of teachers in the use of integrated approach to assessment				
	Inadequate teaching and learning resources				
	Difficulty initiating self and peer assessment strategies				
	Principles and ideas underpinning assessment reforms are not clearly defined and understood at all levels				

THANK YOU.

APPENDIX 2

Sample of Introductory Letter



UNIVERSITY OF EDUCATION, WINNEBA

FACULTY OF EDUCATIONAL STUDIES

DEPARTMENT OF EDUCATIONAL FOUNDATIONS

E. O. Bus 25, Winneba, Ghana

ef.foundations@uew.edu.gh

030 299 0803

8th September, 2022.

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

LETTER OF INTRODUCTION

I write to introduce to you, MATTHEW KWARTING, the bearer of this letter who is a student in the Department of Educational Foundations of the University of Education, Winneba. He is reading Master of Philosophy in Curriculum and Pedagogic Studies with index number 202114407.

He is conducting a research on the topic: **TEACHERS USE OF ASSESSMENT IN THE IMPLEMENTATION OF THE STANDARDS-BASED CURRICULUM**. This is in partial fulfillment of the requirements for the award of the above mentioned degree.

He is required to gather data through observation for the said research and he has chosen to do so in your outfit.

I will be grateful if he is given permission to carry out this exercise.

Thank you.

Yours faithfully,

A handwritten signature in blue ink, appearing to read 'Dzakadzie Yayra'.

DR. DZAKADZIE YAYRA
AG. HEAD OF DEPARTMENT

