

UNIVERSITY OF EDUCATION, WINNEBA

**ASSESSING TEACHERS' PERCEPTION, KNOWLEDGE AND READINESS
FOR IMPLEMENTATION OF THE NEW STANDARDS-BASED
CURRICULUM**

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DECLARATION

STUDENT'S DECLARATION

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

Signature:

Date:

SUPERVISOR'S DECLARATION

I hereby declare that the 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.

Name of Supervisor: Dr. Richardson Addai-Mununkum

Signature:

Date:

DEDICATION

I am honoured to dedicate this work to my parents, Rev. S. E. Ampiw and Mrs. Agnes Irene Ampiw who have always supported me and to all my siblings.



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ABBREVIATIONS

AEDA:	Agona East District Assembly
AME:	Zion – African Methodist Episcopal Zion Church
GES:	Ghana Education Service
IL:	Illinois
MOE:	Ministry of Education
NACCA:	National Council for Curriculum and Assessment
PLC:	Professional Learning Community
SPSS:	Statistical Package for the Social Sciences
UK:	United Kingdom
UN:	United Nations
UNESCO:	United Nations Education Scientific and Cultural Organisation
USA:	United States of America
UREC:	University Research Ethics Committee



ABSTRACT

With the introduction of a new Standards-based Curriculum in Ghanaian Basic schools in September 2019, no empirical study has examined teachers' knowledge and perceptions about the new curriculum. This study employed a quantitative non-experimental descriptive survey approach to investigate teachers' perceptions, knowledge and readiness to implement and adopt the new curriculum for use. A non-probability purposive sampling method was used to obtain a homogenous sample of sixty primary school teachers in Agona Nsaba in the Central region of Ghana. A self-complete structured questionnaire was used to elicit information about the views of the teachers. In all, the teachers believed a change in curriculum was very much needed and that the new curriculum offered better learning opportunities for the learners. The teachers fairly understood all the listed aspects of the curriculum, had the required knowledge about the key concepts of the new curriculum and believed they could competently apply the aims and values of the curriculum in their teaching. Even so, the teachers were apprehensive of how the implementation of the curriculum would go because they felt the training they received was inadequate and that for them to implement the curriculum successfully, more training was required.



CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Since its coinage from the Latin verb “Currere” which means "a race" or "the course of a race" (Online etymology dictionary, 2020), curriculum has been used to describe the entirety of a learner’s experiences that take place in the educational process. In one of the earliest attempts to define curriculum, John Kerr, as quoted by Vic Kelly, states that curriculum refers to “all the learning which is planned and guided by the school, whether it is carried on in groups or individually, inside or outside the school” (Kelly 2009). In her book titled „The curriculum“ Braslavsky (2003) in a wider sense defines curriculum as “an agreement among communities, educational professionals, and the state on what learners should take on during specific periods of their lives”.

To achieve a successful educational program, there is a need to effectively develop a custom-made curriculum that meets the current demands of the society while still incorporating cultural norms and moral standards of the said society. Such a curriculum should adequately equip students with the relevant knowledge and understanding about the world around them and prepare them to live in the 21st century (Al-Awidi & Aldhafeeri, 2017).

The importance of the curriculum to the teacher cannot be overlooked either. Jadhav and Patankar, (2013) stress that the curriculum is the guiding tool that informs the instructional lessons and delivery methods that teachers use as well as the strategies to employ in assessing the students’ progress. In essence, the success of any educational endeavor relies on the teacher’s ability to interpret and relate the curriculum to everyday teaching and learning.

In the last few decades, education has changed drastically with several aspects of the educational system and curricula being modified to appropriately meet the demands of the ever-revolving and growing society (Kelly 2009). In the 1990s and early 2000s, a type of curriculum known as objective-based or outcome-based curriculum was in use in education systems around the world in countries such as United States, Australia, Malaysia, Hong Kong, India and South Africa (Kennedy, 2011; Allais, 2007; Donnelly, 2007; Mohayidin, 2008; Manno, 1994.). As the name suggests, the outcome-based educational theory built individual parts of the curriculum around goals or objectives which must be achieved by each learner at the end of the educational experience. There was no single specified style of teaching or assessment, and as long as the students achieved the specified outcomes, learning was considered to have taken place (Spady, 1994).

The major drawback of the outcome-based curriculum which led to it being phased out in several countries was that the definitions of the outcomes decided upon were subject to interpretation by those implementing them. Therefore, across different programmes or different instructors, objectives could be interpreted differently, leading to disparities in education, even though the same outcomes were said to have been achieved by the learners (Tam, 2014). Policy makers in several countries then set out to design, develop and implement new curricula that would ensure uniformity in teaching delivery, assessment and achievement of goals, across all educational institutions. In several documented studies, curriculum reforms have taken place in Sub-Saharan Africa (Bantwini, 2010) and globally (Flores, 2005; Fullan, 2009). However, many of such curriculum reforms in Sub-Saharan Africa have largely not achieved their intended goals (Sofu et al., 2019, Tabulawa, 2013).

Since Ghana gained independence in 1957, successive governments have taken recognition of the importance of education to national development, and have relentlessly crafted policies aimed at making quality education accessible to all and relevant to the social, industrial and technological development of the country (MOE, 2007). The curriculum that had been run in schools across the country was introduced in 1987 as part of the Educational reform programme. It has been indicated in some studies that acceptance of the 1987 curriculum and its implementation in Ghanaian schools became a challenge due to several reasons.

In a 2004 study in Ghana, it was reported that planned changes in the new curriculum were not clearly conceptualized and there appeared to be serious lack of communication between the various elements of the educational system (Osei, 2004). The author of that study further posited that, per classroom observations, the ideas originally laid out in the National Education Policy, such as integrated approaches to subject matter, student involvement, and problem-oriented teaching methods had not been effectively adopted and implemented by teachers.

To address some of these issues, the 1987 curriculum was reviewed and the revised version was introduced in 2007. As documented in the UNESCO report (2010), the 2007 curriculum was designed to make pre-tertiary education responsive to challenges of education in the twenty-first century and also to ensure that all learners get the maximum benefit from the system. It was largely based on the outcome-based educational theory and though the intended purposes were well-meant, this curriculum has come under attack in recent times.

In his online article titled, “Curriculum Reform of Secondary Education in Ghana”, Sakyi (2012) highlighted many of the challenges that hindered and delayed the implementation of the 2007 curriculum. Teachers’ disposition toward the

curriculum and their preparedness to implement it was one major factor policy-makers failed to consider (Sakyi, 2012). Consequently, it took several years and strident efforts to achieve some of the objectives that occasioned the 2007 curriculum, and even then, many loopholes kept resurfacing.

The curriculum had been faulted for its emphasis on preparing learners just to pass examinations which dissuaded students from taking part in extra-curricular activities, instead of encouraging students to actually acquire and use knowledge (Osei-Dadzie, 2005). Other reported challenges included content overload and inability of the assessment system, without sufficient data, to help fashion out improvement in teaching and learning (Kpedator, 2019). Arguably, there had been some amendments made to the curriculum previously, however, the general outlook of the educational system in Ghana, especially in light of recent advances in technology and the globalization of the world, necessitated a curriculum review and possibly the design of a new curriculum.

The concept of a curriculum change is hardly new and is considered as one of the key factors in reviewing and subsequently improving the quality of education in any nation. As part of its measures to ensure inclusive and equitable quality education and to promote lifelong learning opportunities for all, the United Nations (UN) 2030 Agenda for Sustainable Development Goal 4, Target 4.1 stipulates that, “by 2030, all girls and boys are to complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes” (UN, 2015). Furthermore, it is expected that a large proportion of the learners, especially at the basic level will achieve at least a minimum proficiency level in literacy and numeracy (UN, 2015). It is in light of this monumental goal that the government of Ghana in

2019 introduced the new standards-based curriculum, which was to replace the curriculum that had been in place since 2007.

It was no surprise, then, when in early 2019, a new curriculum was developed and introduced by the National Council for Curriculum and Assessment (NACCA) per the recommendation by the Prof Osei Kwarteng's Ministerial Advisory Committee of 2017. The new Standards-based curriculum which was to be run from Kindergarten to Primary 6, was, among other things, intended to shift the structure and content of Ghana's education system from merely passing examinations to building character, nurturing values, and raising literate, confident, and engaged citizens who can think critically (National Pre-Tertiary Education Curriculum Framework, 2018).

This new curriculum was expected to help guide the planning, implementation, and assessment of student learning and the use of standards to streamline instruction was to ensure that teaching practices deliberately focus on agreed upon learning targets. According to Glavin (2017), the Standards-based curriculum is an evolution of the earlier outcomes-based education and has been adopted by several countries including the United States, Sweden and Malaysia, (Alvunger, 2018; Priestly and Sinnema, 2014; Veloo et al., 2015 ; Hamilton, Stecher, & Yuan, 2008; Young, 2008;).

Although a curriculum change had been anticipated for some years, there have been several concerns raised by the populace since its introduction in September, 2019. Generally, the most outstanding issue borders on whether the government, parents, teachers and even the learners are ready to roll out this new initiative. Concern over supply of recommended textbooks and other relevant learning materials and most importantly, the in-depth training of teachers to adequately prepare them to

adopt and use the new system have been raised (Kpedator, 2019). As part of plans to successfully implement the Standard-Based curriculum, about 152,000 teachers from all over the country were trained over a period of five days. There have been questions raised about how effective the training was as well as the quality of the Teacher Resource Packs supplied to the teachers to augment their teaching until the appropriate textbooks are supplied (Gyamfi, 2019).

Curriculum development, review and implementation is multi-faceted and challenging, therefore the involvement of all stakeholders in the process is paramount. Undoubtedly, one instrumental stakeholder in the design and effective utilization of a curriculum is the teacher. The role of the teacher in this endeavor cannot be overemphasized as the teacher serves as the mediator between the curriculum and the students. According to Alsubaie (2016), teachers, with their knowledge, experiences and competencies, are central to any curriculum development effort. To wit, the success of any curriculum change relies largely on how well-trained teachers are to comprehend, interpret and relate the curriculum to everyday teaching and learning in the classroom (Richardson, 1991).

1.2. Statement of Problem

In recent times, many countries have made remarkable efforts to implement new curriculum reforms. Often these reforms are well-designed and have relevant objectives and targets but in many cases, their implementation has resulted in less than desirable outcomes and many of these reforms are never translated into reality in the classroom (Morris, 2002). Many studies in some countries have examined the gap between policy and practice in curricular change and have explored some of the issues that limit and negatively affect the implementation of such policies, namely, teachers’

understanding and perception of the new curriculum and their lack of preparedness to adopt it for use (Park and Sung, 2013; Stiggins, 2005; Carless, 1998).

The curriculum, being the single most important guiding tool for the teacher, provides relevant information and content that will enable the teacher to dispense his duties efficiently. However, there are multiple and interrelated factors that influence a teacher's engagement with and willingness to implement a curriculum initiative. Carless (1998) observed that Teachers' attitudes obviously affect their behaviour in the classroom and when these attitudes are congruent with the innovation of a new curriculum, they are likely to have a positive disposition towards its implementation.

Stiggins (2005) noted that teachers were not ready to adopt a new curriculum for teaching because they lacked opportunities to learn the appropriate techniques and proper practices. Another study reported that teachers generally harboured negative and unconstructive feelings and perceptions about curriculum reforms and these perceptions negatively impacted their involvement in and commitment to implementing the reform (Park and Sung, 2013). These findings are similar to what Tabulawa, (2013) found in his study on why pedagogical reforms fail in Sub-Saharan Africa and the earlier reports of Waugh, (1993) in his British study.

Without a doubt, teachers' knowledge, perceptions and attitude towards a curriculum change correlates with their readiness to implement said change. Efforts to investigate the aforementioned factors will consequently inform future decisions and lead to improved standard of education in Ghana.

With the introduction of a new Standards-based Curriculum in Ghanaian basic schools in September 2019 little is known about teachers' readiness to implement and adopt the new curriculum for use. Besides anecdotal reports about teachers' readiness, no empirical study has examined their knowledge and perceptions about the new

curriculum. There is therefore a yawning gap in scholarship about teachers' level of knowledge, awareness and readiness to implement the new standards-based curriculum in Ghana. It is this gap in research that this study hopes to fill. Such knowledge will be very critical to future decisions about acceptance and effective use of the new curriculum and consequently, lead to improved standards of education in Ghanaian primary schools.

1.3. Purpose of the Study

The purpose of this quantitative descriptive survey research was to assess teachers' perception, knowledge and readiness for implementation of the new standards based curriculum.

1.4. Research Objectives

1. To assess teachers' perception about the quality of the new standards-based curriculum
2. To analyse teachers' evaluation of the quality of training received about the new curriculum
3. To ascertain the extent to which teachers consider themselves competent to handle the new standards-based curriculum

1.5. Research Questions

1. What is teachers' perception of the quality of the new curriculum
2. What is teachers' evaluation of the quality of training received about the new curriculum
3. To what extent do teachers consider themselves competent to handle the new standards-based curriculum

1.6. Significance of the Study

Harnessing information about teachers' perception, knowledge and readiness for implementing the new standards-based curriculum, will inform future decisions concerning primary education, facilitate the acceptance and effective use of the new curriculum by teachers and thereby lead to improved standards of education in Ghanaian primary schools. Furthermore, information obtained from this research will serve as a guideline upon which the new standards-based curriculum would be successfully implemented at all levels of education in Ghana.

1.7. Delimitation

This study was carried out in six public primary schools in Agona Nsaba Township in the Central region of Ghana. Agona Nsaba is the District capital of the Agona East District and teachers in the town were reported to have attended the new curriculum training in higher numbers than their colleagues in the villages. To reliably ascertain, among other things, the perceived effectiveness of the training program in the district, schools in the villages were therefore excluded from the study since many of the teachers there could not fully participate in the training program for diverse reasons.

CHAPTER TWO

LITERATURE REVIEW

2.0. Introduction

This chapter contains the opinions and views of some writers and researchers that are relevant to the current study. It encompasses issues related to concept of curriculum and curriculum reforms and highlights the major factors that influenced curriculum reforms in some countries worldwide as well as in Africa. It then bears down on a review of educational reforms in Ghana, post-independence to the present and wraps up with an empirical review of the role of teachers in curriculum implementation that necessitates an investigation into their perceptions of and readiness to implement the new standards-based curriculum in Ghana.

2.1. Concept of Curriculum

The word “curriculum” is derived from the Latin word *currere*, originally meaning the circuit of a race. In relation to education, the word may be taken to mean the path or track of a course of study (Online etymology dictionary, 2020). Traditionally, the term „curriculum“ was related to the prescribed course of studies followed by a pupil in a teaching institution or the body of subjects or subject matter prepared by the teachers for the students to learn (Wang, 2006). Nevertheless, in recent times, the concept of curriculum has evolved and its interpretation is subject to the context and perspective of the author.

According to Sahlberg (2005), the origin of modern curriculum thinking relates back to the first half of the 20th century when two American writers Franklin Bobbitt and Ralph Tyler published their works on curriculum that were the most dominant in terms of laying the ground for curriculum theory and practice. Bobbitt is reported to have described the curriculum as a series of experiences which children

and youth must have by way of achieving specific objectives, and those objectives, to him, were to show the abilities, attitudes, habits, appreciations and forms of knowledge that men needed.

Sahlberg (2005) also intimated that the curriculum theory by Ralph Tyler was based on four questions that revolved around what educational purposes the school sought to attain, the educational experiences that could be provided to attain these purposes, how those educational experiences could be effectively organized and how to determine whether those purposes were being attained. Evidently, this concept of the curriculum stressed the formulation of behavioral objectives for teaching. It was upon this rationalist thinking of Tyler that Sahlberg (2005) believed many subsequent curriculum theorists based their work.

It is important to note that several attempts had been made to conceptualise the term curriculum however, a number of theorists in this field have emphasized its multifaceted nature by demonstrating a general lack of agreement on how the term is to be defined. One of the earliest documented controversies about the curriculum was in relation to what its primary focus should be. In much early usage, “the curriculum” referred exclusively to the educational activities carried out by learners and was more content-oriented (Sahlberg, 2005).

Sahlberg (2005) further reports that Taba, a keen supporter of Tyler, held the firm belief that the curriculum was much more than a list of what was to be taught but rather entailed pedagogy as indicated in her quote “the selection of content does not develop the techniques and skills for thinking, change patterns of attitudes and feelings, or produce academic and social skills. These objectives only can be achieved by the way in which the learning experiences are planned and conducted in the classroom” (Leyendecker, 2012).

In another popular theory, Kerr is known to have based the tenets of curriculum on four principal elements; objectives, evaluation, knowledge, and school learning experiences. In other words, the curriculum was to have at its core the intended outcomes, objectives or as he termed it, “learning experiences”. Based on this idea, Kerr proposed that the term curriculum should denote “All the learning which is planned or guided by the school, whether it is carried on in groups or individually inside or outside the school.”(Kelly 2009). This emphasis on specified objectives ushered in yet another dissension on what the curriculum should be all about.

Lawrence Stenhouse, an ardent critic of the idea that the curriculum should be based on educational aims and objectives, pointed out that there were certain aspects of human experience that ought to be included in a curriculum not because they were necessary to achieve specified outcomes but because of their inherent value (Kelly, 2009). Stenhouse was of the view that any definition of curriculum should reflect its essentially dynamic nature and thereby posited that “a curriculum is an attempt to communicate the essential principles and features of an educational proposal in such a form that it is open to critical scrutiny and capable of effective translation into practice.” He believed that specifying content, rather than objectives, was more liberating to the individual student and the teacher and gave room for creativity (Kelly, 2009).

According to Kelly (2009), although Lawton, another curriculum theorist, agreed with Stenhouse to some extent, his summation of the curriculum was that “the school curriculum is essentially a selection from the culture of a society in which certain aspects of our way of life, certain kinds of knowledge, certain attitudes and values are regarded as so important that their transmission to the next generation is

not left to chance in our society but is entrusted to specially-trained professionals in elaborate and expensive institutions”. This ideology places emphasis on curriculum content carved out of a society’s cultural and moral background and stresses that essentially, what is in the curriculum is the result of choices that have been made during the curriculum development process.

Out of these earlier viewpoints of the curriculum, several authors subsequently came up with contemporary approaches to curriculum theory and practice. Smith (2000) postulated four ways of conceptualizing the curriculum, that is, curriculum as a body of knowledge to be transmitted, curriculum as an attempt to help students achieve a goal, curriculum as a process and curriculum as praxis or practice. This approach aptly sums up all aspects involved in a curriculum such as its basis, structure and content as well as teaching and learning objectives, pedagogies and processes. This curriculum idea is similar to those proposed by Braslavsky (2003) and Kelly (2009).

The multitude of ways in which the term “curriculum” had been interpreted supports the assertion by Braslavsky (2003), that most definitions of curriculum are influenced by modes of thoughts, pedagogies, and political as well as cultural experiences and because of this, the concept of curriculum is sometimes characterized as fragmentary, elusive and confusing. However, it can be deduced from these earlier theories that there are some key components that underpin any curriculum design attempt which are generally recognised. It is no wonder then, that these elements have influenced all subsequent definitions of curriculum.

In the first place, a curriculum is generally considered to be a plan of what teachers are expected to impart as well as what students are expected to learn in a specified setting. Therefore, Marsh and Willis (2003) defined curriculum as all the

“experiences in the classroom which are planned and enacted by the teacher, and also learned by the students.” Secondly, to ensure uniformity and a high educational standard, learning outcomes and objectives should be clearly spelt out in the curriculum. Hence Stotsky (2012), explained curriculum as a plan of action that is aimed at achieving desired goals and objectives. In other words, the curriculum is a set of learning activities meant to make the learner attain goals as prescribed by the educational system.

To achieve an education that does not undermine the creativity of students and teachers but gives room for exploration of new ideas, the curriculum should also consider the content and the pedagogy, which are the means of achieving outlined goals. In that regard, Ali and Ajibola (2015) opined that curriculum is an organized plan of a course outlined with the objectives and learning experiences to be used for achievement of the objectives. Before then, Wiles and Bondi (2007), had also maintained that “curriculum pertains to instruction that is planned with associated intended outcomes, recognizing that much more may occur in the classroom that is meaningful and relevant, even though it may be unintended”.

Apart from making decisions regarding content, process, objectives and topics, the curriculum should also be both students and society-centered. In other words, the curriculum should incorporate the cultures and values that need to be passed on to the younger generations while providing avenues for the learners to meet a demand in society as suggested by Lawton. Due to the changes that occur in everyday lives and how the society and the world at large is evolving, a good curriculum should be dynamic and versatile enough to accommodate and meet the growing demands of a globalized world. This value-oriented curriculum design is supported by several educators (Al-Awidi and Aldhafeeri, 2017; Kelly, 2004; Braslavsky, 2003).

From the various definitions and concepts presented, it is obvious that there is no one-size-fits-all definition to encompass the many aspects that a curriculum addresses. It is also apparent that curricula are custom-made for each society based on the prevailing norms and present demands of that society. As Braslavsky (2003), succinctly put it, “curriculum is planned and guided learning experiences and intended outcomes, formulated through the systematic reconstruction of knowledge and experiences under the auspices of the school, for the learners” continuous and willful growth in personal social competence”. Consequently, for the improvement of the educational system in any country, the concept of the curriculum must evolve and all parties concerned must accommodate changes and adapt appropriately.

2.2. Types of Curricula in the Formal Educational System

Generally when educators talk about the curriculum, they are referring to a written document which is formally designated and reviewed by curriculum directors and administrators often upon consultation with other stakeholders such as teachers. Kelly (2009) referred to this curriculum as the Intended curriculum because it constitutes what societies envisage as important for teaching and learning and is usually expressed in comprehensive and user-friendly documents, such as curriculum frameworks or subject curricula/syllabi, and in relevant and helpful learning materials, such as textbooks, teacher guides, and assessment guides. For all intents and purposes, it is to this type of curriculum that references will be made in this study.

Although it represents the vision of the society and pushes the intentional instructional agenda of the school, this written or official curriculum is by no means an exhaustive description of what a curriculum should be. In the educational context, a curriculum can be seen from other different perspectives as narrated by Kelly (2009). In reality, the intended curriculum may be altered through a range of complex

classroom interactions, and what is actually delivered and presented by the teacher at the classroom level can be considered the “enacted” or “implemented” curriculum or the “curriculum-in-use”. In addition, those things that students actually take out of classrooms; those concepts and content that are truly learned and can be assessed and demonstrated as learning outcomes or competencies is the “received” “achieved” or “learned” curriculum.

Curriculum theorists have also described a “hidden” or “covert” curriculum which refers to the unwritten, unofficial, and often unintended lessons, values, and perspectives that students learn in school. Longstreet and Shane (1993) defined the hidden curriculum as the kinds of learning children derive from the very nature and organizational design of the public school, as well as from the behaviors and attitudes of teachers and administrators. It is an unintended curriculum which is not planned but may modify behavior or influence learning outcomes that transpire in school (Kelly, 2009).

In many centralized countries the intended curriculum is usually legislated by the national government and approved by the Ministry of Education or a similar higher body and serves as instructional guide in all public schools in the country. This concept of a national curriculum has been a feature of education in many countries for quite some time now and is inextricably linked to matters of national identity and security, and also national culture and language (Biesta & Priestley 2013). Globally, a number of countries including France, Chile, Hungary, Ireland, Italy, India, Japan, Korea, Australia, New Zealand, Norway, Portugal, Singapore, Spain, the United Kingdom and all African countries have this type of national curricula (Green, 2019).

On the other hand, federal countries such as the United States, Brazil and Argentina have no such national curriculum. In such countries the Intended

curriculum is approved by the authorities in individual states based on certain common guidelines such as the Common Core State Standards Initiative in the United States (Savage & O'Connor 2015).

2.3. Curriculum Reforms

The education system is a social institution that often faces major changes and one important factor in the changes made to this institution is the act of curriculum reform through planning and informed development (Kelly, 2004). Without a doubt, development in any endeavour connotes changes which are systematic but mere change does not mean improvement. A change for the better means an alteration, modification or improvement of existing conditions. Curriculum reform, therefore, is the process of making changes to the curriculum with the intent of making learning and teaching more meaningful and effective.

In many countries and throughout the modern era of educational change, curriculum innovation has been regarded as an essential strategy for educational reform. McCulloch (1998) rightly noted that curriculum reform has been employed as a means towards a wide range of aims, often related explicitly to particular social and economic ends, but also to promote more specifically, educational goals such as raising the standard of student achievement.

2.3.1. Factors That Influence Curriculum Change

The literature is replete with reasons that necessitated radical changes in the traditional school curricula in several countries. Curriculum reforms are all about change and according to Sahlberg (2005), nations and states renew their curricula because their existing ones are not what they should be, or simply because there is a belief that changing the curriculum will also bring expected improvements into the classroom. Some earlier reports outlined very specific and monumental gaps in the

educational system of some countries that needed to be resolved by a change in curriculum.

Shaw (1966) cited several studies that had investigated the effects of socioeconomic status and environmental influences on academic achievements of children in slums and segregated schools in America. It was found, among other things that modifications to the old curriculum that would enable such deprived pupils to develop competence in reading, science and mathematics was in order. To buttress this point, Burns and Brooks (1970), explained that the curriculum, in the state it had been then, had lost its relevance because it was not considering the different backgrounds of the students.

In their candid opinion, “hunger is not appeased by pursuing Shakespeare, disease is not avoided by memorizing the names of the bones in the human body and poverty is not overcome by memorizing the first ten articles of the constitution” (Burns and Brooks, 1970). In other words, the curriculum had to be realistic enough to take into account the interests, problems, frustrations, struggles and aspirations of each individual learner. In that same article, the authors further elucidated that the world was rapidly changing and that rather than emphasizing information learning, the curriculum should focus on discovery and rather than students learning by memorisation, their understanding, motor and affective skills should also be developed (Burns and Brooks, 1970).

The role that advances in technology have played in curriculum reforms cannot be overemphasized. Historically, the major inventions that prompted a curricula change in most countries across the globe were the development of personal computers, mobile phones and the internet and the increasing use of automation and cybernation in industries (Dede, 2000). Interestingly, this plethora of revolutionary

and high-tech innovations seemed to surge in the late 1960s to early 1970s, making historians refer to that era as a "pivot of change" in world history. Although these changes affected areas such as economy and commerce as well, it appears the educational sector underwent a phenomenal upheaval in that time (McCormick, 1992).

Ginzberg (1965) and Watson (1963) reported that improvements in automation technology had led to a high demand for scientific and professional workers and that if no new programs of education were developed, learners could not meet the demands of the workforce after their studies. In addition, there emerged unprecedented information and knowledge explosion due to the advent of personal computers that urged educators to remodel and reshape their curricula to enable learners fully access and utilise infinite educational information (Burns and Brooks, 1970). This led to attempts to integrate Information and Communication Technology (ICT) into the school curricula in several countries across the globe.

One fundamental point that also underpins periodic updating of school curricula is the profound understanding that what is normally considered to be true is constantly undergoing change as and when new information is discovered. This phenomenon is mainly evidenced by the realisation that curricular materials including textbooks are frequently out-of-date. It goes without saying, therefore that teaching and learning materials, all relevant tools and even the content of the curriculum itself should be continuously updated and upgraded to meet the current world standards.

Equally important for improving learning experiences of students is the refining of teaching practices and methods as days go by. As Burns and Brooks (1970) and Pinar et al., (1995) pointed out, there has been an increased understanding of how people learn in recent times, owing to the growing fields of Educational and

behavioural psychology. Undoubtedly, this has contributed to some archaic pedagogies, conducts and modalities of teaching being thrown out to be replaced by more professional and refined practices that make learning more innovative and interesting for the learner. All these changes in learning paradigms only become realities when certain portions of the curriculum are restructured.

In the 21st century, curricula reforms have mainly sought to introduce contemporary and ingenious ways of making teaching and learning fun and less burdening for all involved. For example, the Montessori and Kindergarten educational approaches have heavily influenced the curricula of public schools today (Pate et al., 2014). Emphasis is now placed on creativity and discovery as well as expression of each learner's interests through activities carried out during recreational and leisure hours. Furthermore, the orientation of the curricula in several countries has shifted from teaching and learning to pass examinations and is now more focused on developing specific skills which the individual can use upon leaving school (Adu and Ngibe, 2014).

Quite recently, as reported by several documented studies, curriculum reforms have taken place in some countries in Sub-Saharan Africa (Adu and Ngibe, 2014; Bantwini, 2010) and globally (Miller and MacPherson, 2019; Bryce et al., 2018, Oates et al., 2011; Flores, 2005; Fullan, 2009). In the United Kingdom, it has been reported that since the first statutory National Curriculum was introduced by the Education Reform Act in 1988, there have been a significant number of curriculum reforms owing to several of the reasons already discussed (McCulloch, 1998).

Recently, however, Miller and MacPherson (2019) divulged that mounting dissatisfaction with the overloaded curriculum content and the high expectation for students to excel against all odds motivated some countries in the UK, particularly

England and Scotland, to design new curricula. Scotland and England, after years of research and planning, launched their revised curricula in 2010 and 2014 respectively (Bryce et al., 2018, Oates et al., 2011).

2.4. Curriculum Reforms in Africa

2.4.1. The Role of UNESCO in Curriculum Reforms in Africa

Africa is the second largest continent in the world and comprises 53 individual countries. On the attainment of independence, virtually every country in Africa attempted to design and adopt educational policies and practices most suited to its nation-building agenda. Ezeanya-Esiobu (2019) believed this was due to the high illiteracy level that plagued most of these nations at that time. Huge investments were therefore made in the education sector in order to better manage and control the countries' affairs in the absence of colonial masters. Invariably, a radical re-thinking and remodeling of the entire or parts of the curriculum was an integral component of overall educational reforms in Africa.

Obanya (2004) in his comprehensive review of the role United Nations Education, Scientific and Cultural Organization (UNESCO) has played in curriculum reforms in Africa highlighted six ministerial conferences that featured discussions on curriculum issues. Several of the deliberations focused on curriculum objectives, content and materials, teachers and teaching methods and diversification of curricula to offer opportunities for science, technology and technical/vocational skills.

The first of these conferences was the Addis Ababa Conference in 1961 which called for new curriculum directions to meet the demands of changing patterns of African social and economic life. It is reported that as at that time, the content of education in member States was not in line with existing African conditions, the postulates of political independence, the dominant features of an essentially

technological age, or the imperatives of balanced economic development. Hence a major recommendation of the conference was the teaching of scientific and technical subjects to ensure the training of highly qualified research workers, engineers, science teachers and economists. However, it was at the Abidjan Conference in 1964 that participants agreed to expand the scope of their school curricula to include languages and the natural sciences (Obanya, 2004).

Obanya (2004) intimated that The UNESCO Educational Documentation Office in Accra, Ghana, was tasked to conduct studies firstly on the transfer from mother tongue to official languages as means of instruction, and then on teaching and learning of science at the primary and secondary level. Ultimately, the results of these studies as well as other suggestions made in the previous conference led to commendable efforts by a number of African countries between 1961 and 1964, to adapt school textbooks to new curriculum demands and to set up national curriculum development centres.

Following this, the Nairobi Conference was held in 1968 to address matters arising from previous discussions and to review progress made in education since 1964. In the area of primary education, leaders felt that the use of foreign languages in schools contributed to the psychological alienation of the child, made learning more difficult, and reduced the quality of learning outcomes. Therefore, each country was urged to examine its peculiar linguistic configuration and design appropriate policies for the use of languages at the primary level. In addition, it was recommended that science be intensively taught at the primary level and that upon completion, “the leaver should have acquired basic scientific and mathematical knowledge to enable him/her understand a world that is becoming increasingly science-dominated, so as to be able to adapt to such a world” (Obanya, 2004).

Undoubtedly, most curriculum reform efforts at the time had attempted to relate the cultural environment of the learner to education, and the increasing use of African languages was seen as a right step in this direction. At the Lagos Conference in 1976, it was recommended that an African Curriculum Organisation (ACO) should be created to, among other things, forge greater regional cooperation in curriculum reform and renovation of school curricula and to play a major role in building up capacity in the field of systematic curriculum development in Africa (Obanya, 2004).

It goes without saying that these deliberations and conferences were yielding ground-breaking results across the African continent. By 1982, as reported at the Harare Conference, many African countries had embarked on programmes of integrated science at the primary level and there had been attempts to relate science curricula to the environment and to emphasize pre-vocational skills. Although evidence from several countries indicated that large-scale curriculum reform was underway, there remained a concern that the problems identified at the Addis Ababa conference of 1961 still remained largely unsolved. Hence at the Harare conference, several recommendations from the four preceding conferences were reiterated and member states that were present re-affirmed their commitment to improving the quality of education in their countries through curriculum reviews (Obanya, 2004).

Similar to all preceding conferences, the Dakar conference in 1991 gave due prominence to curriculum issues in Africa. In the first place, it was agreed that African languages were a useful curriculum tool which should no longer be confined to the first two years of primary school but should be extended right up to the highest level. Furthermore, there was to be an improvement in the quality of basic education, with special emphasis on improving teacher training and learning outcomes. A greater interaction of learners with their environment and more effective participation in

development through the acquisition of knowledge and the development of appropriate skills and attitudes was also to be encouraged (Obanya, 2004).

Chisholm and Leyendecker (2009) documented that many countries in Africa held multiparty elections in the early to mid-1990s to signal commitment to liberal democracy and market openness consistent with world developments even though authoritarianism remained part of many political systems. These elections, they believed, paved the way for educational and curriculum reform and ushered in new processes for curriculum development focusing on learner-centredness, outcomes- and competency-based education in order to improve students' enrolment, participation and outcomes.

2.4.2. Curriculum Reforms in Some Named African Countries

Educational and curriculum development approaches differ widely in individual countries in Africa, particularly during the early part of the twenty-first century (Le Grange, 2010). This explains why in recent times, studies with a curriculum focus in Africa tend to be country specific, since it is not possible in a review of African curriculum studies to refer to developments in each of the 53 countries. All the same, curriculum reforms in four African countries have been reviewed as follows.

According to Adu and Ngibe (2014), the South African education sector has experienced multiple curriculum changes since 1994 because the curriculum needed to be revised to reflect the democratic values and principles contained in the constitution of South Africa. In 1997, the government launched an education system called Curriculum 2005, which was based on "outcomes-based education" (OBE). Curriculum 2005 was an attempt to radically change the previous curriculum which was criticized for being content-led, teacher-centred and irrelevant to the learners'

experiences of the real world and the development of their competence to deal with the world (Hoadley and Jansen, 2009).

In contrast, the new curriculum was competence-based and learner-centred and was expected to eliminate much of the elitism and the dominance of the white, male orientation in the curriculum (Pinar, 2010). Curriculum 2005 was found to have too little specification of content to be learnt, therefore, in January 2012, the National Curriculum Statement retained the outcomes-based structure but specified what outcomes, in terms of both skills and knowledge, needed to be achieved in each grade and this constitutes the National curriculum framework which is currently being run in schools in South Africa (Adu and Ngibe, 2014).

In Eastern Africa, specifically Uganda, a thematic curriculum has been implemented since 2007 for the first three lower primary grades mainly to achieve quick development of foundational literacy, numeracy and life skills. At this level, teaching is delivered in the child's local or familiar language. Starting in grade four and through to upper primary, however, the curriculum transitions from being theme-based to subject-based, and from using the child's familiar language to English as the medium of instruction (Atuhurra and Alinda, 2018). Prior to the introduction of this curriculum initiative, there had been five major reforms in the basic education curriculum since 1962 which had all reportedly failed to achieve significant progress in Education in Uganda (Ezati, 2016).

In Kenya, a new curriculum (2-6-3-3-3 model) was introduced in January 2017 to replace the 32-year-old 8-4-4 system for several reasons (Wanjala 2017). In the first place, the previous curriculum had been phased out because it was deemed unsuitable for the changing aspirations of Kenyans and the labour market which was slowly beginning to embrace technology. Moreover, Wanjala (2017) disclosed that

the system had laid emphasis on academics as opposed to orienting learners for employment and also failed to cater for the critical pre-primary level of schooling for children under six years. The new curriculum was touted as the ultimate remedy to limitations identified in the previous system because it was entirely skills-based (Wanjala, 2017).

In the case of Nigeria, the government adopted a national Basic Education Curriculum for grades 1 to 9 in 2005. This policy was an outgrowth of the Universal Basic Education program announced in 1999, to provide free, compulsory, continuous public education. In 2014, the government implemented a revised version of the national curriculum, reducing the number of subjects covered from 20 to 10 (Igbokwe, 2015). The new innovations emphasized basic Science and Technology and were intended to make the curriculum more practical, relevant, and interest-generating to the young learners, in line with global best practices.

2.4.3. Curriculum Reforms in Post-Independence Ghana

Post-Independence Ghana, like all other colonized African countries, had a very low literacy level as evidence by the fact that by 1957, only about 20% of the country's children were enrolled in school (Mazrui, 2003). Fueled by a strong desire to change the status-quo as far as education and other aspects of life were concerned, the leaders of the time made strident efforts to review some facets of the education sector. The goal was to increase the quality of education while making it accessible for all. Hence there was a never-ending search of a model of education that would fit the needs of the country and the expectations of the citizens.

Several educational acts and reforms have taken place in Ghana since Independence. Undoubtedly, the 1961 Education Act initiated by Dr. Kwame Nkrumah which aimed at achieving Free Universal Primary Education is known to

have contributed largely to a remarkable increase in school enrollment within a five year period (Kadingdi, 2004). Mazrui (2003) indicated that due to this high accessibility of education, the literacy level in Ghana had risen to 85% by 1962. Regardless of these commendable feats, the education sector in Ghana was still woefully deprived, hence the country was dependent on the British colonial powers for financial aid mostly through the provision of teachers, volunteers, shipping of textbooks and school materials and the granting of scholarships to brilliant African children (Steiner-Khamsi and Quist, 2000).

Ezeanya-Esiobu (2019) asserted that there were far-reaching consequences to the continued reliance on external assistance as it became apparent that several African countries that had gained independence, including Ghana, still lacked the much needed capacity or even audacity to intervene and change the colonially-bequeathed structure and program content of its education system. Therefore, the curriculum as at that time was predominantly western-styled as the British insisted on their own paradigm being reflected in the school curriculum. Quist (2003) contended that, this foreign curriculum model that was adapted to the Ghanaian context had been a significant instrument for the human-resources and socio-political development of Ghana but its emphasis on academic type of education created a situation of dependency with respect to techno-scientific and economic development.

In the early 1970s however, looking at the pressing demands in education from the perspective of the Ghanaian leaders, emphasis was placed more on how many were being taught, rather than what was being taught (Quist, 2003). Consequently, the enrolment rates increased exponentially at the expense of quality of education in terms of how relevant the content of the curriculum was to the Ghanaian society. The Ghanaian Education System at that time consisted of six years of primary

education, followed by four-years of secondary education after which some students went on to do a two-year sixth form course that could lead to a three-year University course and others went on to complete two-years of pre-vocational classes (6-4-5/2 model) (Adu-Gyamfi et al, 2016).

By the 1980s, the educational system in Ghana had started deteriorating both in quality as well as quantity and was considered to be in crisis. The general view that the system was too long coupled with the foreign nature of the curriculum which was seen to be too academic caused a growing dissatisfaction and dissent in the educational sector. These and many other extenuating factors led to the Educational reforms of the 1980s. Upon recommendation by the The Dzobo committee and with the assistance of several development partners (World Bank, Department for International Development (ODA) and international grants) the education system was reviewed and proposals were implemented in 1987 (Osei-Dadzie, 2005).

The 1987 educational reform also introduced a new curriculum which purported to expand and make accessible a more equitable education at all levels and to change the structure of the pre-tertiary school system from 17years to 12years (6-3-3 model). In addition, it sought to improve pedagogic efficiency and to make education more relevant by increasing the attention paid to problem-solving, environmental concerns, pre-vocational training, manual dexterity and general skills development (Kadingdi, 2004; Adu-Gyamfi et al, 2016).

It is undeniable that the 1987 educational reform had a significant impact on the educational landscape in the country and helped to solve some of the existing problems. Particularly, it aimed to vocationalize the education system by shifting focus from an academic-oriented field to a more practical and technological environment which was in line with the nation's manpower needs (Adu-Gyamfi et al,

2016). Nevertheless, at the primary school level, the quality of education did not improve as expected. There were still a number of problems including poor quality teaching and learning, weak management capacity at all levels and inadequate access to education (Osei-Dadzie, 2005).

Although the 1987 curriculum was presumably an improvement on the previous British-colonially imposed one, and supposedly attempted to factor in local and cultural issues, it was still critiqued as being elitist in nature (Kadingdi, 2004). Moreover, the curriculum was faulted for placing emphasis on preparing learners just to pass examinations instead of encouraging them to acquire and use knowledge (Osei-Dadzie, 2005). The issue of Ghanaian school children receiving modern education through a foreign language especially at the basic level was also one of major concern (Adu-Gyamfi et al, 2016).

Osei (2004) further revealed another setback that delayed the large-scale adoption of the 1987 curriculum. Apparently, planned changes in the new curriculum were not clearly conceptualized and there appeared to have been a lack of communication between the various stakeholders which accounted for why the new innovations in the curriculum had not been effectively adopted and implemented by teachers. In 2007, the pre-tertiary educational structure and curriculum underwent significant revisions geared towards eliminating the weaknesses associated with the structure and content of previous reforms.

This educational review was influenced by the report from the Anamuah-Mensah Committee which had been set up in 2002. With regards to the educational structure, two years of Kindergarten was introduced into the Basic Education system making it eleven years in all and the duration of Senior High School was extended

from three years to four years. Moreover, the medium of instruction in Kindergarten and lower primary was to be in the Ghanaian Language and English (Inkoom, 2012).

According to a 2010 UNESCO report, the objectives of the 2007 curriculum were to emphasize active learning rather than passive learning and to prioritise intellectual competencies and skills rather than subject teaching. It is relevant to note that the 2007 curriculum also aimed to emphasize participatory and problem-solving pedagogy and under this participatory approach, teachers were expected to employ a mixture of teaching methods within a lesson to ensure that the needs of every child were met. By implication, teachers being the primary interpreters of the curriculum at the classroom level were at the very centre of this curriculum design. It is therefore unfortunate that the policy-makers failed to consider teachers' disposition toward the curriculum and their preparedness to implement it, as purported by Sakyi (2012) and Eshun (2013).

In reality, there had not been much improvement in shifting focus from students merely learning for the sake of passing examinations to actually building character and concerns arose about how overloaded the content of the curriculum was (Kpedator, 2019). In light of the public outcry against the 2007 curriculum, a new curriculum was developed and introduced by the National Council for Curriculum and Assessment (NACCA) per recommendations by the Prof Osei Kwarteng's Ministerial Advisory Committee of 2017.

Prior to the introduction of the standards-based curriculum in 2019, the basic school curriculum in Ghana was based largely on the objective or outcome model of curriculum development which was used in many developed countries in the last half of the 20th century (Kennedy, 2011; Allais, 2007; Donnelly, 2007; Mohayidin, 2008; Manno, 1994). The objective-based curriculum design, which was critiqued by

several educationists, was structured around identifying key instructional objectives and employing specific activities which would enable learners achieve desired learning outcomes. Mereku (2013) argued that though objectives enable teachers to judge the quality of their teaching, not all the outcomes of a particular lesson can be specified in a limited number of instructional objectives.

Furthermore, spelling out specific objectives could lead to the exclusion of other equally important areas of learning and dissuade teachers from accommodating unintended outcomes in the classroom. Subsequently this system over-emphasizes products of learning at the expense of the processes of learning which involve higher cognitive competencies (Mereku, 2003). Tam (2014) also asserted that because the definitions of the outcomes were subject to interpretation by those implementing them, this caused disparities in education across different programmes or different instructors, even though the same outcomes were said to have been achieved by the learners.

According to the NACCA report, the previous curriculum framework had also been too broad with several curricular aims which teachers were expected to achieve within a considerably small time-frame. In effect, teachers and learners alike compromised under the heavy weight of the curriculum by narrowing it to some aspects which were expected to yield good assessment results. Consequently, there was a dire need to design a new framework that held teachers and learners accountable to higher levels of desirable achievements or standards (National Pre-Tertiary Education Curriculum Framework, 2018). Glavin (2017) opined that, the use of standards to streamline instruction ensures that teaching practices deliberately focus on agreed upon learning targets and this is expected to help guide the planning, implementation, and assessment of student learning.

The concept of a standards-based curriculum is known to have evolved from the earlier outcome-based education and has been adopted by several countries including the United States, Sweden, Malaysia and South Africa (Alvunger, 2018; Glavin, 2017; Adu and Ngibe, 2014; Priestly and Sinnema, 2014; Veloo et al., 2015; Hamilton et al., 2008; Young, 2008). It is considered to be a step in the right direction of building character and nurturing values in scientifically-literate twenty-first century individuals. However, the success of this endeavour demands that extensive investigations be done to ascertain the readiness of key stakeholders in implementing the new reforms.

2.5. The Role of Teachers in Curriculum Implementation

An essential part of any curriculum development is the implementation stage. Curriculum implementation describes how the planned or officially designed course of studies is translated by the teacher into syllabuses, schemes of work and lessons to be delivered to students. It is known that the role of the teacher is paramount to the success of new reforms as he or she is the transmitter of curriculum knowledge to students (Adentwi, 2000). Alsubaie (2016) therefore opined that, without doubt, the most important person in the curriculum implementation process is the teacher. In essence, during curriculum implementation, the teacher brings into existence the anticipated changes by taking on new roles as advisor, facilitator and developer of the enacted curriculum.

Generally, curriculum reforms portend drastic changes to the educational system in any country. These changes require teachers to possess the skills and knowledge to implement the curriculum with fidelity (Wiles and Bondi, 2007). Early et al., (2007) were of the view that adopting new curricula required teachers to feel confident in the delivery and purpose of the materials they use in order to ensure

accurate implementation. In addition, Lochner et al., (2015) also believed that teachers are central to whether a curriculum is delivered consistently, effectively, and with efficacy to enable the support of students' progress and growth.

Meier (2018) outlined a few roles that teachers play in the curriculum process as far as classroom work is concerned. According to her, the primary duty of teachers is to help students develop an engaged relationship with the content of the curriculum. To this end, teachers build lessons that include simulations, experiments, case studies and activities to deliver the curriculum in easy-to-understand instructional language to the learners. This interactive approach intertwines curriculum and practical experiences as well as the teacher's creativity to immerse students in learning.

Meier, (2018) further contended that, no matter how well-intended a curriculum is, it cannot and does not always meet the needs of all learners in the classroom. Teachers are the experts, when it comes to understanding the individualized needs of each student. Differentiated or Adaptive instruction which employs a wide variety of learning options is therefore critical to ensure that each student will maximize their potential, for example, teachers may group students by interest to encourage collaborative learning or to assess student progress so that the teacher can determine the pace of curriculum delivery.

In the same light, teachers assist the learners to connect curriculum content to an individualized plan that reflects a career interest. During curriculum implementation, teachers consider how they can incorporate students' choices and predilections in classroom learning in order to build their individual interests in certain subjects which may influence future career paths. This is where project-based learning comes in to optimize learners' skills and potentials by encouraging them to be more hands-on (Meier, 2018).

It is an undisputable fact that continuous curriculum changes affect the lives, relationships and working patterns of teachers. In this regard, policy makers should no longer assume that curriculum implementation is a process that translates directly into classroom reality. Teachers ultimately decide the fate of any educational enterprise therefore their attitudes, feelings and perceptions should not be devalued before the launching of any innovation.

2.6. Effects of Teachers' Perceptions about Curriculum Changes on Curriculum Implementation

The history of curriculum reform and attempts to introduce new approaches in teaching are replete with good ideas that fail to get implemented or that are successful in one context but not in another one (Jadhav and Patankar, 2013; Morris, 2002). The overall success of any educational endeavor heavily relies on the teacher's ability and willingness to interpret and relate the curriculum to everyday teaching and learning. It goes without saying, then, that identifying reasons that support or prevent teachers' effective implementation of a new curriculum may provide direction for helping them with curriculum changes.

A number of studies have explored some of the issues that limit and negatively affect the implementation of curriculum reforms and reported that commonly, teachers' understanding and perception of the new innovations and their lack of preparedness to adopt them for use is a major factor. Richardson (1991) in assessing how and why teachers change surmised that, the propensity for adopting curricular innovation depended on teachers' attitudes towards or receptivity to it. Anderson (2011) also reported that great variability existed among teachers implementing new curricula changes and that the individual's perceptions, feelings, motivation, frustrations and satisfactions are factors responsible for such variability.

Other authors found that teachers' fears, beliefs and uncertainties as well as their perceived expectations greatly affected their responses to system-wide curricular changes (Waugh and Punch, 1993). According to Thompson (1990), teachers may view an innovation with suspicion especially when it is perceived as a criticism of what they have been doing. Arthur (1999) also noted that the introduction of any change in curriculum is frequently regarded by teachers as signaling more work and requiring extra effort by them in terms of learning new skills, managing new resources and acquiring novel techniques in inter-personal relationships without extra remuneration and this led to their unwillingness to implement the reforms. Arthur (1999) further observed that innovations which demand approaches and attitudes that are at variance with those held by the teachers contribute to lapses in implementation.

In a Korean study, Park and Sung (2013) indicated that lack of commitment to implementation of curriculum changes stemmed from negative and unconstructive feelings that teachers harboured towards the reforms. Undoubtedly, teachers' attitudes affect their behaviour in the classroom, as such, when these attitudes are congruent with the new curricular changes, implementing them becomes easier (Carless, 1998). However, there appears to be a mismatch between teachers' attitudes and their actual behaviour in the classroom as purported by Kennedy (2011), who intimated that for several reasons, teachers might express a positive attitude towards an innovation, yet might not actively implement it in class. In other words, it should not be assumed that just because an innovation has been adopted, it was being implemented as planned in various classrooms.

To buttress this point, Stiggins in a 2005 study observed that teachers were not ready to adopt a new curriculum for teaching, not because they had negative feelings towards it but because they lacked opportunities to learn the appropriate techniques

and proper practices required to implement it. Based on this, Park and Sung (2013) elucidated that there are certain external factors that may also contribute to how a teacher implements curriculum reforms such as being assigned too many official duties, working in a traditional school structure or a low-resource school, and institutional support and cooperation.

These circumstances and environmental considerations are usually beyond the teacher's control. Therefore, it is important to note that if teachers perceive an innovation as being outside of their control, however positive their attitude towards it, they may not implement it (Park and Sung, 2013; Carless, 1998). Tabulawa, (2013) in his study on why pedagogical reforms fail in Sub-Saharan Africa revealed that major reform attempts failed mainly because teachers were not able to adapt instructional innovations to technical problems and that lack of resources, and poor training programmes were to be blamed.

When South Africa's amended National Curriculum Statement came into effect in January 2012, several authors reported some challenges to its implementation from the perspective of teachers. Prior to this, Bantwini (2010) had cautioned that "the meaning each teacher attaches to curriculum reforms acts as his or her map to understanding the new curriculum, and frequently determines the success of the implementation journey". Therefore to facilitate teachers' clear understanding and development of constructive meanings of the new curriculum reforms, intensive training was paramount.

In a comprehensive study to ascertain South African teachers' perceptions about the continuous change in curriculum, Adu and Ngibe (2014) intimated that the teachers were not against reforms as such; rather they were offended at the way the reforms were presented to and imposed on them. Some teachers were also reluctant to

see and practice the changes because they admittedly lacked the skills and knowledge to carry them out. The authors further cited other studies that indicated that commonly, teachers' views and beliefs were not in line with the educational policies because the new tasks were too demanding and they did not believe that these changes would improve their overall teaching and learning (Adu and Ngibe, 2014).

Lumadi (2013) in his South African study titled, "Exploring Factors Faced by Teachers in Curriculum Implementation" also disclosed that a lot of teachers had mixed feelings about the curriculum change and did not welcome it because it brought a lot of concerns and fears. Firstly, there was a concern that their roles were not clearly spelt out in the new curriculum and some had still not clearly understood the new curriculum as at the time of the study. The teachers felt that there was too much cumbersome jargon in the new curriculum which had not been well explained to them. Furthermore, 53% of the teachers complained that they did not receive enough in-service training concerning the new curriculum and considered the six days workshop training they had received to be insufficient because it was done haphazardly.

Atuhurra and Alinda (2018) in their review of Basic Education curriculum effectiveness in East Africa, indicated that although some authors had praised the intentions of the thematic curriculum in Uganda, some educationists had also repeatedly highlighted its' lack of relevance to the contextual realities prevailing in schools and classrooms across the country, especially outside of the urban settings of major towns. These researchers cited an earlier study by an author named Altinyelken that sought to assess teachers' perspectives of the thematic curriculum. It was revealed that the initial enthusiasm teachers had developed for the new curriculum quickly turned into frustration as they discovered that the recommended pedagogical

approaches in the new curriculum were inappropriate and impractical in their settings (Atuhurra and Alinda, 2018)

In a research work by Apeanti and Asiedu-Addo (2012) to investigate the views of teachers and parents concerning the 2007 educational reforms in Ghana, it was reported among other things that majority of the teachers felt the curriculum was too loaded and that there was lack of coordination between stakeholders in education and the policy makers. Interestingly, from the perspective of teachers, the failure of the 1987 educational reforms in the country was attributed to similar factors (Osei, 2004). After decades of well-intended amendments to the educational system in Ghana, it appears several concerns raised by teachers, who are the implementers of the curriculum, have not been given the necessary attention.

The new standards-based curriculum that was introduced in Ghana in early 2019 was expected to be rolled out in all primary schools from September of the same year. This new educational reform has been touted as revolutionary and innovative both in design and intended goals (Kpedator, 2019; Gyamfi, 2019). Regardless of how perfect a curriculum design may be, however, it can be regarded as successful only if it involves the teacher in as many curriculum decisions as possible (Carl, 2005; Steyn, 2006).

There have been some curricula reforms in Ghana in the past, however, their implementation was said to have been fraught with a number of problems that militated against the success of the intended changes (Sofu et al., 2019; Adu-Gyamfi et al, 2016; Osei, 2004). This proves the assertion by Rutz-Primo (2005) that even the best programme in education will fail to have the intended impact if its essential elements are not implemented properly.

The standards-based curriculum initiative in Ghana is still in the implementation stage and already, there have been several concerns raised by the populace about whether or not the government, parents, teachers and learners across the country are ready to whole-heartedly embrace it for large-scale classroom work (Gyamfi, 2019). It is imperative, therefore, to assess teachers' perceptions and readiness to implement the new reforms in order to ensure that unlike past efforts, these innovations would achieve the highest possible success.



CHAPTER THREE

RESEARCH METHODOLOGY

3.0. Introduction

This section discusses the methodology and research design which were used to achieve the objectives of the study. It also looks at the study area, sampling procedure and instrumentation adopted for data collection and analysis. Furthermore, the rationale behind the choice of method and instrument is provided and duly referenced where applicable.

3.1. Research Approach

A quantitative research approach was employed in this study for several reasons. Unlike qualitative research which involves collecting and analyzing non-numerical data such as narratives, quantitative research deals with collecting and analyzing numerical data and is particularly useful in finding patterns and averages, establishing trends, testing causal relationships and making predictions about human behaviour and other human attributes.

In addition, results from a quantitative research can be generalized to the wider population because the techniques involved permit larger sample sizes than qualitative research. According to Watson (1963), when investigating items that are generally difficult to measure such as peoples' feelings, attitudes, perceptions and thoughts about a particular situation or phenomenon, as this study sought to do, using a quantitative method is the best approach.

3.2. Research Design

The non-experimental descriptive survey design was used in this study as described by Apeanti & Asiedu-Addo (2012). Unlike an experimental research, the

variables in this study were not manipulated. Glasow (2005) indicated that, descriptive surveys can elicit information about attitudes that are otherwise difficult to measure and can enhance understanding of just about any educational issue. Rose (2015) reiterated that variables like respondents' attitudes and opinions which may be difficult to investigate by other research designs can be measured through surveys.

3.3. Research Method

This survey used questionnaire to collect information from a sample of teachers at a set point in time (one-shot survey). Self-complete structured questionnaires were used to elicit information about the views of teachers concerning the new standards-based curriculum. This choice is supported by the assertion by Rose (2015) that sample surveys that use self-complete questionnaire are very efficient at gathering large amount of information from respondents.

Furthermore, questionnaire were used because they ensured uniformity as each respondent received the same set of questions phrased in exactly the same way. This made the data collected more comparable and standardised than information obtained through other methods (Chaleunvong, 2009). Questionnaire also enable participants to take their time to carefully answer questions at their own convenience and also to state their views or feelings privately without worrying about the possible reaction of the researcher (Kothari, 2004). Thus it ensured confidentiality of the responses obtained and avoided the bias of the investigator.

Unfortunately, as with the questionnaire method, there was a risk that some respondents would be inclined to give socially acceptable answers. Therefore, all participants were encouraged to answer the questions as honestly as possible in order to avoid drawing false conclusions from the study. In all, there were five sections in the questionnaire (see Appendix).

The first section of the questionnaire sought for background data comprising of demographic information about respondents and their participation in both the training organized by the Ghana Education Service for the new curriculum as well as other training. It consisted of closed-ended questions followed by multiple choice answers from which participants could choose. According to Farrell (2016), closed ended items provide respondents with an easy method of indicating their answer, prompt the respondents to rely less on memory in answering the questions, and help to classify the responses easily to make statistical analyses straightforward. Again, closed ended questions are reported to have higher response rates because participants are not required to write so much.

The next two sections (A and B) of the questionnaire dealt with respondents' perceptions about the new curriculum and their preparation for its implementation respectively. Both sections had closed-ended questions followed by five-point Likert scales ranging from „Strongly Agree“, all the way down to „Strongly disagree“. The fourth and fifth sections (C and D) attempted to ascertain the respondents' knowledge and competencies regarding certain aspects of the curriculum. Each question was followed again by a five-point Likert scale ranging from „Not Sure“ to „To a very large extent“.

3.4. Study Area/ Population

The study was carried out in Agona Nsaba Township in the Central region of Ghana. Agona Nsaba is the Administrative capital of the Agona East District and is a predominantly farming community well-known for being one of the richest cocoa growing areas of the Central Region. The district is bounded on the south by the Agona West Municipal and Gomoa East District Assemblies. The West Akim and

Birim South District Assemblies lie to the north of the District whilst it is bounded on the east by Awutu Senya District.

The population of the entire District according to 2010 population and housing census was 85,920 with 41,035 male and 44,885 female (AEDA, 2012). In all, there are eight (8) basic schools in Agona Nsaba; five (5) public schools and three (3) private schools. There is also a Presbyterian Senior High school which was established in 1962.

3.5. Sampling Procedure

A non-probability purposive sampling method was used in this study. According to Crossman (2019), Purposive/Judgmental sampling is a technique where the selection of the sample is based on the researcher's knowledge of the population and the purpose of the study. All five public primary schools in Agona Nsaba were selected for the study because, presently, the new Standards-based curriculum is being run on a pilot basis from Kindergarten to Primary 6 in all public schools and the teachers there were more likely to have participated in the Ghana Education training on the new curriculum. The selected schools were the Presby Primary school, the Methodist Primary School, The Roman Catholic Primary School, the A.M.E. Zion Primary School and the Islamic Primary School.

Being a primary school teacher in the selected schools automatically qualified one to be a participant in this study. The teachers that participated in the study had a wide range of teaching experience and were teaching at different levels from Kindergarten to Primary 6. The criteria for participant selection were availability and willingness, therefore teachers that were disinclined to take part in the study and those who were indisposed as at the time of data collection were excluded. Based on these

criteria, a homogenous sample of sixty (60) primary school teachers in the selected schools was obtained and used in the study.

3.6. Data Collection Procedure

All questionnaires were hand delivered to respondents at their teaching posts during working hours, for the reason that further explanations and information could be provided to respondents where needed. Respondents were then given a couple of days to complete the questionnaires after which collection was done.

3.7. Ethical considerations

Ethical clearance was given by the University Research Ethics Committee (UREC) of the University of Education, Winneba. In addition, there was an introductory part of the questionnaires which provided contact information of my Supervisor for any respondent that sought further clarification. Permission was obtained from the various heads of the schools included in this study before participating teachers were approached. To provide confidentiality for respondents, they were asked not to write their names or any personal details on the questionnaire. However, those who desired to participate in a follow-up interview were asked to provide their phone numbers. It was well explained to respondents that participation in this study was voluntary and under no circumstances were they coerced into providing information to the researcher.

3.8. Data Processing and Analysis

Prior to statistical analysis, all quantitative data were coded. With the categorical data, the first response item was coded 1 and the other response was coded 2. For instance, 1 for male and 2 for female. Questions that had three or more responses were coded 1 for the first response, 2 for the second response and 3 for the

third response and so on. The Likert scale responses were coded 1 for Strongly Disagree, 2 for Disagree, 3 for Undecided, 4 for Agree, and 5 for Strongly Agree. SPSS windows version 25 was used to analyze the responses from the questionnaire to generate frequencies and percentages, standard deviation and means to paint a descriptive picture of the data obtained.



CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.0. Introduction

This chapter presents the results and findings of the study and the discussion of the results and the interpretation of the findings in relation to the research questions designed to guide the study.

4.1. Results

4.1.1. Sample Details

Total sample size was 60 teachers from five public primary schools in Agona Nsaba. In all, thirty-four female teachers and twenty-six male teachers were involved in the study. The sample details are shown in Table 1.

Table 1: Sample Details

School	Female (%)	Male (%)
A.M.E. Zion	7	4
Catholic	8	4
Presby	6	8
Methodist	9	5
Islamic	4	5
Total = 60 (100%)	34 (56.7)	26 (43.3)

The information in Table 1 shows that of the 60 respondents who took part in the study, 34 of them, corresponding to 56.7% were female while 26 of them, corresponding to 43.3% were males.

4.1.2. Teachers' Background Data

Background data of the respondents including their demographic information and their job details was obtained. The results are shown in Table 2.

Table 2: Teachers' Background Information

Characteristic	No (%)	No (%)	No (%)	No (%)	No (%)	%
Age range	20-25 3 (5)	26-30 16 (26.7)	31-35 18 (30)	36-40 14 (23.3)	40-45 9 (15)	
Present rank	No Rank 2 (3.3)	Assist. Supt. 1 (1.7)	Supt. 10 (16.7)	Snr. Supt. 35 (58.3)	Prin. Supt. 7 (11.7)	Ass. Director 5 (8.3)
Teaching Experience	2yrs or less 3 (5)	3-5yrs 12 (20)	6-8yrs 16 (26.7)	9-12yrs 15 (25)	13-20yrs 10 (16.7)	Above 20yrs 4 (6.7)
Class taught	KG 16 (26.7)	B1/2 13 (21.7)	B3/4 15 (25)	B5/6 16 (26.7)		

From Table 2, the data indicate that 9(15%) of the respondents were within the age range of 40-45, 14(23.3%) were within 36-40, 18(30%) fell within the 31-35 range and 16(26.7%) were within the 26-30 range. The youngest respondents fell in the 20-25 age range and were 3 in number, corresponding to 5%. None of the participants in the study were above the age of 45years.

With regard to the respective Ranks of the respondents, 2(3.3%) indicated they had no Rank while quite a majority of them (35 corresponding to 58.3%) were Senior Superintendents and 10(16.7%) were Superintendents. Seven of the respondents (11.7%) were Principal Superintendents and 5(8.3%) were Assistant Directors. Only one respondent had the Rank of Assistant Superintendent and none of the teachers in the study had the rank of Deputy Director.

In the area of Teaching experience, 3 respondents had been teaching for two years or less, 12 (20%) for 3-5 years, 16(26.7%) for 6-8years and 15 (25%) for 9-12years. Ten of the participants had been teaching for 13-20 years while four of them had been in the service for 21years and above.

Concerning the various classes taught, 16 of the teachers in this study were in the Kindergarten class while 13 of them taught Basic 1 or 2. Again, 15 of the

participants handled Basic 3 or 4 while 16 taught in Basic 5/6. All participants indicated that they were teaching in the Central region at the time of this study.

4.1.3. Teachers Participation in the GES Training and Other Training Programmes on the New Curriculum

Respondents were to indicate whether they had attended the GES-organised training on the new curriculum or any other training programme. The results are shown in Figures 1 and 2.

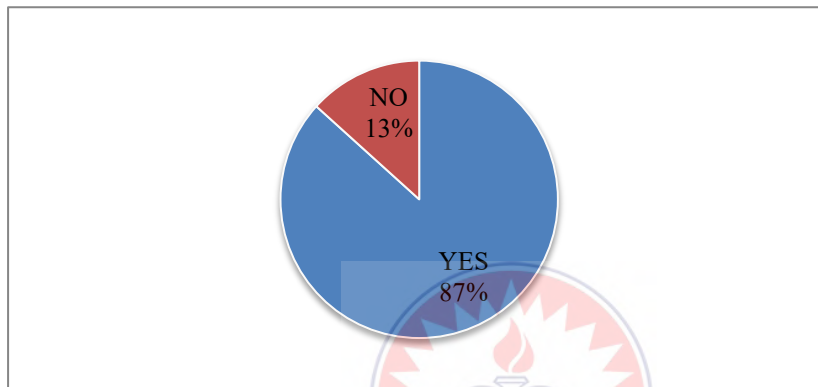


Figure 1 : Teachers' attendance to the GES training on the new curriculum

It can be seen from Figure 1 that a majority (52 corresponding to 87%) of the teachers took part in the training programme organised by the GES on the new curriculum. Only eight teachers, corresponding to 13% did not attend the training.

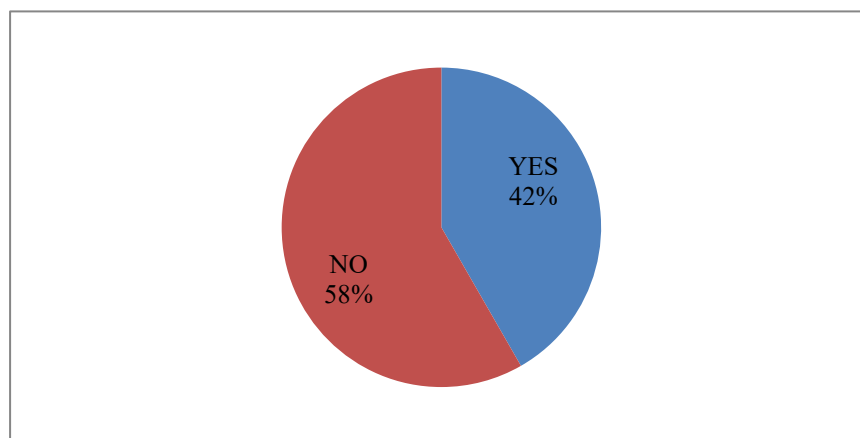


Figure 2: Teachers' participation in any other training on the new curriculum

Information from Figure 2 shows that 35 (58%) of the teachers indicated they had not participated in any other training programmes besides the initial one organised by the GES while 25 (42%) reported that they had.

4.1.4. Results on Research Questions

Research question 1: What is teachers' perception of the quality of the new curriculum?

Data collected in answer to this research question have been presented in Table 3.

There were six items in this section numbered from A1 to A6 as follows:

A1: A change in the curriculum is very much needed at this time

A2: The new curriculum offers better learning opportunities for learners

A3: The new curriculum is very well conceptualized and written

A4: The new curriculum is user friendly and can be implemented with less challenge for the teacher

A5: Learners will be better developed with the new curriculum than they would with the old curriculum

A6: The new curriculum serves the needs of my learners better than the old one

Each item was followed by a five-point Likert scale ranked numerically where **SD** = Strongly Disagree (1), **D** = Disagree (2), **NS** = Not Sure (3), **A** = Agree (4) and **SA** = Strongly Agree (5).

Table 3: Teachers' perceptions about the new Curriculum

Item number	SA (5) (%)	A (4) (%)	NS (3) (%)	D (2) (%)	SD (1) (%)	Total (%)	Mean	Standard Deviation
A1	10 (16.7)	28 (46.7)	13 (21.7)	8 (13.3)	1 (1.7)	60 (100)	3.63	0.97
A2	8 (13.3)	27 (45)	14 (23.3)	8 (13.3)	3 (5)	60 (100)	3.48	1.0
A3	2 (3.3)	24 (40)	23 (38.3)	9 (15)	2 (3.3)	60 (100)	3.25	0.88
A4	2 (3.3)	15 (25)	17 (28.3)	22 (36.7)	4 (6.7)	60 (100)	2.81	0.99
A5	3 (5)	30 (50)	15 (25)	11 (18.3)	1 (1.7)	60 (100)	3.38	0.90
A6	4 (6.7)	25 (41.7)	17 (28.3)	13 (21.7)	1 (1.7)	60 (100)	3.30	0.94

Data from Table 3 indicates that 38(63.4%) respondents strongly agreed or agreed that a change in curriculum is needed at this time with a mean score of 3.6 and a standard deviation of 0.97. Nine (15%) of the respondents disagreed while 13(21.7%) were undecided. With regard to the statement that the new curriculum offers better learning opportunities for the learners, 35(58.3%) of the teachers either agreed or strongly agreed while 14(23.3%) disagreed. Eleven (18.3%) of the participants were undecided. The Mean score here was 3.48 and the standard deviation was 1.

To the statement that the new curriculum is very well conceptualized and written, 26(43.3%) of the respondents strongly agreed or agreed with a mean score of 3.25 and a standard deviation of 0.88 while 11(18.3%) disagreed. 23(38.3%) of the participants were undecided. However, with a mean score of 2.81 and a standard deviation of 0.99, 26(43.4%) of the respondents disagreed that the new curriculum is user friendly and can be implemented with less challenge for the teacher while 17(28.3%) agreed or strongly agreed. Again, 17(28.3%) of the teachers were not sure.

Out of the 60 respondents, 33(55%) strongly agreed or agreed that learners will be better developed with the new curriculum than they would with the old

curriculum. The mean score here was 3.38 and the standard deviation was 0.90. Twelve (20%) of the respondents disagreed while 15(25%) were undecided. In the case of the last statement in this section, 29(48.4%) of the teachers in the study agreed or strongly agreed that the new curriculum serves the needs of their learners better than the old one while 14(23.4%) disagreed and 17(28.3%) were undecided. The mean was 3.30 and the standard deviation was 0.94.

Research question 2: What is teachers' evaluation of the quality of training received about the new curriculum?

To address this question, participants were to respond to items from two sections in the questionnaire, section B and section C.

Section B - Assessing teachers' preparedness for implementation of the new curriculum

This part of the questionnaire sought to ascertain the teachers' level of satisfaction or dissatisfaction about the GES training in general and their preparedness for the implementation of the new curriculum. It consisted of nine items numbered from B1 to B9 as follows:

B1: I have been adequately briefed on the new curriculum

B2: The training I received was enough for me to be able to implement the curriculum

B3: During the training, I was offered opportunity to really understand the new curriculum

B4: The facilitators were able to whip up my enthusiasm for the new curriculum

B5: Professional Learning Community (PLC) in my school is helping me to understand the curriculum better

B6: Besides PLC, my colleagues have helped me to better understand the curriculum

B7: I have obtained copies of the teacher resource pack

B8: I have read all the relevant portions of the teacher resource pack

B9: My circuit supporter (supervisor) has contributed to my understanding of the new curriculum

Again, each item was followed by a five-point Likert scale ranked numerically where **SD** = Strongly Disagree (1), **D** = Disagree (2), **NS** = Not Sure (3), **A** = Agree (4) and **SA** = Strongly Agree (5).

Data collected in answer to these items have been presented in Table 4.

Table 4: Teachers' preparedness for implementation of the new curriculum

Item number	SA (%)	A (%)	NS (%)	D (%)	SD (%)	Total (%)	Mean	Standard Deviation
B1	4 (6.7)	26 (43.3)	17 (28.3)	11 (18.3)	2 (3.3)	60 (100)	3.32	0.97
B2	2 (3.3)	9 (15)	18 (30)	26 (43.3)	5 (8.3)	60 (100)	2.62	0.96
B3	2 (3.3)	22 (36.7)	16 (26.7)	17 (28.3)	3 (5)	60 (100)	3.05	0.99
B4	2 (3.3)	22 (36.7)	16 (26.7)	19 (31.7)	1 (1.7)	60 (100)	3.08	0.94
B5	4 (6.7)	35 (58.3)	15 (25)	4 (6.7)	2 (3.3)	60 (100)	3.58	0.85
B6	5 (8.3)	42 (70)	7 (11.7)	6 (10)	0 (0)	60 (100)	3.77	0.75
B7	12 (20)	34 (56.7)	5 (8.3)	4 (6.7)	5 (8.3)	60 (100)	3.73	1.11
B8	6 (10)	26 (43.3)	15 (25)	8 (13.3)	5 (8.3)	60 (100)	3.33	1.10
B9	2 (3.3)	22 (36.7)	19 (31.7)	13 (21.7)	4 (6.7)	60 (100)	3.08	0.99

The results show that 30 (50%) of the respondents agreed or strongly agreed that they had been adequately briefed on the new curriculum, with a mean of 3.32 and a standard deviation of 0.97. Out of the 60 respondents, 13(21.7%) disagreed and 17(28.3%) were undecided. On the other hand, only 11 (18.3%) of the respondents believed the training they received was enough for them to successfully implement the curriculum. While 18(30%) of the respondents were not sure if the training was

enough, 31(51.7%) either disagreed or strongly disagreed. The mean here was 2.62 and the standard deviation was 0.96.

Twenty-four (40%) of the respondents indicated that the training had offered them opportunity to really understand the new curriculum while 20(33.3%) begged to differ and 16(26.7%) were undecided. The mean was 3.05 and the standard deviation was 0.99. Similar figures were obtained when 24(40%) of the participants agreed that the facilitators at the training had whipped up their enthusiasm for the new curriculum with 20(33.3%) disagreeing and 16(26.7%) being undecided. Here, the mean was 3.08 and the standard deviation was 0.94.

Furthermore, with a mean of 3.58 and a standard deviation of 0.85, 39(65%) of the respondents reported that Professional Learning Community (PLC) in their schools was helping them understand the curriculum better but 6(10%) disagreed and 15(25%) were undecided. Forty-seven (78.3%) of the respondents indicated that besides PLC, their colleagues had helped them to better understand the curriculum. Again, 6 (10%) of the teachers disagreed and 7(11.7%) were not sure. The mean was 3.77 and the standard deviation was 0.75.

The findings also show that 46(76.7%) of the respondents admitted to having obtained copies of the teacher resource pack given at the training while 9(15%) had not. Five (8.3%) of the teachers were not sure if they had received the teacher resource packs. Here, the mean was 3.73 and the standard deviation was 1.11. With regard to the teacher resource packs, 32(53.3%) of the participants reported that they had read all the relevant portions in preparation for implementation while 13(21.7%) had not.

Fifteen of the respondents were not certain if they had read relevant portions of the teacher resource packs. The mean was 3.33 and the standard deviation was

1.10. Lastly, although 24(40%) of the teachers indicated that their circuit supporters (supervisors) had contributed to their understanding of the new curriculum, 17(28.3%) disagreed and 19(31.7%) were undecided.

Section C – Assessing teachers’ knowledge about key concepts in the new curriculum

In order to ascertain how effective the training had been in terms of passing on knowledge about the new curriculum to the teachers, items in Section C of the questionnaire sought to investigate respondents’ level of understanding of certain key concepts in the new curriculum. There were nineteen items as follows:

C1: Key phases of education

C2: Key/envisioned competencies

C3: School level autonomy and flexibility

C4: Cross-cutting issues

C5: Content standards

C6: Performance indicators

C7: Performance standards

C8: Benchmarks

C9: Benchmark test

C10: Assessment as learning

C11: Grading Scheme

C12: Grade descriptors

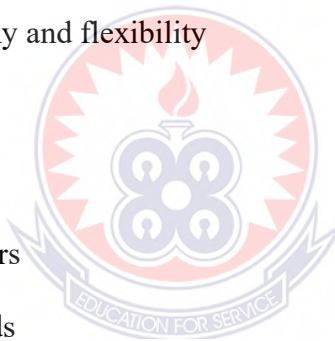
C13: National Standards Assessment test (NSAT)

C14: Physical and Cognitive Characteristics of learners I teach

C15: Subjects and learning areas for the learners I teach

C16: Time allocation for the learning areas

C17: Learning Philosophy



C18: Difference between learner-centred pedagogy and teacher-centred pedagogy

C19: Difference between teacher-centred pedagogy and subject-centred pedagogy

In this case, each item was followed by a five-point Likert scale ranked numerically where **VLE** = Very large extent (5), **LE** = Large extent (4), **M** = moderately (3), **NS** = Not sure (2) and **NAA** = Not at all (1).

Data collected in answer to these items have been presented in Table 5.

Table 5: Teachers' Knowledge about the new curriculum

Item number	VLE (%)	LE (%)	M (%)	NS (%)	NAA (%)	Total (%)	Mean	Standard Deviation
C1	3 (5)	17 (28.3)	36 (60)	3 (5)	0 (0)	59 (98.3)	3.34	0.66
C2	4 (6.7)	17 (28.3)	33 (55)	5 (8.3)	0 (0)	59 (98.3)	3.34	0.73
C3	4 (6.7)	13 (21.7)	27 (45)	15 (25)	0 (0)	59 (98.3)	3.01	0.86
C4	2 (3.3)	20 (33.3)	23 (38.3)	14 (23.3)	0 (0)	59 (98.3)	3.16	0.83
C5	4 (6.7)	24 (40)	27 (45)	3 (5)	1 (1.7)	59 (98.3)	3.46	0.77
C6	4 (6.7)	25 (41.7)	24 (40)	5 (8.3)	1 (1.7)	59 (98.3)	3.44	0.82
C7	4 (6.7)	20 (33.3)	31 (51.7)	3 (5)	1 (1.7)	59 (98.3)	3.39	0.77
C8	1 (1.7)	15 (25)	30 (50)	13 (21.7)	0 (0)	59 (98.3)	3.07	0.74
C9	1 (1.7)	13 (21.7)	27 (45)	17 (28.3)	1 (1.7)	59 (98.3)	2.93	0.81
C10	4 (6.7)	18 (30)	25 (41.7)	12 (20)	0 (0)	59 (98.3)	3.24	0.86
C11	0 (0)	23 (38.3)	28 (46.7)	7 (11.7)	1 (1.7)	59 (98.3)	3.24	0.73
C12	1 (1.7)	23 (38.3)	25 (41.7)	8 (13.3)	2 (3.3)	59 (98.3)	3.22	0.83
C13	2 (3.3)	14 (23.3)	20 (33.3)	16 (26.7)	7 (11.7)	59 (98.3)	2.80	1.05
C14	6 (10)	18 (30)	24 (40)	8 (13.3)	3 (5)	59 (98.3)	3.27	0.99
C15	6 (10)	21 (35)	30 (50)	2 (3.3)	0 (0)	59 (98.3)	3.53	0.73
C16	3 (5)	29 (48.3)	21 (35)	4 (6.7)	2 (3.3)	59 (98.3)	3.46	0.84
C17	2 (3.3)	20 (33.3)	29 (48.3)	8 (13.3)	0 (0%)	59 (98.3)	3.27	0.74
C18	5 (8.3)	31 (51.7)	19 (31.7)	3 (5)	1 (1.7)	59 (98.3)	3.61	0.79
C19	5 (8.3)	27 (45)	22 (36.7)	4 (6.7)	1 (1.7)	59 (98.3)	3.53	0.82

In this section, the total valid entries were 59(98.3%) because one respondent did not fill this part of the questionnaire. The findings show that 20(33.3%) of the respondents indicated they understood the key phases of education to a larger extent while 36(60%) had moderate understanding and 3(5%) were not sure. The mean was 3.34 and the standard deviation was 0.66. Regarding the key/envisioned competencies, 21(35%) of the respondents reported a higher understanding while 33(55%) understood it moderately and 5(8.3%) were unsure about it. The mean was 3.34 and the standard deviation was 0.73.

Again, 17(28) participants had above average knowledge about school level autonomy and flexibility while 27(45%) understood the concept moderately and 15(25%) were not sure about it. The mean was 3.01 and the standard deviation was 0.86. The results also show that with a mean of 3.16 and a standard deviation of 0.83, 22(36.6%) of the respondents indicated they understood cross-cutting issues to a large extent, However, 23(38.3%) understood the concept averagely and 14(23.3%) were not sure about it. When it came to content standards, 28(46.7%) and 27(45%) of the respondents understood it to a large extent and moderately respectively. Three respondents were not sure and one reported not understanding it at all. The mean was 3.46 and the standard deviation was 0.77.

Where knowledge about performance indicators and performance standards were concerned, 29(48.4%) and 24(40%) of the respondents respectively indicated an above average understanding of the concepts while 24(40%) and 31(51.7%) respectively understood moderately. In this case, 5(8.3%) of the participants were not sure about the performance indicators and 1 respondent reported not understanding the concept at all while 3 respondents were not sure about the performance standards

and 1 did not understand it at all. In each case, the means were 3.44 and 3.39 respectively and the standard deviations were 0.82 and 0.77 respectively.

The findings show that 16(26.7%) and 14(23.3%) respondents indicated an above average knowledge of the benchmarks and benchmark tests respectively. With regard to these two aspects of the curriculum, 30(50%) and 27(45%) of the participants respectively reported a moderate understanding while 13(21.7%) and 18(30%) were not sure or had no knowledge about them. In either case, the means were 3.07 and 2.93 while the standard deviations were 0.74 and 0.81 respectively. Concerning knowledge about assessment as learning, 22(36.7%) of the respondents indicated they understood the concept to a large or very large extent while 25(41.7%) respondents reported a moderate understanding. Very few of the respondents (20%) had no knowledge or were not sure about this aspect of the curriculum. The mean was 3.24 and the standard deviation was 0.86.

When asked to indicate their level of understanding about the grading scheme and grade descriptors, 23(38.3%) and 24(40%) of the participants respectively had above average understanding of the concepts while 28(46.7%) and 25(41.7%) had average knowledge about them. Some of the respondents (8 and 10 respectively) were not sure or had no knowledge about the concepts. The means were 3.24 and 3.22 and the standard deviations were 0.73 and 0.83 respectively. With respect to knowledge about the National Standards Assessment test (NSAT), more than half of the respondents (60%) had average and above average understanding of the concept while below 40% were not sure or knew nothing about this aspect of the curriculum. The mean and standard deviations were 2.80 and 1.05 respectively.

Furthermore, the respondents were asked to indicate their level of understanding about the physical and cognitive characteristics of the learners they teach as well as the subjects and learning areas for their learners. In the former case, majority of the respondents (80%) reported a considerable knowledge in this regard while 18.3% indicated a below average knowledge about this aspect of the curriculum. The mean and standard deviation were 3.27 and 0.99 respectively. With respect to the latter case, 95% of the respondents were confident in their knowledge about the subjects and learning areas for their learners while only 2(3.3%) of the respondents were unsure. The mean and standard deviation were 3.53 and 0.73 respectively.

Again, respondents were asked to indicate their level of understanding about the time allocations for the learning areas as well as their level of knowledge about the philosophy of learning. In the first case, 88.3% of the participants reported average and above average understanding while 10% were either unsure or had no knowledge at all about this concept. The mean and standard deviation were 3.46 and 0.84 respectively. In the case of the latter, 85% of the teachers were confident in their knowledge about learning philosophy while 13.3% reported that they were unsure or had no knowledge about it. The mean in this case was 3.27 and the standard deviation was 0.74.

The last two items in this section of the questionnaire investigated teachers' knowledge about the differences between learner-centred pedagogy and teacher-centred pedagogy as well as the difference between teacher-centred pedagogy and subject-centred pedagogy. With regard to the former, 91.7% of the respondents had either average or above average understanding of the differences between learner-centred and teacher-centred pedagogy while 3 were unsure and only one had no

knowledge about it. The mean and standard deviation were 3.61 and 0.79 respectively. Concerning the latter, 90% of the teachers had either average or above average understanding while 4 were unsure and one reported having no knowledge about the differences between teacher-centred pedagogy and subject-centred pedagogy. In this case, the mean and standard deviation were 3.53 and 0.82 respectively.

Research question 3: To what extent do teachers consider themselves competent to handle the new standards-based curriculum?

To determine how ready the teachers in the study were to implement the new curriculum, respondents were to indicate their level of competence in carrying out major aspects of the new curriculum. There were six items in this section numbered D1-D6 as shown below.

D1: Ability to apply the Aims, Values and Core-competencies of the curriculum in my teaching

D2: Implement the right forms of assessment in my teaching

D3: Familiarity with scope and sequence of the curricula for the subject/class I teach

D4: Ability to prepare scheme of learning

D5: Ability to prepare daily learning plans using diversified approaches

D6: Participation in Professional Learning Community (PLC)

Each item was followed by a five-point Likert scale ranked numerically where **VLE** = Very large extent (5), **LE** = Large extent (4), **M** = moderately (3), **NS** = Not sure (2) and **NAA** = Not at all (1).

Data collected in answer to these items have been presented in Table 6.

Table 6: Teachers' competence in handling the new standards-based curriculum

Item number	VLE (%)	LE (%)	M (%)	NS (%)	NAA (%)	Total (%)	Mean	Standard Deviation
D1	5 (8.3)	27 (45)	23 (38.3)	5 (8.3)	0 (0)	60 (100)	3.53	0.77
D2	7 (11.7)	28 (46.7)	20 (33.3)	4 (6.7)	1 (1.7)	60 (100)	3.60	0.85
D3	1 (1.7)	20 (33.3)	28 (46.7)	7 (11.7)	4 (6.7)	60 (100)	3.12	0.89
D4	8 (13.3)	33 (55)	15 (25)	2 (3.3)	2 (3.3)	60 (100)	3.72	0.87
D5	7 (11.7)	35 (58.3)	14 (23.3)	3 (5)	1 (1.7)	60 (100)	3.73	0.80
D6	6 (10)	25 (41.7)	18 (30)	10 (16.7)	1 (1.7)	60 (100)	3.42	0.94

In this section, all 60 respondents provided answers to all the items. With regard to respondents' ability to apply the aims, values and core competencies of the curriculum in their teaching, the findings show that 5(8.3%) of the respondents reported they could do this to a very large extent while 27(45%) indicated they could to a large extent. Twenty-three (38.3%) reported a moderate ability while 5(8.3%) were unsure. The mean was 3.53 and the standard deviation was 0.77. Moreover, 7(11.7%) and 28(46.7%) respondents selected very large extent and large extent respectively when asked to rate their competencies in implementing the right forms of assessment in their teaching while 20(33.3%) and 4(6.7%) respondents selected moderately and not sure respectively. One respondent reported not being competent in this regard at all. The mean was 3.60 and the standard deviation was 0.85.

When asked to indicate how familiar they were with the scope and sequence of the curriculum for their respective classes and subjects, 20(33.3%) teachers selected large extent, 1(1.7%) selected very large extent, 28(46.7%) chose moderately and 7(11.7%) were unsure. Four respondents indicated they were not familiar with these aspects of the curriculum at all. The mean and standard deviation were 3.12 and 0.89 respectively. Majority of the respondents, (63.3%) were very confident with their

ability to prepare their scheme of learning while 15(25%) of them were moderately confident of this ability. Two respondents were unsure and two indicated they lacked this ability entirely. The mean was 3.72 and the standard deviation was 0.87.

Concerning their ability to prepare daily learning plans using diversified approaches, 7(11.7%) respondents selected very large extent, 35(58.3%) selected large extent and 14(23.3%) selected moderately. Three respondents were unsure and one selected not at all. The mean and standard deviation were 3.73 and 0.80 respectively. With regard to the last item in this section, 31(51.7%) of the respondents indicated they participated in Professional Learning Community to a large and very large extent while 18(30%) reported they did so moderately, 10(16.7%) were unsure and one respondent did not do so at all. The mean and standard deviation were 3.42 and 0.94 respectively.

4.2 Discussion of Results

4.2.1. Teachers' background data

The results on the gender of the respondents show that there were more female teachers (56.7%) in this study than male teachers (43.3%). This supports the assertion by several authors that the workforce of teachers, especially at the primary school level is progressively becoming more feminized (Johnston *et al.*, 1999; Lahelma, 2006; Cushman, 2005; Mistry & Sood, 2015). Mistry & Sood (2015) opined that one of the challenges facing the Early Years education sector is how to encourage and recruit more male practitioners to counterbalance the feminization of primary schooling.

In their study, the authors found that although the male respondents indicated they enjoyed working in the early years, the perceived contextual barriers such as existing stereotypes, attitudes, values, beliefs were such that certain actions and strong

mentoring were required to help them overcome such challenges (Mistry & Sood, 2015). As seen in this study, the number of male teachers in Ghanaian primary schools is relatively lower than the number of female teachers and the resultant gender imbalance should become the focus of increased discussion and debate to find the reasons as well as solutions to this challenge.

When the participants ticked the age range appropriate to them, the results showed that the age range 31 – 35 had the highest number of participants (18 out of 60). Although none of the teachers in the study were above the age of 45 years, majority of them (41 out of 60) were between 31 – 45 years which corresponds to 68%. These findings imply that Ghanaian primary schools have a relatively young teaching force which obviously has advantages and disadvantages. In essence, younger teachers are more likely to have more recent, up-to-date training, while older teachers have more teaching experience.

These results are similar to reports from the U.S. Department of Education (2011-2012) which indicated that the vast majority (54%) of public school teachers within the period of study were within 30-49 with the mean age being 42.4. Adams (2013) asserted that "The relatively young teaching force in the UK stands in stark contrast to the situation in many European countries where inflexible employment conditions coupled with declining youth populations have led to ageing teacher populations." The evidence buttressing his assertion came from a study that showed that about 60% of UK primary school teachers are 40 years or younger, and 31% are 30 years or younger whereas in Italy, 85% of primary teachers are over 40, in Sweden 72% and in Germany 71% (Adams, 2013).

With regard to the respective Ranks of the respondents, 35 out of the 60 participants (58.3%) were Senior Superintendents and 16.7% were Superintendents.

Those at the rank of Principal Superintendent were 11.7% and 8.3% were Assistant Directors while none of the teachers in the study had the rank of Deputy Director. In the Ghana Education Service (GES) ranks usually depend on the educational level of the teacher and the number of years in active service, both of which need to be improved for the teacher to be promoted or upgraded to the next rank (GES, 2020). Generally, for a teacher to be a Superintendent, he or she must have served as a teacher for four or more years continuously, must be licensed and registered under the teacher unions and must also have a diploma or degree in any field of related study.

At Senior Superintendent II, a teacher must have obtained a bachelor's degree in education or in any related field of study, must have served three years and above continuously in the Ghana education service and must also have served in the rank of Superintendent for close to two years and more. After three or more years, such a teacher may be promoted to Senior Superintendent I. In either case, teachers with more than 5 years' experience can also apply for an upgrade after passing through an interview conducted by the Public Service Commission in consultation with the Ghana Education Service Council.

A teacher must be a Degree holder in any related field of study and must have served as a Senior Superintendent I for more than three years to be promoted to the rank of Principal Superintendent while for Assistant Director II a person must have served for three or more years as a Principal Superintendent and for Assistant Director I, an applicant must have three or more years' experience as an Assistant Director II before being promoted (GES, 2020).

In the area of teaching experience, 5% of the respondents had been teaching for two years or less, 20% for 3-5 years, 26.7% for 6-8 years and 25% for 9-12 years. 16.7% of the participants had been teaching for 13-20 years while 6.7% had been in

the service for 21 years and above. In general terms, the majority of the participants in this study (75%) had been teaching for more than 5 years while the rest had below 5 years teaching experience. While several attempts have been made by researchers to establish a relationship between teachers' years of experience and teacher effectiveness, many have found the endeavour to be quite problematic (Harris & Sass, 2009; Rice, 2010; Winters, 2011; Irvine, 2019).

Alsubaie (2016) indicated that in all the ways that matter most, an effective teacher is one who accurately interprets and implements the curriculum. Many studies indicate teachers' effectiveness improves in the first few years (typically the first 3 years), and while it is tempting to assess effective teaching through easily observable attributes such as years of experience or academic degrees, Irvine (2019) and Rice (2010) stress that these are "at best weak predictors of a teacher's contribution to student achievement" and do little to indicate the quality of a specific teacher.

Kini & Podolsky (2016), based on their review of 30 studies published within the last 15 years, indicated that although research does not indicate that the passage of time will make all teachers better or make incompetent teachers effective, it does indicate that, for most teachers, effectiveness increases with experience. However, the authors are emphatic that for the benefits of teaching experience to be best realized, teachers ought to be carefully selected and well prepared both at the point of entry into the teaching workforce, as well as through regular intensive training and rigorous evaluation (Kini & Podolsky, 2016).

This brings us to the issue of teachers' participation in the GES training or any other training programme on the new curriculum. In the former case, 87% of the respondents in this study indicated they had participated in the GES training on the new curriculum while 13% had been absent. Moreover, 42% of the teachers in the

study reported they had taken part in other training programs on the new curriculum while majority (58%) of the participants reported they had not attended any other training.

As commented by Kpedator (2019) and Gyamfi (2019), all over the country, teachers' attendance to the GES training on the new curriculum had been on the high side with only a few teachers being indisposed at the time of the training. It is obvious, however, from the percentage of teachers reporting having participated in any other training that besides the one organised by the GES, no other endeavour to educate teachers on the new curriculum had succeeded in recording comparable numbers in attendance.

4.2.2. Teachers' perceptions about the new curriculum

The first variable in assessing teachers' perception, knowledge and readiness for implementation of the new standards-based curriculum investigated in this study was the perceptions of the teachers. Research Question 1: "What is teachers' perception of the quality of the new curriculum?" was designed to help ascertain the opinions of the teachers concerning the new curriculum in general. The results from the data collected on this research question were elicited from respondents' answers to six close-ended questions. To the statement that "a change in the curriculum is very much needed at this time", 63.4% of the respondents agreed while 15% disagreed and 21.7% were undecided.

The fact that majority of the teachers in this study were open to a curriculum change is not surprising considering the backlash against the previous curriculum which many educators had faulted for being too overloaded and too focused on preparing learners just to pass examinations instead of encouraging students to actually acquire and use knowledge (Sakyi, 2012; Kpedator, 2019). Regardless of

this, it is also expected that some teachers would be indifferent or averse to this change. Besides individual personal feelings, beliefs and uncertainties about change in general as described by Anderson (2002), it is known that some teachers believe a change in curriculum portends more work, extra efforts in acquiring new skills and managing new resources without accompanying increment in remunerations and this makes them reluctant to embrace curriculum innovation (Arthur, 1999, Germeten 2011, Adu and Ngibe, 2014).

With regard to the statement that the new curriculum offers better learning opportunities for the learners, 35(58.3%) of the teachers agreed while 14(23.3%) disagreed. Eleven (18.3%) of the participants were undecided. That majority of the respondents agreed to this statement may be due to the emphasis the new curriculum places on building character and nurturing values in scientifically-literate twenty-first century individuals which leaves little doubt that the new standards-based curriculum is purely learner-centred (National Pre-Tertiary Education Curriculum Framework, 2018). Nevertheless, quite a few of the participants disagreed outright which could suggest that such teachers believed efforts should be made to improve the learning outcomes for learners.

Respondents also expressed their opinions about whether the new curriculum was very well conceptualized and written. The results show that 43.3% of the respondents agreed while 18.3% disagreed. However, 23 of the teachers (38.3%) were undecided. Apparently, more than half of the teachers were not convinced or were not sure about the design and structure of the new curriculum. Although it is expected that there would be differences in opinion about the design of any new curriculum, as identified by Anderson (2002), the new standards-based curriculum structure has generally received positive reviews by several authors with some believing it to be

revolutionary and innovative (Kpedator, 2019; Gyamfi, 2019); a fact that 43.3% of the respondents in this study appear to agree with.

The next item investigated how user-friendly the new curriculum was and whether it could be implemented with less challenge for the teacher. Interestingly, majority of the respondents (43.4%) disagreed while an equal number of 17 (28.3%) either agreed or were not sure. These findings are consistent with what Lumadi (2014) reported that most of the teachers in that study felt that there was too much cumbersome jargon in the new curriculum which had not been well explained to them. It stands to reason then, that if teachers expect implementation of the new curriculum to be challenging then more work needs to be done to assist them adequately tackle said challenges.

Out of the 60 respondents, 33(55%) agreed that learners will be better developed with the new curriculum than they would with the old curriculum. Twelve (20%) of the respondents disagreed while 15(25%) were undecided. As Ittner et al. (2019) intimated, teachers being primarily concerned about their pupils learning, would more readily embrace and adopt curriculum change if the reforms had the learners' interests at heart. In the case of the last statement in this section, 29(48.4%) of the teachers in the study agreed that the new curriculum serves the needs of their learners better than the old one while 14(23.4%) disagreed and 17(28.3%) were undecided.

These findings indicate that while a considerable number of teachers in this study believed the new curriculum was an improvement on the old one, especially where the needs of learners were concerned, 51.7% of the respondents disagreed or were in doubt. This observation corroborates what Adu and Ngibe (2014) disclosed that quite a lot of teachers in their study were skeptical about a new curriculum

because they did not believe the changes would improve the overall teaching and learning they were doing with the old curriculum.

4.2.3. Teachers' evaluation of the Quality of training received about the new curriculum

Research question 2: „What is teachers' evaluation of the quality of training received about the new curriculum?“ investigated whether the training on the new curriculum had been effective or not. The results show that 50% of the respondents believed they had been adequately briefed on the new curriculum while 21.7% disagreed and 28.3% were undecided. According to Meier (2018), the primary duty of teachers is to help learners develop an engaged relationship with the content of the curriculum. This begs the question, how can teachers explicitly carry out this task if they themselves are not adequately briefed on the contents of the new curriculum? The fact that 50% of the teachers in this study felt the explanation of the new curriculum, as given during the GES training, was inadequate suggests that perhaps they require more training.

Interestingly, only 11 (18.3%) of the respondents believed the training they received was enough for them to successfully implement the curriculum. While 18(30%) of the respondents were not sure if the training was enough, 51.7% disagreed outright. These findings are similar to the results obtained by Lumadi (2014) where 53% of the teachers in the study opined that they had not received enough in-service training about the new curriculum because the six days workshop training they had participated in had not been to their satisfaction. The key consideration here is that, most of the respondents felt the GES training had been inadequate and that for them to implement the curriculum successfully, more training was required.

It goes without saying that a teacher's understanding of and enthusiasm for a new curriculum is paramount to its successful implementation, as stressed by several authors (Bantwini, 2010; Wiles and Bondi, 2014; Alsubaie, 2017). In this study, 40% of the respondents indicated that the training had offered them opportunity to really understand the new curriculum while 33.3% begged to differ and 26.7% were undecided. Similarly, 40% of the participants agreed that the facilitators at the training had whipped up their enthusiasm for the new curriculum while 33.3% disagreed and 26.7% were undecided. In essence, 60% of the respondents doubted or knew without doubt that the training had not provided them with the needed understanding and enthusiasm for the new curriculum. These findings, again, suggest that more training on the new curriculum is required.

A professional learning community, or PLC, is a group of educators that meets regularly, shares expertise, and works collaboratively to improve teaching skills and the academic performance of students (Dufour, 2004). Edwards (2012) and Pyhältö et al. (2015) emphasized the role that PLC plays in the context of curriculum reforms by asserting that the establishment of a PLC influences teachers' perceptions of curriculum reforms and makes teachers more receptive to curriculum changes by making them feel more empowered and capable of implementing the reforms. In this study, majority of the respondents (65%) reported that Professional Learning Community (PLC) in their schools was helping them understand the curriculum better. Although 10% of the teachers disagreed and 25% were not sure, the general observation here is that PLC has played a part in helping the teachers to better understand the intricacies of the new curriculum. Moreover, 78.3% of the respondents indicated that besides PLC, their colleagues had helped them to better understand the curriculum.

The findings also show that 76.7% of the respondents admitted to having obtained copies of the teacher resource pack given at the training while 15% had not and 8.3% were not sure if they had. In addition, 53.3% of the participants reported that they had read all the relevant portions of the teacher resource pack in preparation for implementation while 21.7% had not and Fifteen of the respondents were not certain if they had. According to the National Council for Curriculum and Assessment (NaCCA), the teacher resource pack was developed as a complementary document to the Training Guide for in-service teachers on the implementation of the new primary school curriculum and is intended to serve as a source of reference to teachers during the preparation of their Scheme of Learning and lesson plans as well as teaching and assessment of learners. It is therefore encouraging that majority of the teachers in this study had obtained and read the teacher resource pack although it is imperative that the few who had not be encouraged to do so.

In Ghana, circuit supervisors are expected to supervise the activities of teachers in schools at least thrice a term, and one of their primary roles is to explain educational policies and provide education on teachers' duties (Opoku-Asare, 2007). In this study, 40% of the teachers indicated that their circuit supporters (supervisors) had contributed to their understanding of the new curriculum while 28.3% disagreed and 31.7% were not sure. The finding here is that to some extent, circuit supervisors have been visiting schools and carrying out their roles especially in helping teachers understand the new curriculum, however, some of the teachers were yet to have such an experience. This could be attributed to the large number of schools each circuit officer has to supervise which negatively impacts their effectiveness, as disclosed by Salifu (2018).

4.2.4. Assessing teachers' knowledge about the new curriculum

To assess teachers' knowledge about the new standards-based curriculum, respondents were asked to indicate their level of understanding of certain key concepts in the new curriculum.

Erden (2010) argued that if teachers do not comprehend what the curriculum theoretical framework is all about, they would find it challenging to implement the curriculum to meet the designers' intentions successfully. Tetteh and Khumi-Agbasa (2019) also stress that, teachers' successful participation in curriculum development hinges on the level of knowledge and competence they bring to the table especially at the implementation level.

The results show that 33.3% of the respondents indicated they understood the key phases of education to a large extent while 60% had moderate understanding and 5% were not sure. Similarly, 35% of the respondents reported a higher understanding of the key/envisioned competencies while 55% understood it moderately and 8.3% were unsure about it. The finding here is that the majority of the respondents had between average and above average knowledge of the key phases and key competencies as enshrined in the new curriculum.

Other notable concepts which respondents reported proficiency in were School level autonomy and flexibility and Cross-cutting issues, where 73% and 74.9% of the teachers had above average knowledge respectively. In either case, 25% and 23.3 % of the respondents respectively indicated they were not sure. When it came to content standards, 46.7% of the respondents understood to a large extent while 45% of the respondents understood moderately. Three respondents were not sure and one reported not understanding it at all.

Knowledge about performance indicators and performance standards were also areas where respondents had mastery over. In the case of the former, 88.4% of the teachers had between moderate to above average understanding while in the latter case, 91.7% of the respondents had moderate to high grasp of the concept. However, one respondent in each case reported not understanding the concepts at all. Similarly, majority of the respondents, (76.7% and 68.3% respectively) had moderate to high comprehension of benchmarks and benchmarks test, with the rest indicating they were unsure. Concerning knowledge about assessment as learning, 78.4% of the respondents indicated they understood the concept either moderately or to a large extent. Very few of the respondents (20%) had no knowledge or were not sure about this aspect of the curriculum.

Concerning the grading scheme and grade descriptors, 38.3% and 40% of the participants respectively had above average knowledge while 46.7% and 41.7% had moderate knowledge. Some of the respondents (below 17%) were not sure or had no knowledge about the concepts. With respect to knowledge about the National Standards Assessment test (NSAT), more than half of the respondents (60%) had average and above average understanding while below 40% were not sure or knew nothing about this aspect of the curriculum.

Furthermore, the respondents were asked to indicate their level of understanding about the physical and cognitive characteristics of the learners they teach as well as the subjects and learning areas for their learners. In the former case, majority of the respondents (80%) reported a considerable knowledge in this regard while 18.3% indicated a below average knowledge. With respect to the latter case, 95% of the respondents were confident in their knowledge while only two of the respondents were unsure. Moreover, 88.3% of the respondents reported average or

above average comprehension of the time allocations for the various learning areas while 85% had moderate or high level of knowledge about the philosophy of learning.

Interestingly, teachers' knowledge about the differences between learner-centred pedagogy and teacher-centred pedagogy as well as the difference between teacher-centred pedagogy and subject-centred pedagogy was equally admirable. With regard to the former, 91.7% of the respondents had either average or above average grasp while 3 were unsure and only one had no knowledge about it. Concerning the latter, 90% of the teachers had either average or above average understanding while 4 were unsure and one reported having no knowledge.

Undoubtedly, the findings indicate that teachers in this study had the required knowledge about all the key concepts of the new curriculum. That notwithstanding, quite a few of the respondents, per the results, need more education and more training on the curriculum. These results contradict what Tetteh and Khumi-Agbasa (2019) found in their study on "Basic School Teachers' Knowledge in Fundamental Curriculum Concepts and Curriculum Development Process in Ghana" where the authors relayed that basic school teachers in Ghana did not express deeper understanding of curriculum concepts and terminologies required to play a substantial role in implementation of the curriculum.

4.2.5. Teachers' competencies in handling major aspects of the new curriculum

Research question 3: „To what extent do teachers consider themselves competent to handle the new standards-based curriculum?“ sought to determine how ready the teachers in the study were to implement the new curriculum. To be able to implement the curriculum, teachers are required to have pedagogic competence, personality competence, social competence and professional competence as described by Maba (2017). Hasan and Alçin (2019) further opined that the degree of success of any

educational endeavour is closely associated with the skills and competencies of the teachers.

With regard to respondents' ability to apply the aims, values and core competencies of the curriculum in their teaching, the findings show that 53.3% of the respondents reported they could do this to a large extent while 38.3% reported a moderate ability and 5 were unsure. The finding here is that quite a majority of the teachers felt confident in carrying out this aspect of the curriculum. Teachers' ability in conducting authentic assessment is certainly a key tool in evaluating and monitoring students' learning progress (Hasan and Alçin, 2019). In this study, 58.4% of the participants indicated they had high competence in implementing the right forms of assessment in their teaching, 33.3% reported moderate ability in this regard and the rest were unsure or doubted they could carry out this task.

When asked to indicate how familiar they were with the scope and sequence of the curriculum for their respective classes and subjects, 35% of the respondents were confident they had the requisite familiarity and scope while 46.7% chose moderately and less than 19% doubted their capability in this regard. It is quite worrying that close to 50% of the respondents admitted to having an average competence in their familiarity with the scope of the curriculum for their respective classes and subjects. Beyond the shadow of a doubt, teachers need to be well versed in all aspects of curricular issues, particularly those pertaining to the actual subjects and levels they teach in order to teach well (Tetteh and Khumi-Agbasa, 2019)

According to Lumadi (2013) and Sri (2016), implementing a curriculum in a real classroom setting requires the teacher to have a good lesson plan and scheme of learning which will make it easier for the teacher to help the students to reach targeted learning objectives. In this study, majority of the respondents, (63.3%) were very

confident with their ability to prepare their scheme of learning while 25% of them were moderately confident of this ability. Two respondents were unsure and two indicated they lacked this ability entirely. Concerning their ability to prepare daily learning plans using diversified approaches, 70% of the teachers indicated they could perform this role to a large extent while 23.3% believed they could moderately. Three respondents were unsure and one selected not at all.

Lastly, 51.7% of the respondents indicated they participated in Professional Learning Community to a large extent while 30% reported they did so moderately, 10 were unsure and one respondent did not do so at all. The finding here is that more than half of the teachers participate in PLC and this is commendable. Nonetheless, considering the predominant role PLC plays in empowering teachers and providing them with more information with which they can improve their teaching, it is imperative that many more teachers are encouraged to take part (Edwards, 2012 and Pyhältö et al., 2015)

Several studies have highlighted the key competencies which teachers most often fall short of which are mainly in the form of lesson planning, implementation of the lesson plan and the forms of assessment (Shilling, 2013; Mantra, 2017; Hasan and Alçin, 2019). In fact, Maba and Mantra (2017) in their study, found that primary school teachers had insufficient competence in implementing the curriculum especially in designing lesson plan, lesson plan implementation and assessment practices while Hasan and Alçin (2019) reported that teachers in their study were poor at preparing course plans. In addition, most teachers were found to have insufficient competence in determining the appropriate teaching methods to be used in teaching as suggested by the curriculum (Hasan and Alçin, 2019).

The findings in this study are at odds with the conclusions drawn by these authors, however, as the teachers appeared to have more than average competency in most aspects of the curriculum. With the exception of familiarity with scope and sequence of the curriculum for the subjects/class they teach, where close to half of the respondents indicated a moderate competence, quite the majority of the teachers reported being able to perform all other requirements spelled out in the curriculum to a large extent. As a matter of fact, ability to prepare daily lesson plans and scheme of learning and implementing the right forms of assessment were the three competencies the respondents felt most confident in, unlike what Shilling (2013), Maba and Mantra (2017), Hasan and Alçin (2019) observed in their respective studies.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of the study

The purpose of this research was to assess teachers' perception, knowledge and readiness for implementation of the new standards-based curriculum in Ghana. This became necessary because since the new Standards-based Curriculum was introduced in Ghanaian basic schools in September 2019, no empirical study has examined teachers' knowledge and perceptions about the new curriculum and little is known about teachers' readiness to implement and adopt the new curriculum for use.

Accordingly, the following research questions were formulated to guide the study:

1. What is teachers' perception of the quality of the new curriculum
2. What is teachers' evaluation of the quality of training received about the new curriculum
3. To what extent do teachers consider themselves competent to handle the new standards-based curriculum

A non-experimental descriptive survey design was used in this study as described by Apeanti and Asiedu-Addo (2012). The study was carried out in Agona Nsaba Township in the Central region of Ghana. A non-probability purposive sampling method was used to obtain a homogenous sample of 60 primary school teachers from the five public primary schools in Agona Nsaba. A quantitative data collection method using Self-complete structured questionnaires was used to elicit information about the views of teachers concerning the new standards-based curriculum. Descriptive statistics such as frequencies and percentages, standard deviation and means were used to analyze the data.

The following are the key findings of the study based on the research questions.

1. The teachers believed a change in curriculum was very much needed and that the new curriculum offered better learning opportunities for the learners.
2. Furthermore, the teachers were convinced the new curriculum was an improvement on the old one, especially where the needs of learners was concerned and that learners would be better developed with the new curriculum.
3. Moreover, while many teachers perceived the new curriculum to be well conceptualised and written, a slightly greater number disagreed or were in doubt.
4. Generally, the teachers felt the new curriculum was not as user friendly as expected and many foresaw that its implementation would be challenging.
5. The teachers indicated that the training received was not enough for them to successfully implement the curriculum.
6. The teachers had obtained and read their copies of the teacher resource pack and PLC and colleague teachers had also contributed in helping them to better understand the intricacies of the new curriculum.
7. Circuit supervisors have been visiting schools and carrying out their role in helping teachers understand the new curriculum, however, some of the teachers were yet to have such an experience.
8. The teachers fairly understood all the listed aspects of the curriculum. The concept most understood by the teachers was on the subjects and learning areas for their learners while the least understood concept was that of the National Standards Assessment test.

9. In all, the teachers had the required knowledge about all the key concepts of the new curriculum. That notwithstanding, quite a few of them needed more education and more training on the curriculum.
10. The teachers believed they could competently apply the aims and values of the curriculum in their teaching, implement the right forms of assessment, prepare scheme of learning and daily lesson plans and participate in Professional Learning Community.
11. Teachers' familiarity with the scope and sequence of the curriculum for their classes and subjects was average.

5.2. Conclusion

Teachers in this study had a positive disposition towards the new Standards-based curriculum which was introduced in 2019. From all indications, they had welcomed the new curriculum and perceived that it would serve the needs of their learners better than the old one. Even so, it was apparent that the teachers were a bit apprehensive of how the implementation of the curriculum would go because they anticipated some challenges that could potentially crop up. Mainly, the teachers hinted that the training they had received was not enough for them to implement the curriculum with ease.

Furthermore, the teachers expressed a deeper understanding of and appeared to have a high level of knowledge about all the key concepts of the new curriculum. In addition, the teachers communicated that they could carry out all their expected roles as stipulated in the curriculum to a large extent, with the exception of familiarity with scope and sequence of the curriculum for the subjects/class they teach, where close to half of the respondents indicated a moderate competence. Overall, it can be concluded that primary school teachers have embraced the new curriculum and

possess the requisite knowledge and readiness to implement it in their classrooms competently.

5.3. Recommendations

A crucial discovery made in this study is the finding that the teachers generally felt the training they received was inadequate and that for them to implement the curriculum successfully, more training was required. Another salient observation was that several of the teachers indicated they were yet to experience the impact of their circuit supervisors in their journey to understanding the new curriculum. Again, it is apparent from this study that the assumption that curriculum development is a process that translates directly into classroom reality is wrong. Teachers ultimately decide the fate of any curriculum reform and therefore their attitudes, feelings and perceptions play an important role in the success or failure of any curriculum change.

Based on these outcomes, the following recommendations are made:

1. The Ministry of Education in conjunction with the GES should organise continuous in-service training for teachers on the new curriculum regularly to improve on teachers' capacity to contribute positively to the curriculum development process.
2. Policy-makers should endeavour to ascertain the perceptions of teachers and their opinions about changes in the educational structure before such innovations are launched. To wit, any future curriculum reform should seek to first solicit the views of the teachers, who are the implementers of the curriculum, by organizing more intensive and interactive training workshops that would not leave more questions than answers in the minds of the teachers

3. The Ghana Education Service should make efforts to provide more circuit supervisors so that every school will be well supervised, further education provided and rigorous monitoring done to effectively ensure that the right thing is being done in the classroom, curriculum-wise.
4. All recommended textbooks and other relevant learning materials needed by teachers and schools to facilitate effective adoption and implementation of the new curriculum should be provided ahead of time to enable teachers prepare adequately before the academic year begins.
5. As far as sharing of finite resources needed to implement the new curriculum is concerned, it cannot be disputed that some schools require more support than others. Therefore priority should be given to those in greater need, particularly schools with infrastructural needs and those facing peculiar challenges that require particular support such as schools with new head-teachers, fewer teachers or small rural schools coping with geographical isolation.

5.4. Suggestions for Further Research

It should not be assumed that just because teachers have a positive disposition towards the new curriculum and appear to be ready to implement it, that it is being implemented as planned in various classrooms. Future related studies could be designed to investigate teachers' actual behaviour in the classroom in relation to application of the aims, values and core competencies of the new curriculum in their teaching so that inconsistencies between teachers' perceptions of the curriculum and their actual teaching practices will be addressed appropriately.

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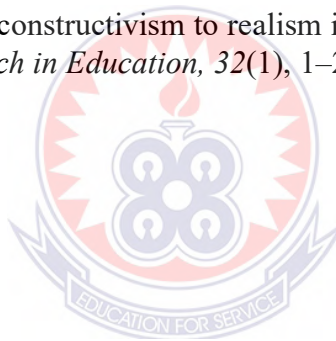
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APPENDIX

UNIVERSITY OF EDUCATION, WINNEBA

FACULTY OF EDUCATIONAL STUDIES

RESEARCH STUDY QUESTIONNAIRE

Dear colleague teacher,

As part of my postgraduate studies at University of Education, Winneba, I am conducting a research study and request that you participate. I am researching teachers' perceptions, knowledge and readiness for the implementation of the new standard based curriculum. You have been selected because you teach with the new standard based curriculum. Your participation involves answering this questionnaire which will require approximately 15 minutes of your time. Your honest response to all the questions is very important to this research. I do not expect any negative side-effect to participating in this study. To protect you, do not write your name or any personal details that can identify you on this questionnaire. Moreover, the responses you provide here will be treated with the strictest confidentiality. Your participation is voluntary and you may decide to opt out at any time.

If you have any questions or concerns about this project, you may reach my supervisor who is the principal investigator at adesuafo@gmail.com, 055-597-1000.

Do you consent to voluntarily participating in this study? Yes [] No []

Part of the study may involve obtaining in-depth information through oral & written interviews. In the event that you are selected for a follow-up interview/ WhatsApp chat, would you be willing to participate?

Yes [] Please provide your phone number _____

No []

	Background Data		
X1. Gender:	Male []	Female []	
X2. Age range:	20 – 25 []	26 – 30 []	31 – 35 []
	36 – 40 []	40 – 45 []	46 – 50 []
	50 + []		
X3. Present Rank:	No Rank []	Assist Sup []	Sup []
	Senior Sup []	Principal Sup []	Ass. Director []

Deputy Director [] Other (please specify)

..... X4. How long have you been teaching?

2 years or less [] 3-5years [] 6 – 8years [] 9-12 years []
13- 20years [] 21 years & up []

X5. Which class do you teach?

KG [] B1/2 [] B3/4 [] B5/6 []

X6. Region where you currently teach.

Bono [] ER [] VR [] GR [] WR []
NR [] UE [] UW [] AS [] CR [] BE [] AR [] SR []
OR [] WN [] NE []

X7. Did you attend the GES organized training for the new curriculum?

Yes [] No []

X8. Have you participated in any training on the new curriculum besides the initial training organized by the GES?

Yes [] No []

Perceptions about the new Curriculum

For each of the following statements, indicate your level of (dis)agreement by choosing from the options: *Strongly Agree (SA)* *Agree (A)* *Not Sure (NS)* *Disagree (D)* *Strongly Disagree (SD)*, & checking

(√) in the right box

	Statements	SA (5)	A (4)	NS (3)	D (2)	SD (1)
A1	A change in the curriculum is very much needed at this time					
A2	The new curriculum offers better learning opportunities for learners					
A3	The new curriculum is very well conceptualized and written					
A4	The new curriculum is user friendly and can be implemented with less challenges for the teacher					
A5	Learners will be better developed with the new curriculum than they would with the old curriculum					
A6	The new curriculum serves the needs of my learners better than the old one					

Preparation for implementation

For each of the following statements, indicate your level of (dis)agreement by choosing from the options: *Strongly Agree (SA)* *Agree (A)* *Not Sure (NS)* *Disagree (D)* *Strongly Disagree (SD)* & checking

(√) in the right box

	Statements	SA (5)	A (4)	NS (3)	D (2)	SD (1)
B1	I have been adequately briefed on the new curriculum					
B2	The training I received was enough for me to be able to implement the curriculum					
B3	During the training, I was offered opportunity to really understand the new curriculum					
B4	The facilitators were able to whip up my enthusiasm for the new curriculum					
B5	Professional Learning Community (PLC) in my school is					

	helping me understand the curriculum better					
B6	Besides PLC, my colleagues have helped me to better understand the curriculum					
B7	I have obtained copies(s) of the teacher resource pack					
B8	I have read all the relevant portions of the teacher resource pack					
B9	My circuit supporter (supervisor) has contributed to my understanding of the new curriculum					

Knowledge

For each of the following statements, indicate your level of understanding of key concepts in the new curriculum by choosing from the options: *Not Sure (NS)* *Not at all (NA)* *Moderately (M)* *To a Large Extent (LE)* *To a very large extent (VLE)*

	In your opinion, how well would you rate your understanding of these aspects of the curriculum	VLE 5	LE 4	M 3	NS 2	NAA 1
C1	Key phases of education					
C2	Key/envisioned competencies					
C3	School level autonomy and flexibility					
C4	Cross-cutting issues					
C5	Content standards					
C6	Performance indicators					
C7	Performance standards					
C8	Benchmarks					
C9	Benchmark test					
C10	Assessment as learning					
C11	Grading scheme					
C12	Grade descriptors					
C13	National Standards Assessment test (NSAT)					
C14	Physical and Cognitive Characteristics of learners I teach					
C15	Subjects and Learning areas for the learners I teach					

C16	Time allocation for the learning areas					
C17	Learning Philosophy					
C18	Difference between learner centred pedagogy and teacher centred pedagogy					
C19	Difference between teacher centred pedagogy and subject centred pedagogy					

Competencies

For each of the following statements, indicate your level of readiness to implementing the new curriculum by choosing from the options: *Not Sure (NS)* *Not at all (NA)* *Moderately (M)* *To a Large Extent (LE)* *To a very large extent (VLE)*

	In your opinion, how well would you rate your competencies in these aspects of the curriculum?	VLE	LE	M	NS	NAA
		5	4	3	2	1
D1	Ability to apply the Aims, Values and Core-competencies of the curriculum in my teaching					
D2	Implement the right forms of assessment in my teaching					
D3	Familiarity with scope and sequence of the curricula for the subject/class I teach					
D4	Ability to prepare scheme of learning					
D5	Ability to prepare daily learning plans using diversified approaches					
D6	Participation in Professional Learning Community (PLC)					

THANK YOU FOR YOUR TIME