UNIVERSITY OF EDUCATION, WINNEBA

THE USE OF PHONICS APPROACH IN TEACHING READING IN EARLY CHILDHOOD CENTERS IN THE BOLGATANGA MUNICIPALITY

FRANCISCA ATAMAKIRA AWANZIRIGO

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FRANCISCA ATAMAKIRA AWANZIRIGO
220017605

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DECLARATION

Student's Declaration

I, Francisca Atamakira Awanzirigo**,** 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 the work were supervised in accordance with the guidelines for supervision of thesis as laid down by the University of Education, Winneba.

Name of Supervisor: Prof. Michael Subbey

Signature: ……

Date: ……...……

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DEDICATION

I dedicate this work to my late father Mr. Joseph Awanzirigo Adongo.

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ABSTRACT

This study examined the use of phonics in teaching reading in early childhood centers in the Bolgatanga Municipality. It drew on two theoretical perspectives: the bottom-up and top-down theories of reading, and the sociocultural theory of learning, particularly the concepts of the zone of proximal development (ZPD), scaffolding, and mediation. The qualitative research approach and exploratory case study design were employed. Fourteen (14) teachers from five early childhood centers were selected as respondents through critical case (purposive) sampling technique. Data were collected through a focused group discussion guide and observation checklist, and analyzed using thematic and cross-case analytical procedures. The findings indicated that the teachers at the selected early childhood centers had gaps in their knowledge of phonics, adapted the use of multiple phonics methods in teaching reading, faced diverse challenges in using the phonics approach in teaching reading, and focused on adaptation, collaboration and professional development as strategies to manage the challenges they encountered. In light of the findings, it was recommended that, continual workshops and training sessions should be organized to update teachers on the evolving methodologies in phonics teaching; teachers in early childhood centers should emphasize diverse teaching strategies that integrate visual, auditory, and kinesthetic methods when combining phonics components; educational institutions and leadership should establish mentorship programmes where experienced teachers guide newcomers or colleagues facing challenges; and early childhood centers should begin phonics education at an early stage, possibly even before Kindergarten, to familiarize children with the fundamental concepts.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Early childhood education (ECE) has a significant impact on the development of children as ECE provides the basic skills, attitudes, and competencies children need for personal development and lays the foundation for basic, secondary, and higher education for human capital required for national development (Bar-On, 2004). ECE refers to any organized educational provision outside of the home for children in the age range of four to eight years.

The teaching and learning of reading are critical to how ECE achieves its goals and impacts learners' lives. This is not only because reading "is a vital foundation to becoming a literate, educated person," but also because "success or failure in becoming a reader is a strong indicator of future progress in school and beyond" (Lewis & Ellis, 2006, p. 1). This applies to all learners, including learners who use English as a first, second, or foreign language. Reading also increases our knowledge about the world, enhances our imagination and creativity, and creates opportunities for ongoing learning (Lewis & Ellis, 2006). According to Anderson (2004), reading is an active, fluent process that involves the reader and reading material in building meaning. He further suggests that meaning does not reside on the printed page, nor is it in the head of the reader. Instead, the words on the printed page with the reader's background knowledge and experiences are combined as a synergy occurrence in reading.

Considering that reading plays such a crucial role in the lives of learners, especially in the early years, it is noteworthy that generally there has always been an ongoing and

intense debate about just how children should be taught to read. Central to this debate is the use of phonics in teaching and learning reading (Hall, 2006). First, there is a debate about which of the common forms of phonics instruction – synthetic phonics instruction or analytic phonics instruction – should be adopted to teach reading (Lewis & Ellis, 2006; Sitthitikul, 2014). Second, researchers, practitioners, and policymakers also argue about whether the phonics approach is sufficient in teaching reading, or whether it should be viewed as one approach among many, including a focus on the whole language approach and a balanced approach (Hall, 2006; Wyse & Bradbury, 2022). Third, stakeholders also debate the effectiveness of phonics in developing reading skills. Some highlight the critical role phonics play in the development of reading and vouch for its effectiveness and success, including its positive impact on the development of literacy skills and long-term benefits for struggling readers (Grants, 2014; Machin, McNally & Viarengo, 2018; Stuart, 2006). Critics, however, argue that the phonics approach has a limited effect on reading and that, in some cases, it has failed learners. Such critics recommend the use of a balanced approach to teaching phonics to derive greater benefits (Wyse & Bradbury, 2022).

It is important to note, however, that the different sides to the debate do not rule out the important role the teaching and learning of phonics play in the development of reading skills in the early grade. That means the focus of the debate is no longer on the necessity of phonics. Rather, the focus is on whether children are being taught enough phonics, including the use of the full complement of the different approaches to phonics instruction; how teachers combine phonics and other strategies to improve learners' reading skills; and the systematic teaching of phonics (Lewis & Ellis, 2006, p. 2).

The central argument made in this present research is that the teaching and learning of phonics in Ghana should take into consideration all the sides of the aforementioned

debate as well as the focus on an integrated approach to the use of the phonics approach to teaching reading. This argument is particularly important, considering that several school districts in Ghana have adopted the synthetic phonics approach to teaching reading.

Teachers in Ghana had their ways of teaching reading to learners. It could have been any of the phonics approaches or other ways of teaching reading. In the year 2012, synthetics phonics which used the Jolly phonics strategy was introduced through pilot training. Several districts took part in the pilot training. Bolgatanga Municipality, for instance, had its first training in September 2014. Also, a report from Jolly Buddies in Winneba indicated that the synthetics phonics approach was good and easy for learners to pick up for reading. Catholic Education Unit in Ghana equally called for the synthetic phonics approach in their schools in 2015-2016. In November 2017, the Ministry of Education and the Ghana Education Service called for all Regional and District Directors to note that the synthetics phonics approach to teaching reading was the only officially approved and accredited literacy project. One hundred and sixteen (116) Districts were introduced to the phonics approach to teaching reading while the remaining 100 Districts used the learning programme in teaching reading.

Evaluating how facilitators in these districts implement the phonics approach, how they combine other approaches with the phonics approach in teaching reading, the challenges they face in using the phonics approach, and the strategies available for the teachers in dealing with the challenges from the different perspectives of the aforementioned debate will deepen our understanding of the use of phonics in teaching reading in Ghana.

1.2 Statement of the Problem

Difficulties in reading pose a serious threat to the future of learners. The children will only be able to read to learn if they have a good foundation in the early grade level where they mostly learn to read. It is believed that by age five when children are supposedly in kindergarten two are expected to be able to pronounce two or three regular words and well-read simple phrases (Zettler-Greeley et al., 2018).

Research has established that learners of English should encounter concepts of phonemic awareness and phonics in the context of meaningful, purposeful, culturally respectful language use, and real words (Enright & McCloskey, 1988 cited in Cieslinski, 2007). Studies have shown also that the introduction of the synthetic phonics approach has helped learners reading skills to increase drastically over the years. Yet, research evidence indicates that all learners learn best when teachers adopt an integrated approach to reading that explicitly teaches phonemic awareness, phonics, fluency, vocabulary knowledge, and comprehension (Hall, 2006; Lewis & Ellis, 2006; Wyse & Bradbury, 2022).

In the Ghanaian context, an evaluation conducted soon after the introduction of synthetic phonics indicated that the approach had a positive influence on children's reading (Universal Learning Solution, 2015). Another study concluded that phonics is a good method for teaching reading to beginners using the sound-letter relationship of written English (Abdul-Razak, 2016). Ankra, Nyanta, and Opoku, (2017) in their study looked at using the phonics method to improve the poor reading ability of learners at Techiman senior high school. The researchers developed activities to help form one student's blend of five and six letters to form meaningful words. The overall goal of the intervention study was to develop strategies to enhance learners' use of the phonics

approach to reading. The researchers reported a significant improvement in the learners' use of phonics. Oduro, Mensah, Quansah, Lawer & and Ankoma-sey (2021) also conducted a study on how English language teachers in the Unipra South Cluster of Schools in Winneba applied the phonics method as a strategy to assist struggling readers in grade four. The study found that the grade 4 teachers predominantly used the Jolly phonics and rhyming methods in remediating phonics difficulties among struggling readers. It was further revealed that the materials used during instruction were flashcards, manila cards, chalkboards and textbooks. The researchers reported a positive influence on learners reading with the use of the Jolly phonics strategy.

The foregoing studies point to the usefulness of phonics in literacy development. They do not, however, tell us anything about how teachers in early childhood centers use the phonics approach in teaching reading. Oduro et al (2021) focused on how teachers use phonics to assist struggling readers. However, their study was conducted among teachers who taught the English language in grade four. The current study, on the other hand, examined how teachers use the phonics approach to teach reading in early childhood centers in the Bolgatanga Municipality.

Also, the aforementioned studies do not address the question of teachers' knowledge about phonics and phonics instruction. Teachers' content and pedagogical knowledge are key to the successful implementation of any approach to teaching and learning (Angeli & Valanides, 2015; Gess-Newsome & Lederman, 2002). Thus, it is important to address the gap in teacher knowledge, if we want to understand how teachers use the phonics approach to teach reading. Additionally, the studies do not focus on how teachers in early childhood centers combine different aspects or components of phonics in teaching reading, such as how they combine aspects of synthetic phonics instruction and analytic phonics instruction. A study addressing the use of the full complement of

the different approaches to phonics instruction may shed much light on how teachers use the phonics approach in teaching reading.

It is also important to note that the studies reviewed do not examine the challenges teachers face in using the phonics approach in teaching reading in early childhood centers or the strategies available for the teachers in dealing with these challenges. These are significant gaps, considering the ongoing debate regarding the use of phonics in early childhood education.

Through the researcher's personal experience and interaction with some teachers in the Bolgatanga East District as a teacher and Jolly Phonics trainer, it came to light that some of the teachers thought that knowledge of letter sounds was the same as knowledge of phonics approach. For that reason, although they taught learners the letter sounds, they concluded that phonics had been taught and learners should be able to read at that point in time. Also, teachers who even taught the letter sounds found it difficult to combine with other phonics components to teach reading. The researcher also interacted with some teachers and their responses about the phonics approach were that it was difficult to understand without someone guiding them. Even teachers who were willing to teach with the phonics approach for learners to start reading complained about the unavailability of teaching and learning resources. The observations through the personal and professional experiences buttress the gaps found in the literature. The study sought to address these gaps by evaluating how teachers use the phonics approach in teaching reading, including the extent to which they combine different components of the phonics approach in teaching reading, the challenges teachers face in using the phonics approach, and the strategies they adopt in addressing these challenges.

1.3 Purpose of the Study

The purpose of the study was to examine how teachers in the selected early childhood centers in the Bolgatanga Municipality use the phonics approach to teach reading.

1.4 Research Objectives

The study sought to examine the following objectives:

1. Teacher knowledge about the phonics approach in teaching reading in the early childhood centers in the Bolgatanga Municipality.
2. How teachers in the early childhood centers combine different components of phonics to teach reading skills in the Bolgatanga Municipality.
3. The challenges teachers face in using the phonics approach to teach reading in the early childhood centers in the Bolgatanga Municipality.
4. The strategies available to teachers in dealing with the challenges they face in using the phonics approach in teaching reading in the early childhood centers in the Bolgatanga Municipality.

1.5 Research Questions

1. What is the knowledge of teachers about the phonics approach in teaching reading in the early childhood centers in the Bolgatanga Municipality?
2. How do teachers in the early childhood centers combine different components of phonics to teach reading skills in the Bolgatanga Municipality?
3. What challenges do teachers face in using the phonics approach in teaching reading in the early childhood centers in the Bolgatanga Municipality?
4. What strategies are available for teachers in dealing with the challenges they face in using the phonics approach in teaching reading in the early childhood centers in the Bolgatanga Municipality?

1.6 Significance of the Study

This study will assist various institutions and educational authorities involved in policy formulation, development, and implementation. It will also benefit school managers seeking to help preschoolers learn to read. The study will also help the synthetic phonics trainers who use the Jolly phonics strategy to know how teachers use the phonics approach in teaching reading and then vary their way of training to achieve their goal. Teachers will be more enlightened in using the Phonics approach to teach learners reading. Finally, the study is hoped to contribute to the literature available on the use of the Phonics approach to assist education evaluators.

1.7 Delimitations

The study focused on the use of the phonics approach in teaching reading in early childhood centers in the Bolgatanga Municipality. Also, the study sampled fourteen (14) teachers from five (5) selected schools in the central "A" circuit in the Bolgatanga Municipality. Teachers in this municipality were among the first to receive training on the synthetic phonics approach. A focus on their practice will provide invaluable insights into the subject matter for this research, how the use the phonics approach to teach reading, how they combine different phonics approaches to teach reading, the challenges they face in implementing the phonics approach and the strategies they adopt to overcome they challenges they face.

1.8 Limitations of the Study

It was realised that some teachers failed to contribute effectively during the focus group discussion. This might negatively affect some portions of the study however; enough data was collected for the study. Also, it was difficult organizing the teachers for the discussion since it had to take place after school. Most of them were rushing to go for

their wards from school so they could not concentrate fully during the discussion. Therefore, the responses provided may not be a true reflection of what they know since they were in a hurry to leave.

1.9 Operational Definition of Terms

1.9.1 Phonics approach

The phonics approach; is an approach during which children are shown that letter sounds are a guide to the pronunciation of words. In this approach, the sounds of the letters of the alphabet are taught, and children learn the correspondences between letters and groups of letters and their pronunciations.

1.9.2 Synthetic Phonics

The synthetic-phonics programme teaches the children, in a simple and multi-sensory way, how the English reading and writing system works. That is to say, it teaches children to use the basic alphabetic code to work out unknown words before expecting them to read books for themselves or to write independently.

1.9.3 Analytic Phonics

In analytic phonics, the letter sounds are taught after the reading has already begun, children initially learn to read some words by sight, often in the context of meaningful text.

1.10 Organization of the Study

The study consists of five chapters. Chapter One focuses on the introduction to the whole study. It discusses the background of the study, the statement of the problem, the purpose of the study, research objectives, research questions, significance of the study, delimitations of the study, operational definition of terms, and organization of the study.

Chapter two deals with a review of related literature to the study, highlighting the study's theoretical framework and key empirical works that address the focus of the study. Chapter three focuses on the methodology, including the research paradigm, research design, the population of the study, sample size, sampling techniques, instrumentation, data collection procedure, and data analysis procedure. The chapter also discusses the steps taken to ensure trustworthiness as well as the limitations of the study. Chapter four focuses on data analysis and discussion of findings. Finally, chapter five presents the summary of the findings, draws conclusions, and makes recommendations for further studies.

CHAPTER TWO

LITERATURE REVIEW

2.0 Overview

This chapter discusses the conceptual framework and theoretical framework that guide this research. It also reviews relevant literature on major themes that are central to this research, including the following: the concept of phonics, approaches to teaching phonics, the integrated approach to phonics to improve learners' reading, challenges teachers face in using the phonics approach to teach reading and strategies teachers adopt to address these challenges.

2.1 Conceptual Framework

According to Yamauchi, Ponte, Ratliffe, and Traynor (2017), a conceptual framework provides a model for interactions between variables that may or may not indicate a specific theoretical perspective, with the goal of explaining and predicting a phenomenon. According to Antonenko (2015), a conceptual framework "explains, either graphically or narratively, the primary objects to be researched, the key components, ideas, or variables, and the anticipated relationships among them." According to the study, a conceptual framework, like a map, directs and offers coherence to empirical investigation. Figure 2.1 presents a summary of the conceptual framework, denoting the key components of the study and the connections between them. The components include the study's overarching focus on teaching reading with phonics in early childhood centers, the different approaches of phonics (synthetic, analytics and analogy), the determinants of the study derived from the objectives (teacher knowledge, combining different phonics approaches to teach reading,

challenges teachers face in using phonics to teach reading, and strategies teachers adopt to address the challenges), and possible outcome of the study.

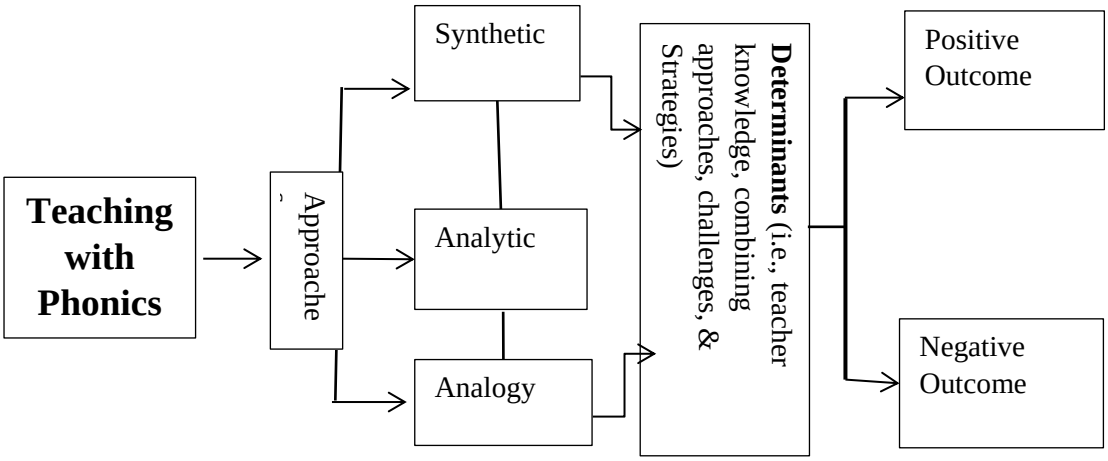

Figure 2.1 Conceptual Framework

Source: self constructed, 2023

2.2 Theoretical Framework

The study drew on two sets of theories. First, it used the bottom-up and top-down theories of reading. The former is associated with synthetic phonics and the latter with analytical phonics (Amadi, 2019). Second, the study also drew on the sociocultural theory of learning, particularly the concepts of the zone of proximal development (ZPD), scaffolding, and mediation (Vygotsky, 1978, 1986). These concepts help us to understand reading development about the social context of the learner, thereby strengthening the perspective on the use of an integrated approach to phonics and reading instruction.

2.2.1 Bottom-up Theory of Reading

The bottom-up theory was propounded by Flesch in 1955. It regards reading as a process of serial and sequential information evaluation. Several high-level actions are used to convert information from low-level sensory input to meaning. Its focus is on how readers process the printed text from the lowest linguistic unit of grapheme-phoneme correspondence to the highest linguistic unit of meaning. Phonics, on the other hand, is a style of education that teaches the graphemes of a written language about the phonemes of a spoken language and how they may be used to decode words and spell them correctly (Amadi, 2019). The technique teaches reading methodically and progressively. It is commonly utilized in the early stages of reading teaching. Early reading is also known as starting or beginning reading. It spans the pre-primary and primary school years. Beginning reading is critical to reading instruction because it serves as a stepping stone to more advanced reading (Amadi, 2019). Beginning reading is of interest to scholars since a home constructed on a weak foundation would undoubtedly fall. As a result, a child who struggles with reading fundamentals may struggle to make progress in subsequent educational undertakings. Lyons (2003) observes that at the end of first grade, children who struggle to learn to read are less confident in their skills than when they began school. Teachers are excited about starting reading, according to Tyner (2019), because they know it is the foundation upon which knowledge, self-esteem, and future educational prospects are created. To instill a strong foundation of early reading ability and efficiency in reading skills in children, there is a need to investigate relevant theories and methods that will enhance effective reading teaching and learning, thus the need to find out the relationship of bottom-up theory to phonics-based reading instruction.

The bottom-up theory is frequently referred to as a data-driven method. Reading is seen as an act that begins with the processing of visual input in terms of the information shown in a text. This processing progresses from the lowest language unit to comprehension of the author's meaning. In other words, a reader decodes sounds, words, phrases, and paragraphs using visual information represented by written language letters. Bottom-up theory, according to Reutzel and Cooter (2005), learning to read progresses from acquiring chunks of language to understanding full texts. Gough (1972), one of the proponents of the theory established a linear model of the reading process which presents reading as a sequential or serial mental activity. According to Alvermann, Unrau, Salors and Ruddell (2019), the model describes a process that begins with low-level sensory representation in the form of letter input and goes through phonemic and lexical-level representation to deeper structural representation. In other words, during the reading process, information enters the reader's visual system as graphemes (letters), which are articulated as phonemes (sounds) and identified as words, facilitating comprehension of the message encoded in the text.

According to Purcell-Gates' (2007) model analysis, reading begins with letters being detected feature-by-feature through a visual system before being moved to a phonemic system for recognition. The identified words are stored in working memory to be processed and comprehended as sentences and, eventually, as texts. Gough's reading model involves three stages of information processing. The reader gets graphemic information via the visual system at the first level, converts letters to sounds bit by bit, and transfers them to the second level, where sounds (phonemes) are turned into specific words. These words are transferred to the third level where meaning is absorbed into the knowledge system. Information is thus controlled and transformed

from low-level sensory input to meaning via several high-level sensory activities. LaBerge and Samuel (1974) also established another popular model which is a process and data-driven model. Their work on automatic information processing or automaticity deals with the capacity to accomplish a complicated activity swiftly with fewer attentional resources (Penner-Wilger, 2008). The paradigm compares the human mind or brain to a computer, which can execute numerous tasks at once but has limited ability to attend to all activities concurrently. In other words, the human mind (brain) has a limited capacity for attention. As a result, to complete two complicated tasks at the same time, one must become proficient in the talents required. The application of automaticity to the reading process by LaBerge and Samuels revealed that word recognition and decoding are fundamental abilities required for the later effort of comprehension. Both decoding and comprehension are complicated activities that involve the attention of the reader. When children are beginning to read, the job of decoding consumes a large portion of their attention capacity, leaving fewer resources for understanding. However, with consistent practice in sounding out letter-sound correspondences, readers become natural decoders who can detect words without having to strain their attention too far. When youngsters become automatic in decoding, they allocate their available attention to the job of understanding and actively monitoring their reading. When readers' attention is no longer primarily focused on decoding, comprehension becomes feasible. According to Penner-Wilger (2008), decoding and understanding are mutually exclusive. As a result, understanding might lead to simple decoding when reading in an area of competency, and vice versa. Bottom-up theory proponents argue that reading goes sequentially and serially from low-level information processing to high-level processing. They maintain that information is received and processed from the smallest language units ranging from

sounds through letter blends, words, phrases, clauses, and sentences to the broader task of meaning. As a result, starting readers must build a series of sub-skills that lead to the development of comprehension ability, which will eventually turn them into expert and fluent readers. Reutzel and Cooter (2005) highlight that instructors who believe that bottom-up theories completely explain how children become readers sometimes teach sub-skills first before other reading abilities. Their reading training starts with the introduction of letters and sounds, followed by whole-word pronunciation and then linking word meanings to grasp literature. By implication, such teachers employ phonic abilities to promote understanding of a text. The bottom-up theory was challenged for being linear and directed that is, processing information from lower-level processes to the high-level unit exclusively. It did not allow for changes that could occur at low-level processing units as a result of high-level process impacts. It was also chastised for neglecting to convey the impacts of the significance of meaning in reading. Despite the critiques and limitations, Hassan (2012) maintains that bottom-up models must be considered since they give a solid foundation for the reading processes of weak or beginning readers who rely primarily on low-level processing.

The bottom-up theory of reading provides a framework within which teachers in the early childhood centers in the Bolgatanga Municipality could use in helping learners to read. The tenets of the theory indicate that children must work through and develop a series of repeated skills in letter and sound relationships as in phonics, and text knowledge in reading comprehension.

2.2.1.1 Synthetic phonics

According to Johnston and Watson (2007), it is an expedited type of phonics that does not require teaching toddlers their first-sight vocabulary. It is intended to educate

children on the links between letter sounds before they are exposed to real books. Camilli, Vargas, and Yurecko (2003). Synthetic phonics, according to some, is used to teach children the correspondences between graphemes and phonemes of the language, as well as how to utilize them to decode unknown words by sounding out the letters and blending them. Torgerson, Brooks, and Hall (2006) agree, describing it as a strategy that teaches the pronunciation of sounds linked with certain letters as well as how to blend them. Thus, synthetic phonics is a reading instruction approach that teaches children how to isolate letter-sound correspondences in a language and how to co-articulate or combine them to make words and decode words. (Johnston and Watson, 2007; Johnston and Watson, 2005) say with this strategy, children are first taught some set of letter sounds and then educated on how to combine them to interpret new words. Afterward, more sets of letters are taught and the children blend or decode them to make new words. According to the literature, synthetic phonics is the most successful method for teaching beginning reading. It teaches children how to create or develop word pronunciation by themselves. Without the instruction or support of the teacher, children may decode unknown words in a text on their own. In essence, Torgerson, Brooks, and Hall (2006) agree, characterizing it as an approach that teaches the pronunciation of sounds associated with certain letters as well as how to blend them. As a result, synthetic phonics is a reading teaching method that teaches children how to extract letter-sound correspondences in a language and how to co-articulate or blend them to form words and decode unfamiliar words. The answer is yes. Synthetic phonics is supposed to benefit all types of learners. According to the National Reading Panel (2000), systematic synthetic phonics programs are successful with children of various ages, skills, and socioeconomic situations. When this strategy is employed in the classroom, children appear to make large increases in their ability to read words, which

leads to big advances in text processing. The strategy also boosts the capacity of good readers to spell across all class divisions. One objection addressed against the use of synthetic phonics for teaching first reading is the problem of the irregularity in English spelling which may provide difficulty in sounding and blending of letter-sounds. According to Dombey (2006), an uneven grapheme-phoneme relationship may expose children to specific challenges with reading irregularly spelled words. However, the one-route connectionist theories of reading championed by Seidenberg and McClelland (1989) assert that irregular words include regular features that will improve pronunciation. It emphasizes that even irregular words such as "yacht" include pronunciation information. Hence, it can be said that the synthetic phonics approach to reading instruction may not lead to so severe an impairment in the reading of irregular words. The method seems to be all-inclusive.

2.2.1.2 The Relationship between Bottom-up Theory and Phonics

Regardless of the phonics variety involved, the bottom-up theory appears to be the foundation upon which the phonics approach is founded. Phonics-based training teaches children to utilize a language's letter sounds to decode new words by sounding out and blending such letter sounds. The phonics teaching pattern follows a sequence, as illustrated in bottom-up models of the reading process. The sequence covers every grapheme-phoneme relationship, including short and long vowels, consonant digraphs, letter sound blends, sound decoding to recognize new words, word combinations to build sentences, and text comprehension. Thus, phonics depicts reading as a sequential process in which readers are taught to decode text word by word and connect words to produce phrases, clauses, and finally sentences. Beginning readers who are unable to assimilate information from a high-level sensory information unit are best served by phonics. Beginning readers who are unable to process information from a high-level

sensory information unit are best served by phonics. Bottom-up theory's depiction of low-level information processing is particularly applicable for reading since children can only become fluent or expert readers by mastering basic reading abilities such as decoding, word recognition, fluency, and spelling, which improve comprehension. Phonics is used to help children learn to read and become automatic in these abilities so that they may devote more time to understanding. Phonics as a word recognition technique gives learners a temporary method for word recognition. It directs the learner's attention to the arrangement of letters that comprise specific words. This allows them to collect and preserve information on particular word spellings. As a result, according to Chall (1996), phonics instruction develops readers who have an edge in word recognition and, by the end of second grade, have greater levels of comprehension and vocabulary than children taught using alternative approaches. The bottom-up approach has a lot to offer early readers since it focuses on the fundamentals of reading that help with comprehension. It provides a solid foundation for beginner or struggling readers' reading processes. Phonics is another way of teaching reading that may be introduced early on. It is often introduced at the start of the child's first year in school. Children are taught a set of letter sounds and then shown how to blend them to speak and create words during this period. This is normally done before children are introduced to real-world text reading. This allows children to decode unexpected words in texts without assistance from the teacher. Phonics is beneficial to children in kindergarten through primary six, as well as those on the edge of failing to read. Bottom-up theory depicts the reading process both serially and sequentially. It displays the text as a visual input that catches the printed characters, which are then sounded out, mixed, articulated, and merged to make the text. It is often introduced at the start of the child's first year in school. Children are taught a set of letter sounds and then

shown how to blend them to pronounce and form words during this period. This is usually done before introducing pupils to real-world text reading. This enables learners to interpret unusual words in texts without the need for a teacher's aid. Children in kindergarten through primary six, as well as those on the verge of failing to read, benefit from phonics. The bottom-up theory presents the reading process in both a serial and sequential manner. The text is shown as a visual input that captures the printed letters, which are subsequently sounded out, blended, articulated, and combined to form the text. The words are processed linearly through phrases, clauses, sentences, and finally meaning, which is the primary aim of reading. Thus, text processing begins with the lower work of blending letter sounds and progresses to the higher goal of understanding. As a result, phonics is a reading strategy that is based on or stems from bottom-up theory.

2.2.1.3 Applying Bottom-up Based Phonics Instruction to Beginning Reading

The bottom-up theory applies to reading that occurs in the early phases of the educational process. Phonics is a teaching approach that teaches basic reading skills. Word identification, decoding, fluency, and spelling are examples of such skills. To properly teach these skills, the teacher may need to divide his lesson into two parts. The first stage should cover kindergarten. During this period, the child should have learned the English alphabetic system but has little or no understanding of the links between letter sounds and how to utilize them to make words. The teacher can now proceed to the second stage, which should begin at the start of the primary one. The phonics technique may be used by the teacher to expose the children to all grapheme-phoneme links in words, following the instructional pattern spelled forth in the bottom-up theoretical framework. The teacher may employ the synthetic phonics method, in which he or she will initially expose the students to the first set of letter sounds that may be

used to make more three-letter words than any other six-letter sounds. He or she may write out letter sounds like, s 'a', 't', i 'p', and 'n' and teach them how to blend to make words like sat, 'pat', 'tap', 'pan', 'sit', 'tin', 'pit', 'pin', and sip'. After the children have learned them, the teacher can progressively assist them in mastering all forty-two (42) phonics letter sounds. The teacher can also show the children how to utilize magnetic letters to create words. He or she should show the children how to blend and make words by pressing magnetic letters together. Children may use this to speak, spell, and construct words on their own. Following that, the teacher can introduce the children to the reading of real books. Children who have mastered the skill of sounding out and blending letter sounds may now apply their knowledge to recognize and decode words in texts. This enables individuals to read fluently, accurately, and quickly, facilitating text comprehension.

2.2.2 Top-Down Theory of Reading

This theory was propounded by Goodman in 1985 and holds that comprehension begins with more global aspects (the title, the basic idea of each paragraph) and subsequently, goes into smaller linguistic units (Angosto et al, 2013). According to this view, the processing is mostly reliant on the speaker's past knowledge of the communication circumstances. To comprehend a message, the child begins with the meaning of a paragraph (or chunk of text) and then moves on to the phrases and words that comprise the message. The top-down theory facilitates the understanding of confusing texts by activating a high-level schema that controls the reading process. As a result, past information and reader expectations become essential components of the understanding process. As a result, when individuals encounter a text, their prior experience directs their cognitive process.

The top-down theory views reading as not just extracting meaning from a text but a process of connecting information in the text with the knowledge the reader brings to the act of reading (Pardede, 2008). Reading, in this definition, is a conversation between the reader and the text that entails an active cognitive process in which the reader's prior knowledge is important in the construction of meaning.

The top-down reading theory is a comprehension-driven theory that contradicts the notion that decoding is a prerequisite for understanding. The top-down theory of reading is intended to teach children to read by assuming that it is the reader's brain, not the words on the page, that makes sense of what is written. According to the top-down reading theory, text processing begins in the minds of readers with meaning-driven processes or an assumption about the meaning of a text. According to this viewpoint, readers recognize letters and words merely to reinforce their ideas about the text's meaning (Dechant,2013).

Reading is not the process of converting written language to spoken language. It does not entail analyzing each letter and word individually. It is an issue of imparting meaning to print rather than taking meaning from print (Liu, 2014)). According to Goodman (1990) cited in (Kashani et al, 2013), reading is a "psycholinguistic guessing game" (p. 240), and reading is a process in which a reader samples the text, forms a hypothesis, and then verifies or rejects it.

The top-down theory of reading would help teachers in the early childhood centers in the Bolgatanga Municipality to know which books or texts to provide for learners to be able to read without having to rely on only letter and sound relationships. The top-down theory of reading emphasizes more on reading for meaning rather than reading each

word correctly. Teachers in the early childhood centers will therefore encourage learners to self-select materials and engage in interactive activities.

2.2.2.1 Analytic Phonics

The analytic phonics approach to teaching reading is more common in the United Kingdom (UK) (Johnston & Watson, 2005). Analytic phonics is a method of teaching reading that does not emphasize the pronunciation of phonemes associated with specific graphemes in isolation. It is referred to as a mixed method approach by Johnston, MacGeown, and Watson (2012) because it focuses on assisting children in analyzing letter-sound correspondences in previously acquired words to prevent the pronunciation of words in isolation. Letter sounds are introduced in the context of full words or after the reading process has begun. As a result, it is a strategy used to teach grapheme-phoneme correlation after children have been introduced to high-frequency words. The teacher introduces full words before guiding the students through the understanding of letter-sound patterns in the English spelling system. Children are instructed to examine the frequent phonemes in a group of words that contain the phoneme under consideration (Torgerson, Brooks, and Hall, 2006). For example, the instructor and students may look at the parallels between the terms 'bat,' 'back,' 'bush,' and 'bell'. The analytic phonics strategy is often introduced around the conclusion of the first year of school or the beginning of the second year (Johnston, McGeown, and Watson, 2012). To put it another way, the method is intended to begin in the third term of the first year or the first term of the second year of the primary school system. After learning sight words, children are taught to distinguish letter sounds at the beginning, end, and middle of words in print. They may also be taught how to interpret printed words at this time by mixing letters and sounds in all locations of the word, particularly after it has been uttered. The method was chastised for failing to align with the emerging trend toward

child-centered education. It did not appear to align with previous theoretical studies that encouraged instructors to adjust their reading and writing instruction to the particular child's needs. In consequence, the technique renders students too reliant on the teacher. The technique was also chastised for fostering rote learning because it was taught without exposing youngsters to meaningful text reading. The strategy appears to be ineffectual due to the uneven spelling pattern in English. This is because the English alphabet's twenty-six (26) letters do not have a one-to-one correlation with the language's phonemes. As a result, certain words cannot be spelled correctly using the analytic phonics technique.

2.2.3 Balance Theory or Interactive Model of Reading

Bottom-up model advocates argue that excellent readers are better at analyzing words, whilst top-down model supporters argue that a good reader, above all, is capable of making use of context to a larger extent than less talented readers. Children use context to understand the meaning of words (Angosto et al, 2013). An interactive reading model attempts to combine the valid insights of bottom-up and top-down models. It attempts to take into account the strong points of the bottom-up and top-down models and tries to avoid the criticisms leveled against each, making it one of the most promising approaches to the theory of reading today (Hanifi, 2021). The interactive model suggests that the reader constructs meaning by the selective use of information from all sources of meaning (graphemic, phonemic, morphemic, syntax, semantics) without adherence to any one set order. The reader simultaneously uses all levels of processing even though one source of meaning can be primary at a given time (Castro Cárdenas, 2020)

According to Grabe, (1988), an interactive model uses print as input and has meaning as output. But the reader provides input, too, and the reader, interacting with the text, is selective in using just as little of the cues from the text as necessary to construct meaning. Reading is at once a perceptual and a cognitive process. It is a process that bridges and blurs these two traditional distinctions. Moreover, a skilled reader must be able to make use of sensory, syntactic, semantic, and pragmatic information to accomplish the task. These various sources of information appear to interact in many complex ways during the process of reading (Grabe, 1988).

Kuhn et al, (2010) argued that fluent reading is an interactive process in which information is used from several knowledge sources simultaneously (letter recognition, letter sound relationship, vocabulary knowledge of syntax and meaning). The balance theory posits that readers read by focusing on comprehension and letter features at the same time (Stanovich, 1980).

2.2.4 Socio-cultural Theory of Learning

In its broadest sense, the phrase socio-cultural refers to a set of ideas that includes sociolinguistics, pragmatism, and second-generation cognitive science and that frequently expresses themes derived from Vygotsky's cultural-historical theory (Alvermann et al, 2019). Among these themes are the beliefs that the mind emerges from social interaction with other minds, that mental activities are mediated by tools and symbol systems (languages), and that to understand a mental function, one must first understand the roots and processes that contribute to its development.

2.2.4.1 The Concept of the Zone of Proximal Development

The concept of the zone of proximal development was developed by a Soviet psychologist and social constructivist (Lev Vygotsky 1896-1934 cited in McLeod, 2019).

The zone of proximal development (ZPD) has been defined as:

"The distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem-solving under adult guidance, or in collaboration with more capable peers" (Vygotsky, 1978, p. 86 cited in Scott and Palincsar, 2013).

Vygotsky felt that if a learner is in the zone of proximal development for a specific activity, offering sufficient support will provide the student with enough of a "boost" to complete the task.

Educators are recommended to focus on three crucial components that facilitate the learning process to help a person advance through the zone of proximal development: First of all, there should be the presence of someone with more knowledge and abilities than the learner (a more knowledgeable other). Also, there should be an interaction with a skilled instructor that allows the student to observe and improve their abilities. Finally, scaffolding or supportive activities are offered by the educator or a more competent peer to help the learner navigate the ZPD. The more knowledgeable other (MKO); refers to someone who has a greater understanding or a higher degree of proficiency than the learner regarding a certain activity, process, or topic. Although the impression is that the MKO is a teacher or an elderly person, this is not always true. Many times, a child's classmates or an adult's children will have greater knowledge or experience. According to Vygotsky (1978) cited in (Saul,2018), much important learning by the

child occurs through social interaction with a skillful tutor. The tutor may model behaviors and/or provide verbal instructions for the child. This is referred to as cooperative or collaborative communication by Vygotsky. The children attempt to comprehend the tutor's actions or instructions (typically the parent or teacher) and then internalize the information, utilizing it to control or govern their performance.

The gap between what a student can do on his or her own and what he or she can do with assistance and encouragement from a qualified partner is referred to as the zone of proximal development. Thus, "proximal" abilities are those that the learner is "near" to acquire.

ZPD is the zone in which teaching is most useful since the task is just beyond the individual's capabilities. To learn, we must be given tasks that are slightly above our competence level. Tasks that are difficult to complete encourage optimal cognitive progress.

2.2.4.2 The Concept of Scaffolding

Scaffolding refers to the activities offered by the teacher or a more knowledgeable peer to assist the student as he or she progresses through the zone of proximal development (McLeod, 2019). Much like a scaffold is removed from a structure during construction, support is tapered off (i.e., withdrawn) when it becomes unnecessary. The pupil will be able to do the work on his own next time. Wood et al. (1976, p. 90) cited in Gonulal & Loewen (2018) define scaffolding as a process "that enables a child or novice to solve a task or achieve a goal that would be beyond his unassisted efforts." Scaffolds, they say, need adults to "manage those components of the work that are initially outside the learner's capabilities, allowing him to concentrate on and finish just those elements that are within his range of competence" (p. 90).

Wood and Middleton (1975) conducted research to support the scaffolding and zone of proximal development concepts. They built a 3D model by observing how moms interacted with their children. The moms assisted their children in three ways. They first encouraged in general, e.g. You can now try it. Also, Specific instructions were given. Get four large blocks, for example. And they finally did a direct demonstration, such as showing the children how to place one block on top of another. The study's findings revealed that no single technique was superior for assisting the child's development. Mothers who modified their tactics depending on how the kid was doing were the most successful.

They became less particular with their assistance when the child was performing well. When the child began to struggle, they offered increasingly explicit directions until the child resumed his or her development. They concluded that scaffolding and ZPD are most successful when the support is tailored to the requirements of the students. This puts individuals in a position to succeed in an activity that they would not have been able to undertake alone earlier.

2.2.4.3 Socio-cultural Theory and Reading

For many years, reading has been viewed purely from a cognitive perspective and a great deal of research has focused on the cognitive aspect of reading (Ghafar & Dehqan, 2013). Reading is regarded as a receptive skill by people working in this field, and the primary question is what cognitive processes underpin and account for success and failure in learners' attempts to master reading in particular. Memory, information processing techniques, attention, and notices are the primary fields of interest for cognitive theorists and researchers.

The fundamental complaint levied against this general perspective of language learning is that the social environment of learning is mostly ignored. This criticism, based on the sociocultural theory of learning, attempts to place more emphasis on social factors in the learning process. It asserts that learning is not an individualistic process, but rather one that must be taught in a social setting with the assistance of peers or skilled teachers (Yang & Wilson, 2006).

Unlike cognitive methods, which see learning as a series of fixed steps, the sociocultural theory emphasizes that learning occurs in a sociocultural setting and sees learners as active constructors of their learning environments (Mitchel & Myles, 2004 cited in Behroozizad, Nambiar, & Amir, 2014). Like cognitive theory, sociocultural theory is concerned with cognitive development, but unlike cognitive theory, it prioritizes social elements. In other words, the sociocultural paradigm asserts that cognitive growth cannot occur without social interaction with more competent peers. Indeed, mediation and scaffolding are necessary for cognitive growth to occur (Lantolf, Thorne & Poehner, 2014). The Zone of Proximal Development (ZPD) is a key concept in sociocultural theory that explains the critical function of teachers as mediators and is crucial to the scaffolding concept (Ghafar & Dehqan, 2013).

Reading, which was historically seen as a wholly individualized talent, has been evaluated from a completely new viewpoint in this respect. Reading, according to the sociocultural theory of learning (Salem, 2017), is a social skill that demands active engagement and interaction from the learners who participate in it.

Vygotsky's sociocultural theory of learning has gotten a lot of attention with the development of a more social viewpoint on language instruction and learning. As previously said, it prioritizes the social elements over the individual factors. It indicates

that social components are essential for learning to occur in a person. Some strategies have been developed to incorporate sociocultural theory in a learning setting, one of which is scaffolding, which is generally accepted and acknowledged.

Ghafar and Dehqan (2013) conducted a study to investigate students' reading comprehension and reading strategy use across sociocultural and traditional teaching approaches, as well as to determine which proficiency (high and poor) benefited the most from the intervention. They had two groups of pupils in their study. Some students were taught to read using the sociocultural strategy while others were taught using the traditional strategies.

The results revealed a significant difference in reading comprehension among students taught utilizing the sociocultural technique. This suggests that sociocultural teaching strategies (teacher and peer scaffolding) improve learners' reading comprehension and lead to greater levels of strategic reading comprehension growth. It asserts that sociocultural teaching practices improve learners' reading comprehension as compared to traditional methods.

The study also discovered that learners who received sociocultural teaching approaches outperformed those who did not in terms of reading strategy utilization. It was discovered that the scaffolding approaches were designed to accommodate language learning strategies in general and reading comprehension strategies in particular. This discovery provides the door for language instructors and researchers to better equip students with language learning tools. Unlike some researchers (Anderson & Roit, 1993; Block, 1993), who emphasized the importance of teaching reading strategies as the only method for providing learners with language learning strategies, the results of

this study demonstrated that scaffolding and sociocultural techniques could also be effective and instructive for language learning strategies (Ghafar & Dehqan, 2013).

The study's conclusions advocated for the adoption of more social and cooperative strategies in language learning and instruction. It is more in favor of a collaborative learning environment that necessitates the presence of a peer or expert peer that allows learners to correct themselves while also learning the strategic procedures required for learning new and challenging abilities. This enables students to be active builders of their learning environments. It is also worth noting that dialogic interaction in a sociocultural environment assists learners in transitioning from other-regulation to self-regulation; from reliance on others to independence (Ghafar & Dehqan, 2013). This suggests that this strategy is more conducive to learners gaining mastery and independence in their reading subject.

2.3 Concept of Phonics

The study of the link between sounds and letters is known as phonics. It is an integral component of elementary school reading and writing practice and teaching. Knowledge of phonics leads to knowledge of words. Students continue to read words easily with little effort as they gain reading expertise. Students learn the written connection between letters, patterns of letters, and sounds through phonics education. It should be remembered that phonics is only one component of a comprehensive literacy program that must also include comprehension, fluency, vocabulary, writing, and thinking exercises.

Phonics has been described as one of several reading cues (e.g., Dahl, Scharer, Lawson, & Grogran, 1999). It refers to educational approaches that stress how spellings are systematically connected to speech sounds (Sitthitikul, 2014). According to this

description, phonics education may be found in a variety of reading programs (Routman & Butler 1998). According to Ehri et al. (2001), phonics teaching is any method in which the instructor does or says anything to help youngsters learn how to decode words. This might include teaching children directly about sound-symbol correspondences, having them modify sounds in written words through spelling activities, pointing out patterns in similarly spelled words, or anything else that helps children learn about orthographic patterns in written language. Phonics is the deliberate, focused study of the relationship between sounds and symbols to learn to read and spell.

English, as Bear, Invernizzi, Templeton, and Johnston (2020) pointed out, is an alphabetic language with twenty-six letters. Each letter in the English language can make one or more sounds. The letter-sound correspondence is sometimes referred to as "phonics" (Bear et al., 2020). However, phonics definitions are generally divided into three groups. These three criteria are as follows: the letter-sound connection (Chen et al, 2022), the technique utilized to teach early reading, and the capacity to grasp the letter-sound relationship (Bear et al., 2020). Numerous scholars have emphasized, however, that phonics is not a specialized approach to instruction. On the contrary, a variety of instructional methodologies can be used. As a result, it is critical to distinguish between phonics and phonics teaching in terms of concept and application (Chen et al, 2022).

2.3.1 Development of the Concept of Phonics

Children most likely learned to read by having someone read to them over and over again until they desired to attempt reading for themselves. The adult then informed the child of the terms he/she did not understand. Such an approach did not provide children with any roadmap to figure out words for themselves (Emans, 1968). The first attempt

to teach reading independence was most likely an alphabet-spelling system. In this method, children were taught the names of the letters of the alphabet first. Then, as new words were introduced, they were taught how to spell them. It became obvious very quickly that the letter names' sounds bore little relation to the sounds represented by the letter names in the word content. To correct this, the concept of teaching recommended sounds rather than letters emerged over time through the works of such pioneers as Ickelsamer in 1534, John Hart in 1570, Benjamin Franklin in 1768, and Noah Webster in 1798 (Emans, 1968). Other reading specialists advocated teaching reading by presenting an object or a picture alongside a word. The focus of this approach was on teaching words' meanings rather than their sounds. An early example of this approach is seen in the works of Comenius, who published his Orbis Sensualium Picture (The World of Sense Objects Pictured) in 1658, and those of Samuel Worcester, the American author of Primer of the English Language published in 1828 (Emans, 1968).

The phonics approach remained relevant regardless and received renewed attention in the 1890s. The phonics training introduced at this time, however, was significantly different from the phonics instruction abandoned a half-century before. While previous phonics methods drilled the child on individual letter sounds, the phonics method of this era shifted to an emphasis on groups of letters known as word families. Reading was reduced to a series of mechanical drills, each focusing on a unit smaller than a word, such as sick, ick, ate, old, and ask. Before introducing full words or genuine sentences, children were taught over a hundred phonics principles. When presented, the context was submissive to the phonics parts, for example, Kate ate a date.

Several studies have been conducted to support the teaching of phonics. Winch (1925) tested the alphabet, the word method, and two phonics systems in England. His conclusions endorsed phonics. Tiffin and McKinnis (1940) showed a significant

correlation between phonological aptitude and silent reading ability. Phonics boosted independence in word identification, encouraged accurate pronunciation, and improved oral reading, but had no effect on comprehension; overall, the research appeared to support phonics teaching. Gates and Russell (1938) examined the overall reading skills of children given no phonics, moderate phonics, and a lot of phonics. They determined that modest doses of phonics were preferable. Using somewhat more longitudinal approaches, Sexton and Herron (1928) determined that phonics training provided very little assistance during the first half of reading instruction but was quite beneficial in the second grade.

The new phonics teaching processes that emerged in the late 1930s and early 1940s differed from prior methods, such as the alphabet spelling method, the teaching of letter sounds, or the teaching of word families. Previously, drills were given on word parts before the child encountered them in whole words. This solitary exercise practice, or synthetic technique, gave way to a new approach known as the analytic approach. These labels distinguished the approaches: one involved constructing words from their constituent components, while the other involved disassembling a word to identify it (Emans, 1968).

The novel technique observed the word as a whole, and then the parts as components of the whole. This approach corroborated Hamilton and Judd's prior study, which found that individuals prefer to recognize the bigger visual forms of a word first and explore the details only when the larger structure cannot be easily detected (Rogers, 1938). The procedure began with genuine phrases said by youngsters that piqued their curiosity. Terms that were challenging for youngsters to read regularly were compared to words they previously understood. Most instructors continued to adopt this technique, which distanced phonics from concerns that pupils remembered phonics principles in tasks

separate from reading (Emans, 1968). In his study, Emans (1968,) described the advantages of the analytical method as follows: To begin with, young children are primarily interested in the meanings that words have for them. He added that the sound-sounding promotes children's self-discovery of letter-sound links and sparks their interest in words. Analytic approaches prevent blending issues, which are a major stumbling point with other methods. The whole-word strategy allows for the most experience in "reading through" words, the phonics skill most needed when students deal with new words in context on their own. Finally, whole-word sounds immediately contribute to learning words and making them familiar sight words.

Several studies have backed up this newer approach. House (1941) performed middle-school research and concluded that word analysis abilities were best learned when the functional application of what was taught could be demonstrated by the training itself. In his study, Emans (1968) discovered that phonics taught in conjunction with children's demands in tackling words outperformed both standalone phonics and no phonics. According to studies, phonics and phonics education are beneficial to the reader. Several other studies did not produce such clear positive outcomes. Naeslund (1955) investigated eighteen pairs of twins at the University of Stockholm. He saw no difference in methods employed with twins of normal and outstanding intellect but concluded that phonics was particularly efficient for educating the less gifted kid. Reading failure is also caused by a lack of awareness of letter names and sounds, according to the study (Emans, 1968).

The discussion on the development of the concept of phonics is pertinent to this study. The review of the literature reveals that there has traditionally been significant disagreement around the teaching of phonics. As a result, phonics training has sometimes been abandoned, only to be reintroduced later. However, each time phonics

was returned to the classroom, it was usually revised into something very different from what it was when it was discarded. Knowledge about the merits and challenges associated with the development of the concept of phonics and phonics instruction provides context for understanding the focus of the current research on the use of the phonics approach to teaching reading.

2.4 Phonics Instruction in Context

For English novices, learning to read is a difficult undertaking. To read effectively and fluently, they must coordinate numerous cognitive processes, including word recognition, sentence and text meaning construction, and memory retention. Learning the alphabetic system, including letter-sound correspondences and spelling patterns, is an important part of the process for beginners, as is learning how to apply this information in their reading (Sitthitikul, 2014). Systematic phonics education is a method of teaching reading that emphasizes the learning of letter-sound correspondences and their application to reading and spelling words (Ehri et al, 2001).

The heated argument about beginning reading teaching in recent years, particularly at the first-grade level, is consistent with a half-century of disagreement over what works best in developing young readers (Lundberg, 1998). According to him, most of the present dispute in first grade has been between those who prefer explicit education of basic reading abilities, particularly phonics instruction and others who favor the whole language philosophy. Many factors have influenced the choice of instruction methods in education, particularly in the teaching of reading, over the years, including not only teachers' own frontline experiences about what works, but also politics, economics, and popular wisdom of the day (National Reading Panel, 2000). Meanwhile, substantial scientific evidence claiming to shed light on reading acquisition processes and effective

instructional approaches has accumulated (Sitthitikul, 2014). When educators consider the components of good reading programs for children today, phonics teaching receives a lot of attention. Over the last two decades, research has confirmed the importance of phonics and its relationship to reading acquisition (Snow, 2021). According to Sitthitikul (2014), the existence of phonological awareness is a distinguishing feature of competent readers, whereas its lack is a constant feature of bad readers. In short, issues with verbal sound perception, coding, and retrieval have strong and long-lasting repercussions on reading. However, the most encouraging lines of research show that significant gains in phonological awareness can be achieved through teaching and that these gains have a direct impact on the ease of reading acquisition and subsequent reading achievement (Smith, Simmons, & Kameenui, 1998). Thus, reviewing phonics instruction is important and interesting so that teachers can learn more from it and determine whether this instruction lives up to these claims. Many studies on the efficacy of phonics instruction have contributed to this body of evidence. Correlational studies have identified phonemic awareness and letter knowledge as the two strongest school-entry indicators of how well children would learn to read during their first two years in school, according to the National Reading Panel's report (2000). This study demonstrates that teaching phonics to youngsters may be beneficial educationally. Furthermore, numerous experimental studies have been conducted to assess the effectiveness of phonics instruction in facilitating reading acquisition. The results are said to be positive and give a scientific basis for proving the effectiveness of phonics training (National Reading Panel, 2000).

The scientific community is generally agreed that systematic phonics should be emphasized in early reading education in English (Bowers, 2020). That is, first reading teaching should directly and methodically teach letter-to-sound (grapheme-phoneme)

correspondences. This is in contrast to the major alternative technique known as whole language, in which students are encouraged to focus on the meanings of words contained in meaningful text and letter-sound correspondences are only taught incidentally when necessary (Moats 2000).

Phonics instruction is a type of instructional activity that tries to help beginning readers and writers understand how letters are related to sounds to develop letter-sound connections and spelling patterns that they may later utilize in their reading and writing (Chen et al, 2022). According to Thompson and Fletcher-Flinn (2012), such instruction should be clear as well as systematic. The clear and methodical presentation of letter-sound correlations to learners is more successful than asking them to find hidden rules. Furthermore, systematic instruction entails gradually introducing sounds and skills and progressing from the simple to the complicated (Thompson and Fletcher-Flinn, 2012). Explicit and systematic phonics training is congruent with the Bottom-Up Theory of the Reading Process, which claims that phonics instruction should go from simple to difficult processes via direct instruction (Amadi, 2019).

2.5 Necessities of Phonics Instruction in Context

According to Chen et al (2022), English vocabulary items are regular and decodable; nonetheless, before beginning to read, learners must comprehend the link between sound and text. According to the Bottom-Up Theory of the Reading Process, reading is a linear process that begins with important visual information in print and advances progressively from the most basic linguistic units to the more complicated ones (Amadi, 2019). Beginners must first acquire the fundamental sub-skills of a language before they can grasp its more complex linguistic components. As a result, direct, explicit, and gradual training in synthetic phonics may help language novices avoid such problems

(Amadi & Offorma, 2019). Phonics is concerned with the decoding rules that regulate letter pronunciation or spelling patterns. Beginners may recognize unknown words by following basic decoding guidelines (Chen et al, 2022). They can articulate the letters when they imagine them as words. They can spell unknown words when they hear them for the first time (Bald, 2007). Because the primary goal of phonics instruction is to help beginners learn to read, it can help them achieve reading fluency.

Second, via phonics training, novices learn how to decipher words that conform to these regular connections. When beginners master the basic phonics decoding rules, they make rapid progress toward literacy. Phonics allows beginners to learn to read and write more words faster than they would otherwise. As a result, early reading teaching must include phonics training. Early skill in sounding out words is a strong predictor of future decoding and comprehension growth (Sailors and Price, 2015). As decoding skills improve and an increasing number of words can be visually recognized, less mental energy or capacity is required to decode words, allowing more mental energy (capacity) to be devoted to extracting meaning from text (Sailors and Price, 2015). Early decoding skill is important because it predicts subsequent reading comprehension development.

Third, as Chen et al (2022) explain, knowing phonics improves beginners' spelling skills. Reading and spelling are intricately related and mutually beneficial habits (Bald, 2007). The process of reading written words is known as phonics decoding, whereas spelling is the process of encoding a word. To put it another way, when spelling, novices must match a spelling to each sound heard in the word. Spelling development usually follows reading growth. Beginners' visual attention is necessary to distinguish words that are remembered. Spelling, on the other hand, requires a greater recall of visual information than reading and places a significant burden on memory. According to Sailors and Price (2015), a good speller is also a good reader. Competent spellers do

not need to memorize dictionary terms; instead, they comprehend decoding and encoding rules as well as sight words. In general, phonics training aids both beginners and individuals who struggle with reading. According to Chen et al. (2022), this strategy is advantageous to everyone and detrimental to no one. As a result, phonics education with beginning readers is required.

2.6 Role of Phonics in Reading Instruction

Fluent word recognition abilities are required for the development of strong reading comprehension (Connelly et al, 2001). They claimed that teaching with phonics input progresses beginning readers more quickly than teaching without phonics input.

Phonics instruction is characterized by Connelly et al (2001) as explicit teaching concerning specific letter-sound correspondences, their sequences (including spelling patterns), and the pronunciation of associated sounds.

Connelly et al. (2001) researched to see if two groups of 6-year-old beginning readers taught to read using phonics and a "book experience" non-phonics method differed in reading comprehension and word identification processes. Even though the two groups were matched on word recognition, the phonics-taught youngsters exhibited superior reading comprehension. Phonics-taught youngsters made more contextually acceptable mistakes and made more voiced efforts to read unknown words in both single-word and text reading. In several of these studies, phonics-taught starters comprehended what they read better than non-phonics-taught students. The study discovered that phonics instruction created readers who had an advantage in word recognition and had greater levels of comprehension and vocabulary by the end of a second grade than children taught using alternative approaches such as 'look-say'. Bond and Dykstra (1967) reported a more mixed picture in the cooperative study program, but the overall results

demonstrated that phonics was related to faster development of word recognition and, in certain circumstances, greater comprehension levels by the beginning of third grade. Adams (2004) also cites further research that she believes supports the conclusion that phonics education promotes faster word recognition and comprehension development than non-phonics teaching regimens. As a result, in studies where phonics-taught children performed better in reading comprehension, they also performed better in word recognition than non-phonics-taught children. It may be claimed that the beginner's advantage in reading comprehension is completely attributable to phonics-taught children outperforming non-phonics-taught children in word recognition.

On the other hand, the advantage in reading comprehension may be related to the distinct processing strategies used by novices who receive different modalities of reading training. Several studies have found that the method of reading instruction affects children's early reading and how they process written information. Seymour and Elder (1986), for example, discovered that children taught using a "whole word" strategy, which required studying lists of terms, were unable to read words outside of their classroom learning set in their first year of reading. The children were severely restricted in their vocabulary exposure and had little letter sound knowledge at the end of their first year. They had so limited word recognition abilities that several of them had difficulties reading the taught classroom words on the various mediums of a computer screen. These youngsters were dubbed "logo-graphic readers" by Seymour and Elder (1986).

Connelly et al (2001) compared the phonics approach and the whole language (book experience) approach to teaching reading. Their research found that children who were taught phonics were slower readers but used more letter-sound information to construct pronunciations for written words, to the point where it became a disadvantage. The

study found that when matched on word recognition, children who received phonics were better at reading comprehension than children who did not get phonics. The two groups of beginning readers employed different types of processing for word recognition. In both nonword reading and phonemic awareness, the phonics group outperformed the non-phonics group. They were also better at reading words with ordinary letter-sound correspondences but worse at reading words with exceptional correspondences than the non-phonics group. All of these data indicate that phonics-taught children do better in explicit phonological recoding. Despite reading text at a much slower rate, the phonics group performed better than the non-After reading, the phonics group should answer questions regarding the text.

Why is slow reading phonics taught to youngsters more effectively? When students came across an unknown term, they sought to figure it out by sounding it out to tailor their reaction to the tale context. The increased number of contextually acceptable mistakes made by phonics-taught children that are graphemically similar to the target word, as well as evidence of their greater use of explicit phonological recoding, imply this method. This approach may assist students to think about the tale while sounding out words and ensuring that their replies are appropriate for the context. The method would result in a greater rehearsal of the story's material as the reading progressed. As a result, even though the phonics-taught youngsters read slower, they grasp and recall more about the tale.

When trying to figure out unfamiliar words, non-phonics taught children to produce more refusals. As their reading of the book progresses, they have fewer opportunities to rehearse the story's substance. The non-phonics-taught children's spoken mistakes were less likely to suit the context than the phonics-taught children. This may come as a surprise given the emphasis placed on using context for word identification in their

instruction. However, it is not surprising that they do not retain the context of the story as well as they should while reading the text. Individual variations in reading comprehension were not substantially connected with auditory vocabulary in the phonics group, but they were in the non-phonics group. To attain their more restricted grasp of the texts, the non-phonics group appeared to depend more on general verbal abilities.

2.7 Approaches to Teaching Phonics

According to Chen et al (2022), there are three primary techniques to teach phonics: synthetic phonics instruction, analytic phonics instruction, and analogy phonics instruction. Most recent arguments, according to Amadi and Offorma (2019), have centered on the relative efficacy of two separate techniques known as synthetic phonics education and analytic phonics training. However, if phonics instruction is narrowly defined as the planned, systematic, and explicit instructional activities used to assist learners in developing the letter-sound relationship, it only refers to the synthetic phonics instruction approach.

2.7.1 The Synthetic Phonics Instruction Approach

The synthetic phonics approach to teaching begins with teaching individual sounds and blending sounds to produce words (Chen et al, 2022). Beginners can translate letters into sounds and then combine the sounds to vocalize words using synthetic phonics education (Machin et al., 2018). Based on behaviorist approaches to reading teaching, Johnson (2017) built on the synthetic phonics method, sometimes known as direct or explicit phonics training. Language learners begin by recognizing letters, then go on to blending words and reading related text. More specifically, the names of letters are taught before their sounds in this educational strategy. Following that, decoding rules

are discussed, and the concept of blending sounds to make words is taught explicitly and gradually (Johnson, 2017). Finally, blending assignments are offered to help novices improve their word-reading skills. This method is consistent with the Bottom-Up Theory of the Reading Process (Amadi, 2019). The synthetic phonics instruction strategy, which has been described as direct, explicit, and easy to sophisticated, can be used to build decoding sub-skills and reach automaticity (Johnson, 2017). According to Chen et al. (2022), the synthetic phonics instruction strategy is explicit, systematic, and advantageous to everyone - especially struggling readers and those with minimal familiarity with the English language - while damaging none. Being explicit, as Chen et al (2022) stated, is that novices are openly and directly introduced to letter-sound correlations or the corresponding abilities. This method requires no prior knowledge or terminology, which some novices may lack. In this regard, explicit synthetic phonics instruction is excellent for Ghanaian beginners who are just beginning to study English in primary schools and lack both necessary abilities and acquired vocabulary. Furthermore, Chen et al (2022) clarified that being systematic entails teaching letter-sound relationships and new skills along a planned continuum from simple to complex. This involves going through previously learned skills to ensure mastery before moving on to new ones. In other words, start with well-known or mastered topics and work your way up to new ones. The bottom-up model (Johnson, 2017), often known as the bottom-up phonics instruction strategy, is used in the instruction (Chen et al, 2022). Furthermore, Chen et al (2022) has stated that significant research results support the efficacy of an explicit and systematic synthetic phonics instruction approach. Thus, synthetic phonics instruction may be the best approach to use with beginners because it allows students to learn phonemes first and then blend them to vocalize words, which is consistent with the Bottom-Up Theory of the Reading Process.

2.7.2 The Analytic Phonics Instruction Approach

According to Johnston and Watson (2007), the analytic phonics technique is also known as indirect or implicit phonics, and it is also known as the discovery or top-down approach on occasion. This method introduces learners to previously taught sight words and asks them to infer the letter-sound link. The assumption is that novices are already familiar with the sounds associated with the words provided. Beginners must then study the word list to uncover common points between the words, with a concentration on finding a comparable sound. When a common sound is recognized, the spelling of the sound might be explored. The usage of a certain sound for letters or clusters can then be generalized. As a result, this method is based on "known sight words" and is simple. Meanwhile, Chen et al. (2022) observed that phonics instruction takes place on three levels: the alphabetic layer, the pattern layer, and the meaning-morphological layer. The training may take a long time if all three levels are taught analytically using the analytic phonics instruction technique. Furthermore, students must have read extensively to develop their sight vocabularies and identify sound similarities between words (Parker, 2019). According to Goouch, & Lambirth (2008), analytic phonics training can take two to three years, but synthetic phonics can be taught in months. According to Bald (2007) and Parker (2019), this strategy encourages novices to explore and find letter-sound connections using a reasonably large vocabulary. Furthermore, the Top-Down Theory of Reading (Chen et al, 2022) holds that reading occurs naturally in a language-rich environment and thus indirectly or partially supports analytic phonics instruction. As a result, it is known as the top-down phonics education strategy, and it is less clear and direct than synthetic phonics training.

2.7.3 The Analogy Phonics Instruction Approach

Aside from the two most common phonics instruction approaches, synthetic phonics instruction and analytic phonics instruction, there is a third approach known as analogy phonics instruction (Chen et al, 2022). Although it is not a mainstream approach because approximately 16% of English words are not fully regular (Goouch, & Lambirth, 2008), some teachers use it as a secondary approach in conjunction with mainstream methods to help beginners learn how to decode irregular word sounds (Goouch, & Lambirth, 2008). Unknown words are detected using phonograms (word chunks or word families) in this method (Goouch, & Lambirth, 2008; Mason, 2010). A phonogram is a letter or collection of characters that represents a sound, phrase, or series of sounds but has no meaning. This method of teaching enables students to recognize new words based on components of words they have already learned. This method prioritizes the bigger unit of pronunciation above the particular phoneme (Chen et al., 2022). According to Goouch, & Lambirth (2008), phonograms have long been used in early reading and spelling as a rapid and effective teaching method. Furthermore, Chen et al (2022) considered the analogy instruction approach to be a pattern decoder, and beginners could gain access to more sophisticated phonetic principles through analogy. By analogy, phonograms might be used to obtain progressively precise recognition of particular sight words (Goouch, & Lambirth, 2008). However, as with any concept, some oppose it. Goouch and Lambirth, (2008) cautioned against utilizing the analogy phonics strategy with beginners. The emphasis in education should not be exclusively on phonograms for word recognition, as this technique provides novices with only a limited degree of independence in word analysis. The rationale for this phenomenon, according to Goouch and Lambirth, (2008), is that if learners are instructed to memorize phonograms visually, inadequate

attention may be provided to the core letter-sound connection. Because they are unfamiliar with the specific vowel and consonant phonemes, they may be unable to identify the letter-sound relationship in another unknown word. In that case, the development of the beginner's phonemic awareness may also be delayed (Goouch, & Lambirth, 2008). This is because blending is intrinsically tied to phonemic awareness, which, according to the Bottom-Up Theory of the Reading Process, should come before chunking during the early stages of reading (Aldhanhani & Abu-Ayyash, 2020). Phonemic awareness refers to the ability to intentionally modify and combine distinct phonemes in spoken language, typically when reading. Thus, if only the analogy phonics instruction approach is used for subsequent spelling activities, additional difficulties may arise because this process does not fully nurture the learners' phonemic awareness or pay enough attention to the specific phoneme. As a result, novices may struggle to recognize the letter-sound link when listening to the given word. Failure to recognize the letter-sound link may result in poor spelling ability (Goouch, & Lambirth, 2008). In any event, the comparison phonics strategy can help novices learn certain sight words or irregular words instead of normal ones (Bald, 2007; Goouch, & Lambirth, 2008). As a result, it may be viewed as a supplementary strategy that might be integrated into the continuum of systematic and explicit synthetic phonics education (Chen et al., 2022).

2.8 Challenges Teachers Face in Using the Phonics Approach

Phonics instruction is restricted in that it does not expose children to exciting reading and writing at the price of teaching particular reading and writing abilities methodically. In other words, it does not encourage young children to recite along with teachers who read aloud from engaging large-print books (Sitthitikul, 2014). Students may lack the desire and attention to read and write; thus, teachers must be aware of this shortcoming

and strive to make learning more engaging. Children, by nature, require both direct skill training and exposure to engaging reading. While understanding letter-sound correspondence is essential for skilled reading, effective instruction should also provide a supportive and tolerant environment in which to learn to read.

Furthermore, some may argue that sounding out words is too taxing on the human mind to process every letter of every word; as a result, phonics alone is insufficient to promote strong reading skills. This is because learning to read and write occurs within a social and political setting (Sitthitikul, 2014). To be more specific, in addition to cognitive and linguistic issues, social, cultural, identity, and political concerns influence language literacy development (Sitthitikul, 2014). When it comes to dealing with ethnicity, culture, gender, and other differences among students in the classroom, "teachers must create an environment that ensures that all learners see people from their identity group reflected positively in the instructional materials, pictures, books, and videos used in the classroom and throughout the school" (Sitthitikul, 2014). These variables have significant implications on self-esteem and motivation, which influence literacy development (Sitthitikul, 2014).

Mubanga et al. (2020) did research on the difficulties that English instructors experience while teaching reading using phonics and sight words. The study's findings suggested that some children fled in the early days of first grade when early reading was introduced, failing to deal with reading phonics and sight words. The other difficulty was the over-enrollment of students in the early grades because there were few government schools in the region, thus instructors were unable to pay attention to students with reading challenges owing to high pupil-to-teacher ratios. The survey also discovered a scarcity of acceptable quality teaching and learning resources for early-grade reading in primary schools.

2.8.1 Strategies teachers adopt to overcome challenges

Supporting early readers means making sure each child has an excellent teacher who is equipped with the resources and knowledge to support student learning (Oduro et al, 2021). Many districts are facing a teacher shortage or have new teachers working to hone their skills. Every teacher wants their learners to succeed. However, many teachers don't have the resources and knowledge to successfully support reading acquisition. Pointing out failing test scores makes teachers feel like failures. Providing research and methods that are proven to get kids reading helps teachers feel like there's a clear pathway toward success. The research shows that explicit and systematic phonics instruction is effective. Teachers want to be effective. By harnessing the power of technology to support phonics instruction, you're able to provide expert models for new and inexperienced teachers. When teachers are unsure of how to cue a sound, they can lean into technology to model for students until they feel like they have sufficient expertise to model the sound themselves. While new teachers are getting up to speed, leaning on technology can ensure kids are still getting the instruction they need without cementing any misunderstandings.

When you're adopting new programs or asking teachers to adjust their practice, make sure you're giving them adequate time and support to absorb what they're supposed to be teaching. It's important to ensure your reading programs come with ongoing professional learning opportunities. Ideally, professional development should be customized based on your goals and your teachers' level of expertise. Better yet, make sure you and other instructional leaders in your building are well-versed in the practices you're asking teachers to deploy so that you can model and answer questions at the moment. One of the reasons schools moved away from phonics-based instruction in the first place is that teachers felt it was rote, impersonal, and not culturally responsive. The

phrase “drill and kill” doesn’t exactly exude the vibe most of us think of or want for our kindergarteners, but that is (sort of) what a systematic approach to phonics instruction requires.

Oduro et al. (2021) advocates making phonics fun. That doesn’t mean phonics instruction can’t be fun, and it also doesn’t mean teachers can’t put their personality and style into practice. Thoughtfully adopted resources can move teachers away from the endless worksheets of old and toward activities that are both engaging and delightful while also being incredibly efficacious. Plus, high engagement means students will eagerly come back again for more. This step is obvious in theory, but tremendously challenging in practice. If some of our teachers are still learning about phonics instruction, parents are likely at a loss when it comes to supporting their children along the path to reading. That’s why finding resources that are effortless to use at home is so important. Similar to using technology to model for teachers, technology at home can act as a model for caregivers and make at-home learning more manageable (Oduro et al, 2021). Parents can easily connect to a teacher’s classroom account, and kids can work at home on phonics activities assigned by their teacher. Data appears instantly in the teacher reports, which means there’s no lost information between home and school. In addition to sharing instantly deployable resources, it’s helpful to give caregivers an overview of how children develop reading skills. offer a high-level view of reading acquisition, as well as practical and proven strategies that are backed by reading science and are fun for parents and kids.

2.9 Chapter Summary

This chapter has looked at the theoretical framework where two theories of reading were used. The first was the bottom-up and top-down theories of reading. The synthetic phonics, analytic phonics, and balance phonics approaches were discussed. The second theory used was the sociocultural theory of Lev Vygotsky, particularly the concepts of the zone of proximal development, scaffolding, and mediation. The theories helped to clarify the research objectives and were helpful in deciding on the research methodology. The chapter also reviewed literature on concepts pertinent to the study, including the concept of phonics, approaches to teaching phonics, challenges teachers face in using the phonics approach, and the strategies teachers adopt to address these challenges.

CHAPTER THREE

METHODOLOGY

3.0 Overview

This chapter describes the research methodology that was used to generate data for the study. The chapter provides a description of the research paradigm, the research design, the population of the study, the sample, and sampling techniques. Research instruments, data collection procedure, and data analysis procedure.

3.1 Philosophical Underpinning

The study was guided by the interpretive paradigm. The interpretive belief is that reality is constructed intersubjectively through the meanings and understandings developed socially and experientially (Johnson, 2008). The interpretivist assumes that we cannot separate ourselves from what we know. The investigator and the object of investigation are linked such that who we are and how we understand the world is a central part of how we understand ourselves, others, and the world. They rely heavily on naturalistic methods such as interviews, observations, and analysis of existing texts. These methods ensure an adequate dialog between the researchers and those with whom they interact to collaboratively construct a meaningful reality.

Interpretivism arose as a result of a subjective critique of positivism. Interpretivism is more concerned with in-depth variables and aspects associated with a context; it regards humans as distinct from physical phenomena in that they provide greater depth in meanings on the belief that human beings cannot be investigated in the same manner that physical phenomena can. As a result, social sciences research necessitates this separation and should be distinct from natural sciences research. Interpretivism analyses distinctions such as cultures, conditions, and periods that contribute to the

emergence of various social realities. Interpretivism seeks to incorporate richness in the insights acquired rather than seeking to establish clear and universal principles that can be generalized and applied to everyone independent of some crucial characteristics and aspects (Alharahsheh & Pius, 2020).

As previously noted, interpretivism is more sensitive to individual meanings and contributions rather than being compromised by positivist research philosophy. However, interpretive research may be criticized because it rejects knowledge developed as a foundation base shared as a universal law, calls its validity into question, and requires a different set of criteria than the positivist paradigm. Furthermore, as a paradigm, interpretivism assumes that reality is subjective and can differ depending on the individual. As a result, it is possible to conclude that research participants would not give broad interpretations (Alharahsheh & Pius, 2020). The interpretivism paradigm can provide a thorough understanding of specific contexts, such as cross-cultural studies, and factors influencing specific development through the collection and interpretation of qualitative data, leading to deep insight and conclusions (Myers, 2017). Adoption of the interpretivism paradigm would result in the generation of high-level validity in data because it is based on personal contributions while taking into account various variables (Myers, 2017). The interpretative paradigm would allow researchers to evaluate many things such as behavioral features based on participant experiences, which would aid in describing reality given the interpretive researcher's assumptions and ideas. Furthermore, the interpretivism paradigm would allow researchers to treat the research context and situation as unique in light of the given circumstances as well as the participants involved. This paradigm would also encourage research to be more focused on a single issue, as opposed to the positivist paradigm's emphasis on generalization (Alharahsheh & Pius, 2020). The interpretative paradigm

allows researchers to delve further into individual experiences through formal discussions and interviews. In-depth examination of human experiences using qualitative designs and approaches. It would allow users to experience a vital component and contribute to scientific study. It would also allow researchers to probe deeper into individual experiences rather than relying on broad metrics or expectations as provided by the positivist paradigm. As a result, based on the attributes that the interpretivism paradigm permits researchers to have, qualitative techniques are the most suited approaches for gaining deep insights based on a specific context (Alharahsheh & Pius, 2020).

The interpretive paradigm was founded on the premise that methods used to grasp knowledge in human and social sciences could not be the same as those used in physical sciences because humans interpret their reality and then act on that interpretation, whereas the world does not (Hammersley, 2013, p. 26). As a result, interpretivism adopts a relativist ontology in which a single phenomenon might have numerous interpretations rather than a truth that can be verified by a measuring procedure. Essentially, from an interpretivism standpoint, researchers prefer to get a deeper grasp of the phenomena and their complexities in their context rather than attempting to generalize the foundation of understanding for the entire community (Creswell, 2007). Similarly, Hammersley (2013) emphasizes that because multiple interpretations emerge in human relationships, interpretive researchers should strive to understand "the diverse ways of seeing and experiencing the world through different contexts and cultures" and avoid bias when studying events and people with their interpretations. In this regard, several advantages of this paradigm will be outlined in the following discussion. The first benefit is that interpretative researchers may explain things, individuals, or events from a variety of perspectives. Essentially, from an interpretivism standpoint,

researchers prefer to get a deeper grasp of the phenomena and their complexities in their context rather than attempting to generalize the foundation of understanding for the entire community (Creswell, 2007). Similarly, Hammersley (2013) emphasizes that because multiple interpretations emerge in human relationships, interpretive researchers should strive to understand "the diverse ways of seeing and experiencing the world through different contexts and cultures" and avoid bias when studying events and people with their interpretations. In this regard, several advantages of this paradigm will be outlined in the following discussion. The first benefit is that interpretative researchers may explain things, individuals, or events from a variety of perspectives. Despite the above-mentioned key strengths, this paradigm has some drawbacks. One of these limitations is that interpretivism aims to gain a deeper understanding and knowledge of phenomena within the context's complexity rather than generalizing these results to other people and other contexts, leaving a gap in verifying the validity and usefulness of research outcomes with scientific procedures. The second critique leveled about interpretivism is that its ontological perspective is subjective rather than objective (Pham, 2018). As a result, study conclusions are certainly influenced by the researcher's interpretation, personal belief system, methods of thinking, or cultural preference, resulting in an excessive number of biases. The final weakness of interpretivism is its failure to handle political and ideological issues.

3.2 Research Approach

The qualitative research approach was used in this study. According to Tenny et al. (2017), qualitative research is a type of study that investigates and delivers deeper insights into real-world situations. Rather than gathering numerical data points or intervening or adding treatments, as in quantitative research, qualitative research assists

in the generation of hypotheses as well as the further investigation and understanding of quantitative data.

Qualitative research collects information about individuals' experiences, attitudes, and behavior. It explains how and why rather than how many or how much. It might be designed as a stand-alone study depending solely on qualitative data, or it could be part of a mixed-methods study combining qualitative and quantitative data. At its essence, qualitative research asks open-ended questions with non-numerical responses, such as "how" and "why." Because of the open-ended nature of the research questions, qualitative research design is not always linear in the same way that quantitative research design is. One of the qualitative research's strengths is its ability to describe processes and patterns of human behavior that are difficult to measure. Experiences, attitudes, and actions might be difficult to quantify, but a qualitative method allows participants to describe how, why, or what they were thinking, feeling, and experiencing at a certain moment or during an event of interest (Tenny et al, 2017). By conducting interactions with study participants in a natural environment, qualitative research offers a comprehensive understanding of rich, contextual, and typically unstructured, non-numerical data (Ponelis, 2015).

The researcher sought to examine teachers' knowledge about the phonics approach in teaching reading in the early childhood centers in the Bolgatanga Municipality. Given this, what they know and their experiences will be better understood by collecting qualitative data either through observation or discussion. The research sought to examine how teachers combine other approaches with the phonics approach to teaching reading in early childhood centers in the Bolgatanga Municipality. Seeking an in-depth understanding of this objective requires that the researcher observe first-hand the approaches teachers used, including how they combined other strategies with the

phonics approach to teach reading. Finally, researching teachers' perspectives on the challenges they faced in the implementation of the phonics approach and the strategies available for them to deal with those challenges can be best accomplished through the collection and analysis of qualitative data, since qualitative research collects information about individual experiences, attitudes, and behaviour.

3.3 Research Design

The design employed in this study was an exploratory case study design. The case study provided the researcher with in-depth information on the study for a clearer understanding of the use of the phonics approach in teaching reading in early childhood centers in the Bolgatanga Municipality. The case study method is especially beneficial when it is necessary to gain an in-depth understanding of a topic, event, or phenomenon of interest in its natural real-life setting (Crowe et al, 2011). A case study is a research method used to develop an in-depth, multifaceted understanding of a difficult subject in its real-world setting. It is a well-established research design that is widely utilized in many fields, notably the social sciences. A case study can be described in a variety of ways, with the basic idea being the necessity to thoroughly investigate an event or occurrence and its natural setting. As a result, it is frequently referred to as a "naturalistic" design, as opposed to an "experimental" design (such as a randomized controlled trial), in which the investigator attempts to exercise control over and influence the variable(s) of interest. Case studies, according to Yin (2009), may be used to explain, describe, or analyze occurrences or phenomena in their everyday contexts. These can aid in understanding and explaining causal links and pathways resulting from a new policy initiative or service development, for example.

The researcher sought to explore teachers' knowledge about the phonics approach in teaching reading in the early childhood centers in the Bolgatanga Municipality and find out other approaches that they combine with the phonics approach to teaching reading and this requires the researcher to observe participants in their natural setting. This will help the researchers to understand the phenomena under study. Also, for the researcher to find out the challenges teachers face in using the phonics approach and the strategies available for them in dealing with the challenges that they face, the researcher would need to have a face-to-face discussion with them either individually or focus group to get in-depth information.

3.4 Population

A population is an entire group about whom the researcher wishes to make conclusions. A population may alternatively be defined as all the items or occurrences of a specific sort about which researchers want to learn more. The target population for this study was two hundred and forty-eight (248) teachers from fifty-nine (59) early childhood centers in the Bolgatanga municipality. The accessible population were fourteen (14) teachers from five (5) early childhood centers in the central 'A 'circuit in the Bolgatanga Municipality.

3.5 Sample and Sampling Techniques

Sampling is the selection of a group of people from a population to estimate the characteristics of the entire population. The two primary advantages of sampling are that it allows for quicker data collection and reduced cost (Singh & Masuku, 2014). A sample is a specific group from whom researchers collect data. The size of the sample is usually less than the total size of the population. However, in cases where the entire population is sampled, the sample size and the size of the population are the same, such

as when a census technique is used. The participants for the study were sampled from the central 'A' circuit in the Bolgatanga Municipality. There are five (5) early childhood centers in the central 'A' circuit. All fourteen (14) teachers from the five early childhood centers were selected for the study.

The researcher used the critical case sampling technique for the study. Critical case sampling is a type of purposive sampling technique that is useful for qualitative exploratory studies as well as studies in which a single case or a small number of cases can be significant in explaining the phenomenon being investigated (Shaheen, Pradhan & Ranajee, 2019). The critical case sampling technique is appropriate for this study for two reasons. First, it fits the study's exploratory case design. Second, the five schools selected for the study and the teacher participants serve as a limited number of cases that can help to explain the phenomenon of using phonics to teach reading in the Bolgatanga Municipality. Although findings gleaned from the participants' responses cannot be generalized to the larger population, they can be explained logically to help stakeholders appreciate what happens in other childhood centers in the municipality.

The researcher engaged participants who had been teaching with the phonics approach for not less than five years as the criteria for the selection. The central 'A' circuit in the Bolgatanga Municipal has five early childhood centers and according to the early childhood coordinator of the Municipality, workshops have been organized every year for teachers especially newly posted teachers on the phonics approach. And also, teachers in the central 'A' circuit were the first to receive training in the Bolgatanga Municipality. Information gathered from the municipality showed that there were at least two teachers in each center were part of those who received the first training and had taught with the phonics approach for not less than five years. All fourteen (14) teachers in the five early childhood centers were selected through the critical case

sampling technique. Table 3.1 shows the distribution of participants according to their schools.

Table 3.1: Distribution of Participants

School (Research Site)	Number of Participants
School A	3
School B	4
School C	3
School D	2
School E	2
TOTAL	**14**

3.6 Data Collection Instrumentation and Procedure

The instruments used for this study were an observation checklist and a focus group discussion guide. The researcher observed the study participants in their natural settings and used focus group discussion to obtain in-depth information about the participants on the use of the phonics approach to the teaching of reading.

Creswell (2005) urges researchers undertaking a study to seek and acquire permission from the authorities in charge of the study location because it entails lengthy and substantial data collecting. A letter of introduction was received from the Head of the Department of Early Childhood at the University of Education, Winneba to facilitate this process. The instruments were administered after obtaining permission from the Municipal Director of Education of the Bolgatanga Municipality and the heads of the sampled schools.

3.6.1 Observation Checklist

An observation checklist is a document that provides a set of questions that an observer must answer while observing or evaluating someone's performance, abilities, and other criteria. It assists an observer in identifying skill gaps and issue areas to enhance teaching tactics, classroom environments, and student learning progress. An observation checklist is used in research to capture data on certain behaviors or occurrences that researchers want to explore. They apply to both quantitative and qualitative research methodologies. Observation checklists are useful in a variety of domains, including education, psychology, sociology, and anthropology.

A checklist of observations is used to answer a research question based only on what the researcher observes. There is no intervention or manipulation of study volunteers, and there are no control or treatment groups. An observation checklist is a collection of questions that an observer will look for when doing a specific observation of a classroom. This checklist is frequently provided to teachers to verify that there is clear communication between the instructor, the pupils, and the classroom observer.

Observation is often performed in a classroom to ensure that the instructor is utilizing appropriate teaching methods and that the students are learning in the best possible atmosphere. An observation is not intended to condemn a teacher, but rather to assist the instructor in improving on several tasks that may not be completed in the most effective manner feasible. Teachers should always inform students that there will be an observer in the classroom and be transparent about the observer's objective. This ensures that the pupils are not frightened of the observer and will behave as they normally would in the classroom.

The researcher designed the observation checklist and visited to observe each participant as they used the phonics approach to teach reading. The researcher as well observed how the participants combined other approaches with the phonics approach to teaching reading in the early childhood centers in the Bolgatanga Municipality. The researcher visited the centers one after the other to observe teachers as they taught. The researcher spent a whole day in each center to observe teachers' lessons on phonics and recorded her observations.

3.6.2 Focus Group Discussion Guide

Focus group research is defined as "a method of gathering qualitative data that entails engaging a limited number of people in an informal group conversation (or talks), 'focused' on a certain topic or collection of topics" (Onwuegbuzie et al, 2009). According to Onwuegbuzie et al. (2009), focus group discussion is a strategy for gathering qualitative data that brings together research participants to discuss a certain issue. The questions are open-ended to stimulate an informal debate and investigate people's opinions in greater depth than a survey allows.

The focus group discussion was conducted in the central 'A' circuit in the Bolgatanga municipality. Selected participants were grouped based on their location. Studies have shown that participants in focus group discussions range from two to twenty-one (Nyumba, Wilson, Derrick & Mukherjee, 2018). The fourteen participants for this research were grouped into five as follows; school A, three participants, school B, four participants, school C, three participants, school D, two participants and then school E, two participants. Each group discussed the topics in the guide such as teachers' knowledge about the phonics approach, other approaches combined with the phonics approach, the challenges teachers faced in using the phonics approach, and the

strategies available for them in dealing with the challenges that they faced. The researcher asked open-ended questions that allowed participants to bring their views and express themselves on the issue in detail.

3.6.3 Pilot Testing

A pilot test was conducted before the actual study to validate the research instruments. This was carried out in five early childhood centers in the Bolgatanga East District. School 1, School 2, School 3, School 4, and School 5 in the Bolgatanga East District were selected for the test because of their similarities to the schools in the actual study. The purpose of the pilot test of the focus group discussion guide and the observation checklist was to help avoid ambiguities and poorly worded questions, and also to make sure that the instructions to respondents were clear. The reason for the study was to validate the instruments for the main data collection. As a result of the pilot test, the wording of the items on the observational checklist and focus group discussion guide that seemed unclear were properly reviewed and made clearer. Appropriate revision was made to the instruments based on the outcome of the pilot test.

3.7 Methods of Data Analysis

The data from the observation and focus group discussion were analyzed using thematic and cross-case analyses. The data was first transcribed and coded. The researcher then categorized the codes and developed the themes, which were discussed and compared across cases.

3.7.1 Thematic Analysis

Maguire and Delahunt (2017) define thematic analysis as a way of examining qualitative data. It is frequently used to describe a group of texts, such as an interview or transcripts. The researcher carefully analyses the data to uncover common themes—

topics, concepts, and meaning patterns that appear again. Thematic analysis is an excellent research method in which the researcher attempts to learn anything about people's ideas, opinions, knowledge, experience, or values from a collection of qualitative data, such as interview transcripts, social media profiles, or survey results (Maguire & Delahunt, 2017).

Thematic analysis is the process of examining raw data obtained via the process of qualitative research to uncover the essential information and trends from the collected data (Maguire & Delahunt, 2017). They went on to say that in theme analysis, qualitative data is collected, converted, structured, and analyzed to make raw data valuable by finding key bits of information.

The researcher, first of all, prepared the data that was collected through the observation checklist and the focus group discussion from early childhood centers in the Bolgatanga Municipality. The data was then coded and categorized. The researcher finally developed the themes from the categorized data.

3.7.2 Cross-Case Analysis

A cross-case analysis is a process that entails an in-depth examination of similarities and differences between examples to establish empirical generalizability and theoretical predictions. The cross-case analysis is focused on making cross-case comparisons to determine what is similar and unique in the situations (Ponelis, 2015). This level of analysis can lead to a coherent description across examples, categories, themes, or typologies that conceptualize the data across all cases, or it can lead to the development of a substantive theory that provides an integrated framework encompassing many cases (Ponelis, 2015). Qualitative content analysis is a popular approach to cross-case analysis. The researcher searches for "quotations or observations

that go together, that are instances of the same underlying idea, topic, or concept" in the data when doing qualitative content analysis (Ponelis, 2015). The topics and classifications are built using code, and researchers can take several ways. The data collected from the early childhood centers in the Bolgatanga Municipality was studied across cases and grouped according to similarities and differences in the responses of participants. The data was now given codes based on the concept.

3.8 Validation of Instruments: Trustworthiness Criteria

Trustworthiness is about establishing the validity and reliability of qualitative research (Guba 1981 cited in Krefting 1990). Qualitative research is trustworthy when it accurately represents the experiences of the study participants. Yin (2018) defines trustworthiness as the ability to triangulate data and sustain a chain of proof. According to Yin, having different data sources allows for the capturing of a greater diversity of viewpoints, actions, and attitudes. The degree to which the research properly portrays participants' views, attitudes, and actions is referred to as research credibility. Credibility is derived from the researcher's awareness of any personal biases that may influence the research. It is critical to discuss any personal biases and how they may affect the study. It is also necessary to outline how these biases will be reduced. Confirmability in qualitative research entails reflexivity and the deployment of an audit trail that connects case data to study participant replies (Bloomberg & Volpe, 2018). To increase case study dependability, Yin (2018) proposed creating a chain of evidence. The researcher's integrity and credibility also influence reliability (Yin, 2018). Journaling is one method for creating trustworthiness and credibility since it allows for contemplation about the information gathered. Two criteria were used to measure the trustworthiness of the data collected: Dependability and Confirmability.

3.8.1 Dependability

Dependability is based on the quality of data collection and analysis, which is shown by demonstrating that the research systematically researched what it promised to explore (Lincoln & Guba, 1985). According to Yin (2018), dependability improves when procedural techniques are consistent throughout the investigation.

The researcher used an external audit to ensure dependability. A different person outside the research process to examine the processes of data collection, data analysis, and the results of the study to be sure that it tallies with what it intended. This helped to confirm the accuracy of the findings and to ensure the findings were supported by the data collected. The outsider researcher also examined the data interpretations and conclusions to determine whether they were supported by the data itself which was collected in the early childhood centers in the Bolgatanga Municipality.

3.8.2 Confirmability

Confirmability necessitates the use of an audit trail and chain of evidence so that the reader may be certain that the results are accurate and that the study was conducted with rigor and care. To ensure confirmability, the researcher wrote in detail the process of data collection, data analysis, and data interpretation. The researcher recorded unique topics that were immersed during the observation and focus group discussion. Also, codes derived from the data were recorded and the reason for merging some codes was explained as well as the meaning of each theme generated.

3.9 Ethical Considerations

The protection of participants and their responses will be assured through:

Informed consent, Anonymity, and Confidentiality. In doing this, the purpose and the possible benefits were mentioned to the participants. The researcher permitted participants to freely withdraw or leave at any time if they deemed it fit.

3.9.1 Confidentiality.

According to Hollweck (2015), another crucial aspect of qualitative research is confidentiality, and a researcher should never use the name of an organization as the location for her/his research unless granted formal approval to do so. In general, it is preferable to merely describe the organization rather than name it. Participants must be recognized as well, although not by name. Hollweck (2015) highlighted how challenging it is to ensure secrecy, particularly when obtaining data in a limited context or with a specialized group of people. Many studies employ an alphanumeric coding method that may identify the group to which the individual belongs but not the individual. For example, one may use a code in which the first number represents the interview number, the second letter represents the person's group, and the third represents gender. Furthermore, one must negotiate how he or she will keep the material private. This covers where data will be stored and how it will be disposed of once the dissertation is finished. The data should be available exclusively to the researcher and deleted three years after the dissertation is finished (Hollweck, 2015).

According to Hollweck (2015), confidentiality extends beyond the protection of participants' names. It is also necessary to determine how the data will be protected, both in written form and on the computer. All written data must be maintained in a lockable file cabinet that only the researcher has access to. Password protection was

used for computer data. Everything kept in a cloud database should be encrypted. The researcher made sure to keep participants anonymous and kept the personal information of respondents protected. Also, the researcher designed a form for all participants to sign to ensure that whatever was discussed during the focus group discussion never went beyond the venue of the discussion.

3.9.2 Informed Consent

According to Hollweck (2015) and Yin (2018), informed consent is the link of confidence between the researcher and the participants. It is the most crucial feature of any effective study since it ensures participants that their well-being will be preserved and that they can choose whether or not to participate in the research. There are various factors to consider while gaining informed permission from participants. First, the informed consent wording must be unambiguous and worded in a way that potential participants can comprehend. If you are dealing with someone from a foreign culture or for whom English is a second language, ensure that the informed consent form is understandable. Similarly, if you are working with someone who may be mentally deficient, ensure that this individual understands and signs the informed consent. According to Hollweck (2015) and Yin (2018), while obtaining informed consent, the researcher must examine numerous elements, including developmental factors, illness-related problems, psychological concerns, cultural and religious beliefs, and external influences.

The researcher obtained an introductory letter from the Department of Early Childhood Education, Winneba. A self-written letter introducing the researcher and the purpose of the study from the supervisor to the municipal director of education in the Bolgatanga Municipality. These letters were sent to the Bolgatanga Municipal Education

Directorate. The municipal director approved the researcher's visit with a letter introducing the researcher to the schools that the researcher was visiting. Participants were then allowed to either take part in the study or not.

3.9.3 Anonymity

The well-being and interests of research participants must be safeguarded. The identity of research participants will be concealed or blinded to the greatest extent practicable. People who read the research and the researcher will be unable to associate a certain response with a specific responder (Babbie, 2004). The names of those who took part in this study were not revealed; instead, code names were utilized. The genuine identity of the participants was not revealed in the recorded replies or the written report.

3.10 Chapter Summary

Discussing the research methodology provided a roadmap for collecting and analyzing relevant data in response to the research questions. Attention has been given to a description of the research paradigm, the research design, the population of the study, the sample, and sampling techniques. Decisions about the research instruments, data collection procedure, data analysis procedure, criteria for trustworthiness, and ethical choices have also been discussed. The next chapter presents a detailed analysis of the data and a discussion of the study's major findings.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION OF FINDINGS

4.0 Overview

This chapter deals with the analysis of data and the presentation and discussion of findings. The chapter is divided into two major parts. The first part deals with the presentation and analysis of data. The second part discusses the major findings in relation to the research objectives and questions, and light of existing literature and the theoretical framework of the study. The research addressed four main questions in relation to the use of phonics in teaching reading in early childhood centers in the Bolgatanga municipality. The questions focused on (1) teacher knowledge about the phonics approach in teaching reading in the early childhood centers, (2) how teachers in the early childhood centers combine different components of phonics to teach reading skills, (3) the challenges teachers face in using the phonics approach to teach reading, and (4) the strategies available to teachers in dealing with the challenges they face in using the phonics approach in teaching reading in the early childhood centers. Data to respond to these questions were collected through a focus group discussion guide and observation checklist. Fourteen (14) teachers from five early childhood centers in the Bolgatanga municipality participated in the study. The five schools were School A Kindergarten Center; School B Kindergarten Center; School C Kindergarten Center; School D Kindergarten Center, and School E Kindergarten Center. The qualitative data collected from these participants are analyzed in this chapter using two analytical procedures, namely, thematic analysis (Maguire & Delahunt, 2017) and cross-case analysis (Ponelis, 2015). The analyses follow a four-step strategy: (1) transcription of the data; (2) coding of the data; (3) development of themes (for thematic

analysis); and (4) a cross-case analysis and discussion of major findings. Details of these analytical strategies are discussed in the subsequent sections of the chapter.

4.1 Transcription of Data

Transcribing "is an interpretive process" and one of the first steps in analyzing qualitative data (Bailey, 2008, p. 127). The researcher after recording the audio data during the focus group discussion in each early childhood center, played the audio one more time for participants to listen and be sure of what was recorded. The researcher asked participants whether after transcribing the data should be sent to them to read through but they insisted that it was okay since they would not get the time to go over the text. The researcher used verbatim transcription where the exact words said by participants were listened to and put into writing (McMullin, 2023). The researcher took three weeks to transcribe the data since it had to be done center by center. After transcribing the data, the researcher listened to it over and over again to be sure it was the exact words written down. The transcribed data were then given to a third party to listen to the audio and read through the written text to be sure it was correct.

4.2 Coding of the Data

The researcher adopted a two-step coding strategy by using one first-cycle coding method and one second-cycle coding method (Saldaña, 2016). First-cycle coding methods are "those processes that happen during the initial coding of data" (Saldana, 2016, p. 68). It is a way "to initially summarize segments of data" (Saldaña, 2016, p. 234). Examples of first-cycle coding include attribute coding, structural coding, in vivo coding, and evaluation coding. This research uses structural coding as a first-cycle method. Second-cycle coding methods are advanced ways of reorganizing and reanalyzing data coded through first-cycle methods. Saldaña (2016, p. 234) explains

that the "main goal during second cycle coding is to develop a sense of categorical, thematic, conceptual, and/or theoretical organization from [the researcher's] array of first cycle codes." Examples of second-cycle coding methods include focused coding, theoretical coding, and pattern coding. This research adopts pattern coding as a second-cycle method.

4.2.1 First Cycle Coding: Structural Coding of the Data

Namey et al. (2008, p. 141) define Structural Coding as question-based coding that "acts as a labeling and indexing device, allowing researchers to quickly access data likely to be relevant to a particular analysis from a larger data set." Structural Coding applies a content-based or conceptual phrase representing a topic of inquiry to a segment of data that relates to a specific research question used to frame the data collection procedure (MacQueen et al., 2008, p. 124; see also MacQueen et al., 2009). The similarly coded segments are then collected together for more detailed coding and/or analysis (Saldaña, 2016, p. 98). An example of Structural Coding developed for this study is presented in Table 4.1.

Table 4.1: Structural Coding of Data from Focus Group Discussion

Question-Based Codes	Excerpt Data from Focus Group Discussion
Research Question 1: What is the knowledge of teachers about the phonics approach in teaching reading in early childhood centers? Structural Code TEACHERS' KNOWLEDGE OF PHONICS	EXCERPT 1: *Phonics is an interesting area when it comes to reading and writing. Why am I saying so? Phonics has come to help at the early childhood centers for children to be able to read and write through the identification of the letter sounds* (F2, School A Kindergarten). EXCERPT 2: **Researcher:** *Have you heard of synthetic phonics, analytic, and analogy phonics before?* **F2:** *Explain to us so we know what it means* (School A). EXCERPT 3: *I think phonics and letter sounds help the children learn how to read and pronounce*

	words correctly. For example, on the blending side when you use the letter sounds to blend the word the children get it more than when you are using the letter names (S1b, School B).
Research Question 2: How do teachers in the early childhood centers combine different components of phonics to teach reading skills? Structural Code: COMBINING DIFFERENT COMPONENT OF PHONICS	EXCERPT 4: *To me, I use the three to teach. If I am teaching the simplest one then I use the synthetic or when I get to a difficult sound then I use the three* (S1a, School B). EXCERPT 5: *With me what I think is that in teaching you cannot just say I want to use this particular one alone but from the reaction of the children that leads you to what you are supposed to use. … the strength of the children will lead you to choose either synthetic, analytic or the three at a time* (Ch2, School C). EXCERPT 6: *We combine with the analogy but the kids get the synthetics faster* (Qe2, School E).
Research Question 3: What challenges do teachers face in using the phonics approach in teaching reading in the selected early childhood centers? Structural Code: CHALLENGES IN IMPLEMENTING PHONICS	EXCERPT 7*: Personally, as a teacher eehh the phonics I can say that apart from the first is it during curriculum training that we did it that was all. There is nothing like another training or reminder of phonics so what we learned three to four years ago is what we are using and I want to believe there have been changes and this makes our teaching one way if there are changes and we don't know it won't help. Not all concepts of phonics I have grasped the little that I know is what I manage to teach the children When I don't know I ask my colleagues (Ch1b, School C).* EXCERPT 8: *Yes, we face a lot of challenges. We don't have the TLRs (Pp2, School D).* EXCERPT 9: *Using phonics in teaching sometimes the children when you teach them the letter sounds and you are coming to the blending find it difficult to read the words that you have written down. That is my problem (S1b, School B).*
Research Question 4: What strategies are available for teachers in dealing with the challenges they face in using the phonics approach in teaching reading in early childhood centers?	EXCERPT 10: *As a strategy you don't know that particular letter sound; the next is to contact your colleague teachers If the person is good at it she will help you teach that particular letter sound Besides that, there are Android phones and smartphones have come and this App is everywhere so we have downloaded the App to aid us to identify*

	some of this sounds which aid us to teach in the classroom. We have downloaded the App as a guide and is helping us (F2, School A).
Structural Code: STRATEGIES TO ADDRESS CHALLENGES	EXCERPT 11: *Cluster-based training can be organized for us and I know they wish to but because capitation is not given it makes things difficult (Qe2, School E).*
	EXCERPT 12: *I think more workshops should be organized regularly for us to know the changes that have been taking place in the phonics approach. Those days when we went to learn are not the same as today so if the workshop is organized all the time to know the changes that have taken place in phonics. It will help us (S1b, School B).*

Table 4.1 shows how research questions can serve as codes for organizing research data. As seen from the Table, four major codes were derived from the four research questions for the study. Following this, excerpts from the responses of the participants from the various schools were organized according to the codes. As stated earlier, such structural coding helps to prepare the data for more detailed coding through second-cycle coding methods. This study uses Pattern Coding as a second-cycle coding method.

4.2.2 Second Cycle Coding: Pattern Coding

Pattern Coding, as a second-cycle method, helps to group the summaries and segments generated through first-cycle coding into a smaller number of categories, themes, or concepts. Saldana (2016, p. 236) explains that Pattern Codes are ones "that identify an emergent theme, configuration, or explanation" They bring together a lot of material from first-cycle coding into more meaningful and manageable units of analysis. Miles et al. (2014, pp. 86–93) also indicate that Pattern Codes are appropriate for the development of major themes from the data, the search for causes and explanations in the data, and for laying the groundwork for cross-case analysis by generating common

themes and directional processes. In short, using Pattern Coding supports both thematic analysis and cross-case analysis, two strategies identified as analytical procedures for this study (see Chapter Three).

Table 4.2 Pattern Coding of Data from Focus Group Discussion

Research-Based Codes	Pattern Codes and Excerpts	Merging Codes into Themes
Research Question 1: What is the knowledge of teachers about the phonics approach in teaching reading in early childhood centers? Structural Code TEACHERS' KNOWLEDGE OF PHONICS	**1. Understanding phonics fundamentals** EXCERPT 1*: F2: "Phonics is an interesting area when it comes to reading and writing."* EXCERPT 2*: S1b: "My understanding is about sounds."* **2. Basic familiarity with letter sounds** EXCERPT 3*: Ch1b: "I know the letter sounds."* EXCERPT 4*: Ch1a: "The letter sounds, some of them like there are some changes in it."* **3. Lack of clarity with phonics variants** EXCERPT 5: **Researcher:** *Have you heard of synthetic phonics, analytic, and analogy phonics before?* *F1a: "I have not come across it, but it surfaces."* F2: *Explain to us so we know what it means* EXCERPT 6: Ch1a & Ch1b: *We have not heard about it.*	**Theme 1:** GAPS IN TEACHERS' KNOWLEDGE OF PHONICS **Explanation:** The Pattern Codes and resulting theme highlight the teachers' knowledge and understanding regarding phonics, showcasing their familiarity with certain methods and their struggles with different variants. Overall, teachers recognize phonics as beneficial but have gaps in understanding specific phonics approaches.
Research Question 2: How do teachers in early childhood centers combine different components of	**4. Preferential use of synthetic phonics** EXCERPT 7: *Ch1b: "I use the synthetic phonics approach."* *Ch1a: "I think at this level we use the synthetic phonics more."* *Qe1: "The synthetic phonics approach works faster."*	**Theme 2:** ADAPTIVE UTILIZATION OF MULTIPLE PHONICS METHODS **Explanation:** This theme demonstrates how teachers in the early

phonics to teach reading skills? Structural Code: COMBINING DIFFERENT COMPONENTS OF PHONICS	EXCERPT *8: F2: "I think mostly the synthetics than the others." S1b: "Synthetic phonics helps me best."* **5. Selective combination of components** EXCERPT 9: *Qe2: "Combine the synthetic and analogy for sight words." Pp2: "Synthetic and analytic phonics help my children better." F1a: "If the letter sound is simple, I go for synthetic."* **6. Adaptive approach based on complexity and need** EXCERPT 10: *F1a: "The three approaches depending on the letter sound I am teaching."* EXCERPT 11*: S2b: "I use the synthetic but when I get to a difficult sound, then I use the three." F1a: "If the letter sound is more than my class, I go for the three."* **7. Choosing suitable phonics methods** EXCERPT 12: *F2: "Deciding which one suits the children." F1a: "The higher ones are done in the primary." S2b: "At our stage, which of them should we use more?"*	childhood centers combine different components of phonics to cater to varying levels of complexity in teaching reading skills. However, there is a predominant use of the synthetic phonics approach.
Research Question 3: What challenges do teachers face in using the phonics approach in teaching reading in the selected childhood centers? Structural Code: CHALLENGES IN IMPLEMENTING PHONICS	**8. Teaching-related challenges** EXCERPT 13*: S2b: "How to blend the words is the problem for me." F1b: "When coming to the blending, they find it difficult."* EXCERPT 14: *F1b: "Difficult to use the sounds to teach words."* **9. Learning-related challenges**	**Theme 3:** FACING DIVERSE CHALLENGES **Explanation:** This theme illustrates the challenges faced by teachers in early childhood centers when implementing the phonics approach for teaching reading, including the complexities in method selection, teaching implementation, lack of support, and the complexity of phonics instruction itself.

	EXCERPT 15: *F2: "Some technical words don't go with the pronunciation."* EXCERPT 16: *"Children can't twist their tongues sometimes"* (School C ECC). EXCERPT 17: *"It is difficult to switch between letter names and sounds, as children learn the letter names at home before starting formal school"* (School E ECC). **10. Lack of teaching and learning resources** EXCERPT 18: *"We don't have electricity in the school to play the letter sounds for them." "TLRs are not provided by GES, MoE, or the municipal. What is happening here is that we improvise our materials using cardboard"* (School C ECC) EXCERPT 19: *S1b: "TLRs are not enough, and we have problems."* **11. Inadequate training and professional development** EXCERPT 20: *"We need more training on the phonics approach. We are lagging behind, as the private kindergartens invest in their teachers' training"* (School E ECC). EXCERPT 21: *"The teachers should always have routine training, maybe yearly or monthly, to learn some of the new things that have been done"* (School C ECC).	
Research Question 4: What strategies are available for teachers in dealing with the challenges	**12. Teacher-initiated resource adaptation** EXCERPT 22: *F2: We have downloaded the Apps to aid us to identify some of this sounds which aid us to teach in the*	**Theme 4:**

they face in using the phonics approach in teaching reading in early childhood centers? Structural Code: STRATEGIES TO ADDRESS CHALLENGES	*classroom. We have downloaded the App as a guide and is helping us.* EXCERPT 23: *"We don't have electricity in the school so we improvise our materials using cardboard"* (School E ECC) **13. Need for ongoing professional development** EXCERPT 24: *S1a: "Once in a while, if they can organize training for us, it will help us." S1b: "More workshops should be organized regularly for us."* **14. Collaboration and sharing of knowledge** EXCERPT 25: *S1a:* "We can consult each other in the school and outside the school."	ADAPTATION, COLLABORATION AND PROFESSIONAL DEVELOPMENT **Explanation:** This theme highlights the strategies employed by teachers to manage the challenges encountered in using the phonics approach for teaching reading in early childhood centers, focusing on adaptation, resource utilization, continuous learning, collaboration, and seeking external support for improved teaching methods.

Table 4.2 demonstrates how Pattern Coding was done and how themes were generated from the Pattern Codes. The Table has three columns. The rationale for the first column is to bring into focus the structural codes generated through first-cycle coding. This allows the Pattern codes to be directly related to the specific research questions. The Pattern Codes were generated through a careful reading of the data and judicious use of ChatGPT, 3.5 version. ChatGPT stands for Chat Generative Pre-trained Transformer. It is a large language model-based computer program (chatbot) that "interacts in a conversational way. The dialogue format makes it possible for ChatGPT to answer follow-up questions, admit its mistakes, challenge incorrect premises, and reject inappropriate requests" (OpenAI, 2022). ChatGPT's interactive nature allows qualitative researchers to code large portions of data quickly and effectively (Adu, 2023). However, as a computer program, ChatGPT can make mistakes. To guard against this, the researcher crosschecked to make sure that the Pattern Codes and the supporting excerpts were directly from the data. A total of fourteen (14) Pattern Codes

were generated with supporting excerpts. The 14 Pattern Codes were then merged into four themes as the major findings from the qualitative analysis (see Table 4.2).

The theme-based findings, which address the four research questions are the following:

1. Gaps in teachers' knowledge of phonics.
2. Adaptive utilization of multiple phonics methods in teaching reading.
3. Facing diverse challenges in using the phonics approach in teaching reading.
4. Focusing on adaptation, collaboration, and professional development as strategies to manage the challenges encountered.

The theme-based findings from the focus group discussion are supported by the findings from the observation data, as outlined in Table 4.3.

Table 4.3 Summary of Observation Data

CRITERION	OBSERVATIONS	
TEACHER KNOWLEDGE	**YES**	**NO**
Exhibits knowledge of letter sounds	Seven teachers were able to pronounce letter sounds correctly for learners to imitate (e.g., F2, S1a, S1b, Ch2, Pp1, Qe1, & Qe2	Seven teachers either could not pronounce letter sounds correctly or struggled to pronounce most of the sounds (e.g., F1a, F1b, S1b, S2a, S2b, Ch1b, & Pp2).
Introduces letter sounds with story and actions	The majority of the teachers (12) were able to introduce the letter sounds. Some teachers, however, were able to introduce the letter sounds with both story and actions (e.g., F2, S1a, S2a, Ch2, Pp1); others introduced the sounds with stories but no actions (e.g., F1a, F1b, Ch1b, Qe1, Qe2). One teacher (S2b) used a story to introduce the sound but did not get the sound pronunciation right. Another	In one teacher's (S1b), learners only did the actions for previous sounds. No story or action was used to introduce new sounds. Another teacher (Pp2) did not introduce a new letter sound.

	teacher (Ch1a) used a story but it was not clear to the learners. Sounds teachers introduced included /t/ /w/ /ai/ /s/ and /sh/	
Segments of letter sounds with learners	Only one teacher (S1b) was able to instruct learners to underline the sound /w/ learned in words e.g., web	The majority of the teachers (13) did not segment letter sounds with learners (e.g., F1a, F1b, S1a, Ch2, Pp2, Qe2). In some instances, no words were written on the board for learners to segment (e.g., F2).
Blends already learned sounds with learners	One teacher (Ch2) blended words on the board with learners, e.g., aid. Another teacher (S1b) mentioned blending but only wrote words on the board and pronounced them to learners.	Most of the teachers (12) did not blend sounds to form words with learners.
Sings songs related to sounds with learners	The majority of the teachers (11) sang sound-related songs with learners. For instance, F2 led learners to sing a song titled "Do as I Do." Other teachers, S1a, S1b, S2a, and S2b sang the /or/ /w/ /t/ /s/ songs, respectively, with learners. One teacher (Qe2) also sang "Every letter has a sound" with learners.	
COMBINING APPROACHES OF PHONICS		
Synthetic phonics approach (teaches from letter sounds to whole words, phrases, sentences, etc)	All the teachers predominantly used the synthetic phonics approach, teaching letter sounds before words.	
Analytic phonics approach (teaches from whole words or sentences to letter sounds)		None of the teachers used the analytic phonics approach, i.e., teaching from whole words or sentences to letter sounds.

Analogy phonics approach (focuses on teaching irregular words)		None of the teachers used the analogy phonics approach. They did not focus on teaching irregular words.
CHALLENGES TEACHERS FACE		
The teacher has limited knowledge and understanding of the phonics approach	Most of the teachers (12) exhibited limited knowledge and understanding of the phonics approach. What they demonstrated, mostly, was knowledge of a limited number of letter sounds. However, they had difficulty with most sounds and other aspects of phonics. One teacher (F1a) was less confident in the letter sounds.	Two teachers (S1a & Ch2) exhibited clearer understanding of aspects of phonics, including knowledge of more letter sounds in phonics.
The teacher has a high level of knowledge and understanding of the phonics approach		None of the teachers demonstrated the possession of deeper knowledge and understanding of the phonics approach to teaching reading.
Lack of teaching and learning resources	Most of the teachers (9) did not make use of any TLRs in their teaching. The rest used resources like a picture book (F1a) and letter/flash cards (F2, S1b, S1b & S2a).	
The teacher is unable to use the available TLRs in teaching	In several cases, a limited number of TLRs were available but teachers did not make use of them. This included flash cards (F1a) and the big books of phonics (S1b, S2a S2b).	One teacher (S1a) made use of the big books of phonics
STRATEGIES TEACHERS ADOPT TO ADDRESS CHALLENGES		

Improvises teaching and learning resources	Five teachers used flashcards they had designed (S1a, S1b, S2a, Qe1 & Qe2).	The majority of the teachers (9) did not improvise any TLRs. They only used the chalkboard.
Uses the phonics app on a mobile phone or computer	Most of the teachers (9) used the phonics app to play/teach phonics songs, tell stories, get words for blending	One teacher (F1b) did not use a smartphone. Two teachers (Ch1b & Qe2) had the app but did not use it. The other teachers (Pp1 & Pp2) did not have the app.
Contacts other teachers for mentoring or guidance	Seven of the teachers sought assistance and guidance from their colleagues (F1b, S2a, S2b, Ch2, Pp1, Pp2, & Qe1).	The rest of the teachers sought no assistance and did what they could (F1a, F2, S1a, S1b, Ch1a, Ch1b, & Qe2).

4.3 Discussion of Findings (i.e., Themes) through Cross-Case Analysis

The discussion of the findings follows three steps:

(i) Statement and explanation of the major finding (i.e., theme) addressing a specific question and supported with data from the focus group discussion and observation;

(ii) Presentation of a cross-case analysis showing nuances in participants' responses and practices regarding specific themes;

(iii) Highlighting connections between specific themes and previous research.

4.3.1 Noticing Gaps in Teachers' Knowledge of Phonics

As demonstrated in Table 4.2, three Pattern Codes were developed in relation to research question one, concerning teachers' knowledge about phonics. The codes included teachers' *understanding of phonics fundamentals*, *basic familiarity with letter sounds*, and *lack of clarity with phonics variants*. The three Pattern Codes were merged into a major theme, focusing on ***gaps in teachers' knowledge of phonics***. This first theme highlights the teachers' knowledge and understanding regarding phonics,

showcasing their familiarity with certain methods and their struggles with different variants. Overall, the teachers recognized phonics as beneficial. However, they showed gaps in understanding specific phonics approaches. Excerpts 1-6 below support the codes and resulting theme. Excerpts 1, 2, 3, and 4 show the teachers' basic understanding of phonics and familiarity with letter sounds. Excerpts 5 and 6 indicate gaps in knowledge.

Understanding of phonics fundamentals*, and *basic familiarity with letter sounds

> EXCERPT 1: Phonics *is an interesting area when it comes to reading and writing* (F2, School A).
>
> EXCERPT 2*: My understanding is about sounds* (S1b, School B).
>
> EXCERPT 3*: I know the letter sounds* (Ch1b, School C).
>
> EXCERPT 4*: The letter sounds, some of them like there are some changes in it* (Ch1a, School C).

Lack of clarity with phonics variants

> EXCERPT 5: **Researcher:** *Have you heard of synthetic phonics, analytic, and analogy phonics before?*
> *F1a: I have not come across it, but it surfaces.*
>
> F2: *Explain to us so we know what it means* (School A).
>
> EXCERPT 6: *We have not heard about it* (Ch1a & Ch1b).

The theme of gaps in teachers' knowledge of phonics is also supported by findings from the observation data. For instance, teachers in the early childhood centers thought that knowledge of letter sounds was knowledge of phonics. The researcher realized that the majority of the teachers were teaching only letter sounds without considering how learners would read if they were not taught how to blend and segment letter sounds. Most of the teachers could not pronounce the letter sounds correctly and this led to learners not being able to get letter sounds right. After the introduction of the standard-based curriculum, teachers are expected to begin every lesson with a starter which could

be a song, poem, or story. The researcher noticed that only a few teachers started their phonics lessons with a story or a song and most of the stories or songs were not related to phonics or the particular letter sound they intended to teach. Learners learn best when they are actively involved in the lesson and according to the early childhood coordinator, teachers were taught to include stories, actions, and phonics songs in the lesson. The majority of the teachers did the exact opposite. On the aspect of helping learners to blend learned letter sounds for reading, the researcher noticed that only a few teachers tried to do blending and segmenting with learners even though they only wrote words on the board and pronounced them to learners to say after them which does not encourage independent reading among learners. Most teachers did not introduce blending and segmenting to learners so learners were only taught letter sounds which were not enough for learners to be able to read.

A cross-case analysis of the data showed some nuances in the participants' responses about the theme. For example, teachers at School A were well-versed in the significance of phonics. They recognized the importance of phonics in helping children identify letter sounds and blend them to form words. They emphasized the relevance of synthetic phonics in their teaching methodologies. The teachers at School A also demonstrated knowledge of synthetic, analytic, and analogy phonics, albeit with varying levels of depth. While there's an inclination towards synthetic phonics, they also acknowledge the relevance of analytic and analogy phonics at different educational levels. Teachers at School B also acknowledged the significance of phonics in enabling children to blend sounds to form words and emphasized the importance of using letter sounds for correct pronunciation. Teachers at School C showed varying levels of familiarity with phonics. Some acknowledged knowing the letter sounds but lacked deeper knowledge, while one teacher expressed the benefits of using phonics to engage

students actively. Teachers at School D also demonstrated a basic understanding of the value of phonics in teaching reading, emphasizing its usefulness in early learning. However, there was limited knowledge or exposure to advanced concepts within phonics such as synthetic, analytic, or analogy phonics, revealing a gap in the depth of understanding. At School E, teachers expressed ideas about the importance of phonics in aiding reading and writing skills, similar to other centers. There was also an emphasis on the beneficial impact of phonics on learners' reading abilities. However, like School D, teachers at School E lacked familiarity with advanced phonics concepts, indicating a consistent knowledge gap across the centers.

In short, all centers recognized the importance of phonics in early childhood learning, highlighting its role in supporting children's reading skills. However, teachers at School A appeared to have a slightly more detailed understanding of the different phonics approaches. Teachers across all centers also exhibited gaps in their awareness and training in more advanced phonics concepts, especially synthetic, analytic, and analogy phonics. However, the gaps in knowledge were more noticeable with teachers from School C, School D, and School E early childhood centers. This lack of exposure might impact the depth of teaching methodologies they can employ effectively.

Results from the observation checklist and the focus group discussion indicate that there were inadequacies and gaps in the teachers' understanding and implementation of phonics. The study drew on the sociocultural theory of learning, particularly the concepts of the zone of proximal development (ZPD), scaffolding, and mediation (Vygotsky, 1978, 1986). Educators are recommended to focus on three crucial components that facilitate the learning process to help a person advance through the zone of proximal development: First of all, there should be the presence of someone

with more knowledge and abilities than the learner (a more knowledgeable other). Also, there should be an interaction with a skilled instructor that allows the student to observe and improve their abilities. Finally, scaffolding or supportive activities are offered by the educator or a more competent peer to help the learner navigate the ZPD. The more knowledgeable other (MKO) refers to someone who has a greater understanding or a higher degree of proficiency than the learner regarding a certain activity, process, or topic. Although the impression is that the MKO is a teacher or an elderly person, this is not always the case. Many times, a learner's classmates or older children will have greater knowledge or experience. According to Vygotsky (1978, cited in Saul, 2018), much important learning by the child occurs through social interaction with a skillful tutor. Information gathered during the data collection procedure indicated that learners already know letter names at home before they start formal schooling so teachers are expected to help learners improve upon what they know and learn new concepts. Teachers in this case of the study are expected to be more knowledgeable in phonics and its components to help learners with their reading. Learners might have learned letter sounds but what they would need is an adult to guide them with blending, segmenting, and others to aid in their reading. However, the case of the central "A" circuit in the Bolgatanga Municipality seems different since the researcher observed and had a discussion with the teachers to realize that they had gaps in their knowledge of phonics. This can cause learners not to move beyond their zone of proximal development in terms of reading.

4.3.2 Adaptive Utilization of Multiple Phonics Methods in Teaching Reading

Three Pattern Codes were derived from the data relating to research question two, which focused on how teachers in early childhood centers combined different components of phonics to teach reading skills. The codes were: *preferential use of*

synthetic phonics, *selective combination of components*, and *adaptive approach based on complexity and need*. The major theme developed from these codes demonstrates that the teachers in the early childhood centers combined different components of phonics to cater to varying levels of complexity in teaching reading skills and to meet learner needs. However, there was a predominant use of the synthetic phonics approach. Excerpts 7 to 11 illustrate this point.

Preferential use of synthetic phonics

EXCERPT 7: *Ch1b: "I use the synthetic phonics approach."*

Ch1a: "I think at this level we use the synthetic phonics more."

Qe1: "The synthetic phonics approach works faster."

EXCERPT *8: F2: "I think mostly the synthetics than the others."*

S1b: "Synthetic phonics helps me best."

Selective combination of components

EXCERPT 9: *Qe2: "Combine the synthetic and analogy for sight words."*

Pp2: "Synthetic and analytic phonics help my children better."

F1a: "If the letter sound is simple, I go for synthetic."

Adaptive approach based on complexity and need

EXCERPT 10: *F1a: "The three approaches depending on the letter sound I am teaching."*

EXCERPT 11*: S2b: "I use the synthetic but when I get to a difficult sound, then I use the three."*

F1a: "If the letter sound is more than my class, I go for the three."

Analysis of the observation data also supports this finding. During the observation, the researcher realized that the majority of the teachers were using the synthetic phonics approach in their phonics lessons. They first introduced letter sounds to learners and then moved on to teaching them words which would later lead to phrases, sentences, and whole book reading. Few others tried using the analogy phonics approach when they wrote words on the board, did not try using the letter sounds to blend with learners to get the words but rather pronounced it as it was for them.

The teachers at School A kindergarten emphasized the utilization of synthetic phonics, teaching from basic sounds to blending, which helps in the formation of words. They noted that analytic and analogy phonics are introduced in later educational stages. The teachers also seemed to utilize a mix of synthetic, analytic, and analogy phonics but they tended to focus more on the synthetic approach for the foundational stages. At School B, teachers appeared to use a combination of different phonics approaches without distinct emphasis on any specific method. They introduced picture associations, relied on syllabic approaches, and used phonics books with images to assist in teaching. The teachers at School C kindergarten predominantly relied on the synthetic phonics approach for teaching reading. They focused on introducing letter sounds first, then guiding students to form words and gradually progress to sentences. There was little mention of utilizing analytic or analogy phonics, suggesting a restricted range of phonics techniques employed. Similar to School C, the synthetic phonics approach was prominently used for teaching at School D. Teachers underscored the efficiency of this method. There was little indication of employing analytic or analogy phonics. Teachers at School E also primarily utilized the synthetic phonics approach. The emphasis was on teaching letter sounds leading to word formation. Similar to There was minimal

mention of employing analytic or analogy phonics techniques, similar to the situation at School C and School D.

In summary, teachers at School A kindergarten emphasized synthetic phonics, whereas School B applied a mix of approaches without a distinct preference. The synthetic phonics approach was also the dominant method used to teach reading skills at School C, School D, and School E. There was a shared focus on teaching letter sounds and using blending to form words at these centers, aligning with the standard early phonics teaching methodology. However, teachers at School C expressed a bit more awareness of potential limitations due to the absence of exposure to varied techniques. School D and School E teachers focused more on the efficiency of the chosen method without considering alternatives.

Data from the observation checklist and focus group discussion showed that the teachers primarily focused on synthetic phonics for teaching reading. Some of the teachers felt that the other phonics approaches were too high to be used at the kindergarten so they concentrated on the synthetic phonics approach which teaches from the smallest unit of sounds to the highest that is introducing letter sounds and later guiding learners to blend for reading. The first set of theories the study drew on was the bottom-up and top-down theories of reading and it went on to talk about the balance theory where teachers pick the strong side of the bottom-up and the top-down theory to their advantage (Amadi, 2019). When teachers use any of the theories to teach reading must earn results but if at the end of your lesson whether you use the bottom-up, top-down or balance theory and learners are still not able to read then there is a problem with the teacher style of teaching or other factors influencing that. Teachers are encouraged to look and know their class learners and decide which phonics approach

suits them better and whether the teacher can combine two or three in their lessons. The learners are the center of the teaching so their needs, interests, and abilities must be considered when choosing any of the phonics approaches to teaching reading.

The issue with the central "A" circuit of the Bolgatanga Municipal is that, even though the teachers mentioned that they used more of a synthetic phonics approach to teach reading, they ended up teaching learners only the letter sounds without guiding learners as to what to do with the letter sounds to be able to read. So, learners end up knowing just the letter sounds and are not able to read.

4.3.3 Facing Diverse Challenges in Using the Phonics Approach in Teaching Reading

Five Pattern Codes were derived from the data relating to research question three: *choosing suitable phonics methods*, teaching-related challenges, *learning-related challenges*, *lack of teaching and learning resources*, and *inadequate training and professional development*. These codes were also merged into one major theme, which focused on how teachers ***diverse faced challenges in using the phonics approach in teaching reading*.** The Pattern Codes and resulting theme illustrate the challenges faced by teachers in early childhood centers when implementing the phonics approach for teaching reading, including the complexities in method selection, teaching implementation, lack of support, and the complexity of phonics instruction itself. Excerpts 12, 13, 14, 16, 17, 18 and 20 illustrate this finding.

Choosing suitable phonics methods
EXCERPT 12: *F2: "Deciding which one suits the children."*

S2b: "At our stage, which of them should we use more?"

Teaching-related challenges
EXCERPT 13*: S2b: "How to blend the words is the problem for me."*

EXCERPT 14: *F1b: "Difficult to use the sounds to teach words."*

Learning-related challenges

EXCERPT 16: *"Children can't twist their tongues sometimes"* (School C).

EXCERPT 17: *"It is difficult to switch between letter names and sounds, as children learn the letter names at home before starting formal school"* (School E).

Lack of teaching and learning resources

EXCERPT 18: *"We don't have electricity in the school to play the letter sounds for them."*

"TLRs are not provided by GES, MoE, or the municipal. What is happening here is that we improvise our materials using cardboard" (School C).

Inadequate training and professional development

EXCERPT 20: *"We need more training on the phonics approach. We are lagging behind, as the private kindergartens invest in their teachers' training"* (School E).

Similar findings emerged from the observation data. The researcher observed some challenges that the teachers faced during their phonics lessons. Few teachers could say some of the letter sounds correctly but the majority of the teachers could not say most of the letter sounds correctly. Most of the teachers were not confident in themselves about phonics. Also, only five teachers out of the fourteen observed teachers used flashcards or letter cards in their lessons. The rest did not use any teaching and learning resources during their lessons and this did not help the learners, since some learners learn best through sight.

Teachers at School A faced challenges due to children's behaviour and lack of focus. Noisy classrooms affected the effective delivery of phonics lessons. The teachers also encountered difficulties in teaching some technical or irregular words due to their pronunciation not matching the spelling, creating challenges for effective teaching. The

insufficiency of teaching and learning resources (TLRs) also posed a challenge. Similar to School A, resource constraints and insufficient teaching and learning resources pose challenges in delivering effective phonics education at School B. The lack of support, such as updated training and materials, also impacted the overall learning environment and hindered effective phonics teaching.

The teachers at School C faced difficulties in dealing with children's speech issues, such as articulation problems with certain sounds, hindering their ability to correctly pronounce letter sounds. The absence of essential teaching and learning resources (TLRs), particularly in terms of technology and audio aids, was also a notable obstacle in facilitating an effective phonics learning environment. At School D, the learners often confused letter sounds and names, which was a significant challenge affecting their understanding of phonics. The lack of TLRs, including tools like audio aids and workbooks, impeded effective teaching and learning of phonics. Finally, children at School E struggled to switch from learning letter names (which they learned at home) to understanding and correctly pronouncing letter sounds, confusing the learning process. Similar to other centers, the lack of essential resources, specifically TLRs and workbooks, posed a challenge in providing comprehensive phonics education.

We can surmise, through a cross-case analysis, that all the centers faced a consistent challenge regarding the lack of TLRs, which affected the quality and effectiveness of phonics instruction. However, there were nuanced differences. School A and School B faced challenges related to classroom disturbances and managing young children's behavior during phonics lessons. School C and School D shared a common obstacle related to children's articulation issues and confusing letter sounds with names. School

E faced similar difficulties specifically in the transition from letter names learned at home to the phonics sounds taught at school.

Per the observation the researcher made, it was clear that teachers had challenges with the understanding of the phonics approach and they were not confident in delivering lessons on phonics. Teachers faced resource inadequacies, especially regarding teaching and learning resources. Teachers made it clear during the focus group discussion that inadequate phonics training was one of the challenges they faced.

Furthermore, teachers overestimated the time it took young learners to grasp phonics abilities. When a new skill is presented, it should be revisited methodically and intentionally. Rather than simply exposing learners, the objective should be to teach them to mastery. Only then can learners apply their knowledge to any reading circumstance. Because most curricula are so fast-paced, a more comprehensive review and repetition cycle is frequently required. Increased opportunities to practice past abilities in blending work, dictation, and repeated readings of previously read materials will help with this.

When the majority of instructional time is focused on applying skills to genuine reading and writing experiences rather than isolated skill-and-drill activities, learners grow more quickly in phonics. Application activities should take up at least half of a phonics lesson. The amount of reading during phonics training must be increased for learners who are below level (Blevins, 2019).

Furthermore, the relationship between what we teach and what young learners read has a significant impact on their word-reading methods, as well as their phonics and spelling skills. It also has an impact on learners' motivation to read. Including responsible texts in daily phonics sessions gives more substantial decoding practice and

aids in the transition from most phonics courses to reading graded texts, which are considerably less regulated for phonics abilities.

Phonics lessons sometimes necessitate the use of several manipulatives and resources. Transitional times when materials are provided or collected should be considered as great educational opportunities to address review skills (e.g., sing the ABC song, perform a phonemic awareness exercise, review letter-sound action rhymes to concentrate kids' attention on an instructional goal).

As Blevins (2019) indicates, every minute of phonics instruction should be educational. The efficacy of these transitions is dependent on their planning. Teachers with a phonics or linguistics background are more suited to make relevant instructional judgments, assess learners' mistakes, and enhance language and instruction delivery. Teacher views about phonics instructional materials (for example, decodable text) and routines (for example, sorting, word construction, blending) are also important.

Some instructors spend too much time on activities that they love or that are simpler for learners to learn and not enough time on more demanding or substantive activities that improve learning. Lessons should be fast-paced and demanding. They should prioritize activities that accelerate learners learning, including blending practice, dictation, word awareness tasks, and reading and writing about responsible materials.

Some programmes overemphasize phonics (particularly isolated skill-and-drill practice) while disregarding other critical parts of early reading demands (e.g., vocabulary and background knowledge development) that are necessary for long-term reading growth. It is critical to adjust reading time to achieve a better balance since all of these abilities establish the seeds of understanding as students face increasingly complicated texts. Early reading and writing lessons must include phonics instruction.

To improve their word identification abilities, students must learn how to efficiently decode words. The more words learners recognize automatically, the better their comprehension of the text. Cumulative assessments assist teachers in determining which skills have been truly mastered [and are] a critical phonics instructional tool, reading fluency, which has a powerful effect on their comprehension of text. Phonics teaching is intended to improve learners' ability to read and comprehend text. However, it must be done as effectively and efficiently as possible. Instructors and curriculum authors must look objectively and thoroughly at how we might enhance education to optimize learners' learning (Blevins, 2019).

4.3.4 Adaptation, Collaboration, and Professional Development

Question four addressed the strategies available for teachers in dealing with the challenges they faced in using the phonics approach in teaching reading in early childhood centers. Three Pattern Codes were generated from the data responding to question four, with a resulting theme focusing on adaptation, collaboration, and the need for professional development. The Pattern Codes and the fourth theme highlight the strategies employed by teachers to manage the challenges encountered in using the phonics approach for teaching reading in early childhood centers, focusing on adaptation, resource utilization, continuous learning, collaboration, and seeking external support for improved teaching methods. These ideas are illustrated through excerpts 22-25.

Teacher-initiated resource adaptation

EXCERPT 22: *F2: We have downloaded the Apps to aid us to identify some of this sounds which aid us to teach in the classroom. We have downloaded the App as a guide and is helping us* (School A).

EXCERPT 23: *"We don't have electricity in the school so we improvise our materials using cardboard"* (School E)

Need for ongoing professional development

EXCERPT 24: *S1a: "Once in a while, if they can organize training for us, it will help us."*

S1b: "More workshops should be organized regularly for us."

Collaboration and sharing of knowledge

EXCERPT 25: *S1a:* "We can consult each other in the school and outside the school."

The observation data supports this finding. In terms of strategies teachers adopt to address challenges, five out of fourteen teachers made their letter cards for their phonics lessons and then ten had the phonics app installed on their phones so they could always refer to it. The researcher also observed seven teachers going to consult other teachers for guidance as to how they could go about their phonics lessons.

Regarding question four, teachers at School A exhibited a strong sense of self-reliance, resorting to improvisation in creating teaching and learning resources (TLRs). They created their TLRs to support phonics teaching, fostering an engaging environment for the children. The teachers also recognized the importance of external support and training. They participated in in-service training and relied on resource persons or colleagues to enhance their understanding of certain letter sounds. They also utilized technology by leveraging apps on smartphones to enhance their understanding of certain letter sounds, aiding their teaching approaches. Teachers at School B emphasized the necessity of ongoing training and workshops to update their knowledge of phonics. They highlighted the importance of regular workshops to stay informed about changes and advancements in phonics and stressed the significance of consulting with colleagues or resource persons to exchange teaching methods and better understand phonics. There was also a suggestion to use online resources, such as

internet examples of phonics teaching, to aid in addressing challenges and support children's learning.

At School C, the teachers emphasized seeking assistance from colleagues when facing challenges, creating a collaborative environment to share knowledge. They advocated for periodic training sessions, specifically suggesting annual or monthly workshops, to keep educators updated on new methods or changes in the phonics approach. Teachers at School D demonstrated resourcefulness by creating improvised teaching and learning resources when faced with a lack of official teaching and learning resources. They called for regular workshops or training sessions for teachers, proposing at least once per academic term to enhance their understanding of the phonics approach. School E echoed the need for more frequent training and workshops, specifically mentioning a minimum of two annual training sessions to ensure teachers were updated. They suggested better utilization of qualified trainers and modern teaching methods like video content to improve training efficiency.

In short, while all centers agree on the significance of training and workshops to address challenges, their strategies differ in approach. Teachers at School A stood out for their focus on self-reliance and technology integration, while those at School B emphasized different aspects of resource needs and consistent training. School C focused on peer learning, while School D and School E stressed resource improvisation and more frequent training sessions, respectively. These varied strategies highlight the different methods used by early childhood centers to deal with challenges related to the phonics approach.

4.4 Chapter Summary

This chapter has presented a thorough analysis of the qualitative data for this study and a rigorous discussion of the findings. Structural Coding and Pattern Coding methods were used as initial steps for thematic analysis and cross-case analysis. A total of fourteen (14) Pattern Codes were generated with supporting excerpts. The Pattern Codes were then merged into four themes, which were discussed as the major findings of this study. The four theme-based findings addressed the research questions that guided the study. In summary, the research found that teachers at the selected early childhood centers had gaps in their knowledge of phonics, adopted the use of multiple phonics methods in teaching reading, faced diverse challenges in using the phonics approach in teaching reading, and focused on adaptation, collaboration and professional development as strategies to manage the challenges they encountered. Conclusions, recommendations, and suggestions for future research are presented in chapter five.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Overview

The chapter presents a summary of the major findings, along with conclusions, recommendations, and suggestions for further research. The study looked at how teachers utilize the phonics approach to teach reading in early childhood centers in the Bolgatanga Municipality. Four main questions were explored, relating to the teachers' knowledge about phonics, how teachers combine different components of phonics in teaching reading, challenges teachers face in utilizing phonics to teach reading and the strategies they adopt in addressing these challenges. The methodology of the study centered on the qualitative approach and exploratory case study design. Fourteen (14) teachers from the five early childhood centers in the central "A" circuit of the Bolgatanga Municipal were sampled for the study. The study's participants were selected using a census sampling technique. The primary data-gathering tools were an observational checklist and a focus group discussion guide. The data was analyzed using thematic analysis and cross-case analysis procedures.

The thematic and cross-case analyses resulted in the development of four themes as the major findings of the study, and in response to the four research questions. The themes, which have been thoroughly discussed in chapter four, are the following:

Theme 1: Noticing Gaps in Teachers' Knowledge of Phonics

Theme 2: Adaptive Utilization of Multiple Phonics Methods in Teaching Reading

Theme 3: Facing Diverse Challenges in Using the Phonics Approach in Teaching Reading

Theme 4: Adaptation, Collaboration, and Professional Development

Summaries of the theme-based findings are presented in the next section.

5.1 Summary of the Findings

Theme 1: Noticing Gaps in Teachers' Knowledge of Phonics

The teachers at School A displayed a fundamental understanding of the phonics approach in teaching reading. They recognized phonics as a crucial tool in early childhood literacy development. They emphasized the importance of teaching letter sounds, blending, and using songs and pictures to enhance children's engagement and learning. The concept of synthetic, analytic, and analogy phonics was discussed, with a general focus on synthetic phonics at the kindergarten level. The teachers expressed a preference for synthetic phonics in teaching letter sounds before advancing to more complex methods in higher grades. At School B, the teachers also acknowledged the importance of phonics in teaching children to read. They indicated their use of various phonics methods, particularly analytic and synthetic phonics, based on the complexity of the letter sounds they were teaching. However, they lacked a full understanding of the concepts of synthetic, analytic, and analogy phonics and expressed a need for further training and resources in the area. Teachers at School C have a basic grasp of phonics, particularly the letter sounds. However, their comprehension is limited, and they are unaware of some advanced concepts like synthetic, analytic, and analogy phonics. Teachers at School D recognize the value of phonics in teaching reading. They believe it assists learners in pronouncing, identifying, and spelling words. However, they lack advanced knowledge about the different types of phonics. School E Teachers are generally aware of the usefulness of phonics in reading and writing. They lack knowledge about specific types of phonics but have a keen understanding of the synthetic phonics approach. All sets of teachers displayed a lack of comprehensive

understanding of different phonics variants (synthetic, analytic, analogy). They were unfamiliar with the distinctions between these methods, demonstrating a need for further training or professional development in these areas.

Theme 2: Adaptive Utilization of Multiple Phonics Methods in Teaching Reading

Also, at School A, the teachers primarily focused on synthetic phonics for teaching letter sounds and word blending. They noted the importance of combining methods, occasionally using analytic and analogy phonics, especially when dealing with irregular words or challenging sounds. School B teachers mentioned using a combination of phonics approaches, emphasizing the use of pictures and words together to aid children's understanding. They identified a need for greater clarification on which method to use and suggested a preference for analytic phonics due to its effectiveness in teaching reading. School C on the other hand primarily utilizes the synthetic phonics approach. There's a consideration of using different strategies based on children's reactions, but synthetic phonics is most favored. School D Similar to School C, this center largely employs the synthetic phonics approach, combined with some elements of the analogy approach for sight words. School E teachers face challenges due to children's pre-existing knowledge of letter names before formal schooling and confusion. The synthetic phonics approach works best despite these challenges.

Theme 3: Challenges in Using the Phonics Approach in Teaching Reading

In addition, School A, challenges included difficulties in teaching certain sight words and learners' reactions in noisy classroom environments. Teachers faced resource inadequacies, especially regarding Teaching and Learning Resources (TLRs), and lacked confidence in their phonics teaching. Similarly, at School B, challenges were related to students' struggle with blending words, insufficient TLRs, classroom control issues due to the number of students, and inadequate teacher training. School C KG

teachers encounter difficulties in children's pronunciation of certain letter sounds due to physical limitations, a lack of electricity for tools like phonics songs, and inadequate teacher training. Also, School D Early Childhood Center faces challenges due to the lack of teaching and learning resources like TLRs, affecting effective phonics teaching. As for School E Early Childhood Center, the confusion between letter sounds and names due to children's pre-existing knowledge before formal schooling poses a significant challenge.

Theme 4: Adaptation, Collaboration, and Professional Development

Finally, strategies discussed at School A Early Childhood Center included the need for more comprehensive teacher training in phonics, improved TLRs, and resources, along with peer support among teachers. They also mentioned the importance of starting phonics training earlier and continuing it consistently through primary education. At School B Early Childhood Center, the suggested strategies were ongoing workshops and training sessions for teachers, collaboration between teachers, and utilizing internet resources to improve teaching methods. School C teachers proposed routine training for continuous learning, particularly due to updates in phonics, and the provision of necessary materials. School D Early Childhood Center on the other hand suggests improvisation with limited resources and emphasizes the need for workshops or training to enhance their knowledge of phonics. Teachers at School E suggest frequent training, improvisation, support from the government for needy students, and the need for the provision of TLRs and necessary materials for teaching. All the centers emphasized the necessity for continuous learning and support for teachers to enhance their phonics teaching skills. Overall, all sets of teachers recognized the importance of phonics in early childhood education, but they faced similar challenges, particularly in terms of resource inadequacies and the need for ongoing teacher training and support.

There was a shared desire for a comprehensive and consistent approach to phonics teaching to ensure a strong foundation for learners' literacy skills.

5.2 Conclusions

Responses from the participants clearly indicated that the teachers across the centers had various levels of understanding regarding the phonics approach. While some teachers showed a fundamental grasp of phonics, others exhibited more limited knowledge, particularly in terms of its components and application in teaching. Reasons for the gaps in knowledge and difficulty in practice may be attributed to the challenges the teachers faced in using phonics to teach reading, including inadequate resources and limited professional training. While some of the teachers showed resolve in addressing these challenges through personal initiatives, there is a need for ongoing teacher training and learner engagement strategies to ensure effective implementation of phonics teaching across early childhood centers.

5.3 Recommendations

Based on the main findings, the following recommendations have been put forward by the researcher:

1. Comprehensive and Ongoing Professional Development: Continual workshops and training sessions should be organized to update teachers on the evolving methodologies in phonics teaching. This will ensure that educators are well-equipped with the latest strategies and best practices for effective phonics instruction. Additionally, fostering a culture of sharing knowledge within and among schools will aid in expanding teachers' expertise.
2. Incorporate Multisensory Teaching Approaches: Teachers in early childhood centers should emphasize diverse teaching strategies that integrate visual,

auditory, and kinesthetic methods when combining phonics components. Encouraging a multisensory approach allows teachers to cater to different learning styles, improving students' understanding and retention of phonics concepts.

3. Identify and Address Challenges through Mentorship: Educational institutions and leadership should establish mentorship programs where experienced teachers guide newcomers or colleagues facing challenges. Encouraging collaborative problem-solving, these programmes could help in identifying and resolving specific hurdles encountered during phonics teaching.
4. Emphasize Early Introduction and Consistency in Phonics Teaching: Early childhood centers should begin phonics education at an early stage, possibly even before Kindergarten, to familiarize children with the fundamental concepts. They should also ensure a consistent and structured curriculum that progressively builds upon the complexity of phonics components. This early exposure and continuity will better equip learners for subsequent educational levels. Also, emphasizing the teaching of phonics at teacher training institutions, including at universities and colleges of education would be very helpful.

5.4 Suggestions for Further Research

Researchers interested in the use of phonics in teaching reading in early childhood centers can take a closer look at the suggestions presented below. Researching these topics will build on the findings of the present study as well as expand the knowledge and practice of phonics education, especially for teachers.

1. Assessment of Pedagogical Approaches in Phonics: Conduct a comprehensive study to evaluate the varied pedagogical approaches used in teaching phonics across different early childhood centers. Investigate the effectiveness of these methods on children's reading skills and their engagement with phonics.
2. Exploration of Resource-Related Challenges: Conduct an in-depth investigation into the resource-related challenges faced by teachers. Evaluate the impact of resource availability (or lack thereof) on the effectiveness of phonics teaching and learning outcomes.
3. Longitudinal Study on Teacher Development: Conduct a longitudinal study to assess how ongoing professional development influences teachers' grasp of phonics and the subsequent transfer of this knowledge to learners. Evaluate how training programs impact teacher practices over an extended period. This can target both pre-service teachers (at colleges of education and universities in Ghana) and in-service teachers.

These recommended research avenues can provide a more nuanced understanding of the challenges, strategies, effectiveness, and overall impact of phonics education in early childhood centers, leading to enhanced pedagogical practices and improvements in learner outcomes.

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APPENDICES

INTRODUCTORY LETTER

UNIVERSITY OF EDUCATION, WINNEBA
FACULTY OF EDUCATIONAL STUDIES
DEPARTMENT OF EARLY CHILDHOOD EDUCATION
P. O. Box 25, Winneba, Ghana
+233 (020) 2041072
ece@uew.edu.gh

FES/DECE/I.1

July 26, 2023

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

INTRODUCTORY LETTER

I kindly write to introduce to you **Ms. Francisca Atamakira Awanzieigo** with index number: **220017605** who is a Master of Philosophy (M. Phil) student at the Department of Early Childhood Education, University of Education, Winneba. She is in her final year and has to embark on her thesis on the topic: ***"The use pf phonics Approach in Teaching Reading in Early Childhood Centres in Bolgatanga Municipality".***

Ms. Francisca is to collect data for her thesis, and I would be most grateful if she could be given the needed assistance.

Thank you.

Yours faithfully,

DR. MICHAEL SUBBEY
AG. HEAD OF DEPARTMENT

HEAD
DEPT. OF EARLY CHILDHOOD CARE & DEV.
UNIVERSITY OF EDUCATION
P. O. Box 25, WINNEBA

GHANA EDUCATION SERVICE

Municipal Education Office
P.O. Box 11
Bolgatanga –UER

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Your Ref
Tel. 038022864

bolgamunicipaleducation@gmail.com

2nd August, 2023

ALL KINDERGARTEN HEADTEACHERS
BOLGA CENTRAL 'A' CIRCUIT

RE-INTRODUCTORY LETTER

We hereby write to introduce Francisca Atamakira Awanzieigo who is a student of University of Education, Winneba.

She is conducting a study on the use of Phonics Approach in Teaching Reading in Early Childhood centres in the Municipality.

Her concentration will be on teachers at the Kindergarten Centres in Central 'A' Circuit only.

Kindly assist her in that regard.

EDUCATION FOR SERVICE

ANNE ESTELLA KYE-EEBO
MUNICIPAL DIRECTOR OF EDUCATION
BOLGATANGA

Cc: Ms. Francisca Atamakira Awanzieigo
University of Education, Winneba
Post Office Box 25
Central Region

The SISO, Bolga Central 'A' Circuit

UNIVERSITY OF EDUCATION, WINNEBA

FACULTY OF EDUCATIONAL STUDIES

DEPARTMENT OF EARLY CHILDHOOD EDUCATION

OBSERVATION CHECKLIST

RESEARCH AREA: **The Use of Phonics Approach in Teaching Reading in Early Childhood Centers in the Bolgatanga Municipality**

PARTICIPANT'S CODE……..

SCHOOL…….. CLASS……..

DATE……

S/N	CRITERION	YES	NO	OBSERVATIONS
A	**TEACHER KNOWLEDGE**			
1	Exhibits knowledge of letter sounds			
2	Introduces letter sounds with story and actions			
3	Segment letter sounds with learners			
4	Blends already learned sounds with learners			
5	Sing songs related to sounds with learners			
B	**APPROACHES OF PHONICS**			
1	Synthetic phonics approach (teaches from letter sounds to whole word, phrases, sentences, etc)			

2	Analytic phonics approach (teaches from whole words or sentences to letter sounds)			
3	Analogy phonics approach (focuses on teaching irregular words)			
C	**CHALLENGES TEACHERS FACE**			
1	The teacher has a low level of knowledge and understanding of the phonics approach			
2	The teacher has a high level of knowledge and understanding of the phonics approach			
3	Lack of teaching and learning resources			
4	The teacher is unable to use the available TLRs in teaching			
D	**STRATEGIES TEACHERS ADOPT TO ADDRESS CHALLENGES**			
1	Improvises teaching and learning resources			
2	Uses the phonics app on a mobile phone or computer			
3	Contacts other teachers for mentoring or guidance			

Other challenges observed

Other strategies observed

UNIVERSITY OF EDUCATION, WINNEBA

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FOCUS GROUP DISCUSSION GUIDE FOR FACILITATORS

Introduction

Thank you for agreeing to hold this discussion. The conversation is intended to help me understand how teachers in early childhood centers utilize phonics to teach reading. We will also discuss additional ways that you use in conjunction with phonics to teach reading, as well as the challenges you have while utilizing the phonics approach and the measures you take to solve these challenges.

1. **Teachers' knowledge about the phonics approach in teaching reading in early childhood centers in the Bolgatanga Municipality.**

- How well do you know about the phonics approach to teaching reading?
- (Follow-up questions, if needed): What ideas do you have about the following concepts of phonics?

  (a) synthetic phonics instruction?

  (b) analytic phonics instruction?

  (c) analogy phonics instruction?

2. **How teachers combine the different approaches of phonics to teach reading in early childhood centers in the Bolgatanga Municipality.**

- Please explain how you blend the different approaches of phonics in teaching reading: (a) synthetic phonics

  (b) analytic phonics

  (c) analogy phonics
- (Follow-up question, if needed): Which blend of these phonics approaches is easier for you to use (top-down, bottom-up, analogy)?

3. **Challenges in using the phonics approach in teaching reading in early childhood centers in the Bolgatanga Municipality.**

   Can you please talk about the difficulties you have encountered while utilizing phonics to teach reading in terms of:

   - Your personal delivery
   - Learners' reaction to the lesson
   - Availability of teaching and Learning Resources (TLRs)
   - Classroom atmosphere
   - Staff support

4. **Strategies teachers adopt to address these challenges**

   How do you deal with these challenges?

   (Or: What do you do to overcome these challenges using your own ingenuity and initiative?)

Thank you very much for your time and insights.