



The Use of Phonics Approach in Teaching Reading in Early Childhood Centers in the Bolgatanga Municipality

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DOI: 10.53103/cjess.v6i4.510

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 and adapted the use of multiple phonics methods in teaching reading. 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 kinaesthetic 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 and as well, introduce phonics to teachers undergoing training in the colleges of education and universities in Ghana.

Keywords: Reading, Phonics, Teachers, Centers, Early Childhood Education

Introduction

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 (Torgerson, Brooks & 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).

Wyse and Bradbury (2022), in their article reading wars they made a lot of inputs into how children should be taught reading. Brooks (2023) critiques Wyse and Bradbury for rejecting the evidence favouring systematic phonics instruction. He concluded that the evidence in favour of systematic phonics instruction seems robust. This does not imply that it should be used to exclude other aspects of instruction, but it should form an essential part of a rich and varied language and literacy curriculum. In response to Brook's critique, Wyse and Bradbury (2023) explained that the reading wars have often been seen, particularly in the media, as a conflict between those who think that teaching young children to read should be centred on phonics teaching *first and foremost* (systematic teaching about the ways that letters represent phonemes in words), versus those who believe that other ways of teaching phonics and reading should be prioritised, for example *balanced instruction* which integrates phonics teaching with other aspects such as reading comprehension. Our findings do not support a *synthetic* phonics orientation to the teaching of reading; they suggest that a balanced instruction approach is most likely to be successful (Wyse and Bradbury, 2023).

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, synthetic phonics which used the Jolly phonics strategy was introduced through pilot training. Several districts took part in the pilot training. Bolgatanga Municipal, for instance, had its first training in September 2014. Also, a report from Jolly Buddies in Winneba indicated that the synthetic 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 synthetic 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, will deepen the understanding of the use of phonics in teaching reading in Ghana.

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. In the Ghanaian public schools, learners begin formal education at age four in kindergarten one, then by age five they would be in kindergarten two, and finally to grade one by age six in that order. Most schools, especially those in the rural areas, record children who are above four years old, and they are in kindergarten one. It is believed that by age five, when children are supposedly in kindergarten, they are expected to be able to pronounce two or three regular words and well-read simple phrases (Zettler-Greeley et al., 2018). It is important to teach reading at the kindergarten level so they can grow to be confident and fluent readers. Children are able to study to the highest level in their education and can read to learn concepts in other subject areas if they have a good foundation in reading, and it is at the kindergarten level that learners are taking through a step-by-step process on how to read. Reading helps children expand their vocabulary, improve pronunciation, and understand sentence structure. If children are not taught to read appropriately, then their education will not be as effective as it should be.

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 also shown 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 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.

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. These are significant gaps, considering the ongoing debate regarding the use of phonics in early childhood education.

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.

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?

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). 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. 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.

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). The socio-cultural theory will help teachers in the Bolgatanga Municipality to be available as a knowledgeable person and as well encourage collaboration and cooperation among learners to help them move beyond their zone of proximal development in terms of reading. Teachers in the early childhood centers would also offer supportive activities for learners to help navigate the ZPD.

Methods and Materials

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. 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.

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).

Population

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.

Sample and Sampling Techniques

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 was 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 1: School distribution of Participants (Teachers)

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

Source: field data, 2023

Data Collection Instruments

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.

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.

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 of the centers to observe teachers' lessons on phonics and recorded her observations.

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 and so each school became a group since it was difficult to transport participants from their schools to the other. 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.

Data Analysis Procedure

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.

Thematic Analysis

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). The researcher, first of all, prepared the data that were 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.

Cross-Case Analysis

According to Ponelis (2015), across-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). 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.

Data Transcription

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.

Data Coding

The researcher adopted a two-step coding strategy by using one first-cycle coding method and one second-cycle coding method (Saldaña, 2016). For the first-cycle coding, the researcher used structural coding and for the second-cycle coding, the researcher used patterning coding.

Table 2: A two-step coding strategy on teachers' use of phonics

| 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? | <p>1. Understanding phonics fundamentals</p> <p>Excerpt 1: <i>F2: "Phonics is an interesting area when it comes to reading and writing."</i></p> <p>Excerpt 2: <i>S1b: "My understanding is about sounds."</i></p> <p>2. Basic familiarity with letter sounds</p> <p>Excerpt 3: <i>Ch1b: "I know the letter sounds."</i></p> <p>Excerpt 4: <i>Ch1a: "The letter sounds, some of them like there are some changes in it."</i></p> <p>3. Lack of clarity with phonics variants</p> <p>Excerpt 5: Researcher: <i>Have you heard of synthetic phonics, analytic, and analogy phonics before?</i></p> <p><i>F1a: "I have not come across it, but it surfaces."</i></p> <p><i>F2: Explain to us so we know what it means</i></p> <p>Excerpt 6: <i>Ch1a & Ch1b: We have not heard about it.</i></p> <p>4. Preferential use of synthetic phonics</p> <p>Excerpt 7: <i>Ch1b: "I use the synthetic phonics approach."</i></p> <p><i>Ch1a: "I think at this level we use the synthetic phonics more."</i></p> <p><i>Qe1: "The synthetic phonics</i></p> | <p>Theme 1: GAPS IN TEACHERS' KNOWLEDGE OF PHONICS</p> <p>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.</p> <p>Theme 2: Adaptive Utilization of Multiple Phonics Methods</p> <p>Explanation: This theme demonstrates</p> |
| Structural Code TEACHERS' KNOWLEDGE OF PHONICS | | |
| Research Question 2: How do teachers in early childhood centers combine different components of | | |

| | | |
|---|---|--|
| <p>phonics to teach reading skills?</p> <p>Structural Code: COMBINING DIFFERENT COMPONENTS OF PHONICS</p> | <p><i>approach works faster."</i></p> <p>Excerpt 8: <i>F2: "I think mostly the synthetics than the others."</i></p> <p><i>S1b: "Synthetic phonics helps me best."</i></p> <p>5. Selective combination of components</p> <p style="padding-left: 40px;">Excerpt 9: <i>Qe2: "Combine the synthetic and analogy for sight words."</i></p> <p style="padding-left: 40px;"><i>Pp2: "Synthetic and analytic phonics help my children better."</i></p> <p style="padding-left: 40px;"><i>F1a: "If the letter sound is simple, I go for synthetic."</i></p> <p>6. Adaptive approach based on complexity and need</p> <p style="padding-left: 40px;">Excerpt 10: <i>F1a: "The three approaches depending on the letter sound I am teaching."</i></p> <p style="padding-left: 40px;">Excerpt 11: <i>S2b: "I use the synthetic but when I get to a difficult sound, then I use the three."</i></p> <p style="padding-left: 40px;"><i>F1a: "If the letter sound is more than my class, I go for the three."</i></p> | <p>how teachers in the early 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.</p> |
|---|---|--|

Table 2 has three columns. 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 question. 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. Three pattern codes were generated from the data and these pattern codes were merged into the “Gaps in teachers' knowledge of phonics”. The theme-based findings from the focus group discussions is supported by the findings from the observation data, as outlined in the Table below.

Table 3: Teachers' knowledge about the phonics approach in teaching reading

| CRITERION | OBSERVATIONS | |
|---|--|---|
| | YES | NO |
| TEACHER KNOWLEDGE | | |
| 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 teacher (Ch1a) used a story but it was not clear to the learners. Sounds teachers introduced included /t/ /w/ /ai/ /s/ and /sh/ | 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. |
| 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 | Most of the teachers (12) did not blend sounds to form words with learners. |

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.

As demonstrated in Table 3, 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.

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.

Conclusion

By engaging with the debate on phonics instruction, this study reinforces the argument that while synthetic phonics is effective, it must be implemented with a focus on comprehension and real-world application. The findings bridge Wyse & Bradbury’s critique and Brooks’ advocacy, suggesting that a hybrid approach tailored to learners' needs is the most effective strategy for early reading instruction.

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. 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.

References

- Abdul-Razak, I. (2016). Using phonics as a method of teaching reading in basic schools. *Journal of Educational Development and Practice*, 7(2), 28-54.
- Amadi, E. A. (2019). Bottom-up theory and phonics instruction: Implications for beginning reading. *European Journal of Applied Linguistics Studies*, 1(2).
- Anderson, N. J. (2004). Metacognitive reading strategy awareness of ESL and EFL learners. *The CATESOL journal*, 16(1), 11-27.
- Ankrah, G. K., Nyanta, D., & Opoku, K. (2017). Using the phonic method to improve the poor reading ability of pupils at Techiman Senior High School form one. *European Journal of Education Studies*.
- Bar-On, A. (2004). Early childhood care and education in Africa: The case of Botswana. *Journal of Early Childhood Research*, 2(1), 67-84.
- Brooks, G. (2023). Disputing recent attempts to reject the evidence in favour of systematic phonics instruction. *Review of Education*, 11(2), e3408.
- Cieslinski, C. A. (2007). *Kindergarten English language learners: Can we ensure a more successful start to school? (Doctor of Education)* Temple University.
- Crowe, S., Creswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). The case study approach. *BMC Medical Research Methodology*, 11(1), 1-9.
- Gess-Newsome, J., & Lederman, N. G. (Eds). (2002). *Examining pedagogical content knowledge: The construct and its implications for science education*. New York: Kluwer Academic Publishers.

- Grant, M. (2014). Longitudinal study from reception to year 2: The effects of a systematic synthetic phonics programme on reading, writing, and spelling. *Reading Reform Foundation*. Retrieved 10/04/2023.
- Lev_Vygotsky-libre.pdf (d1wqtxts1xzle7.cloudfront.net) Retrieved 01/02/2023.
- Lewis, M., & Ellis, S. (Eds.). (2006). *Phonics: Practice, research, and policy*. London: Sage.
- Machin, S., McNally, S., & Viarengo, M. (2018). Changing how literacy is taught: Evidence on synthetic phonics. *American Economic Journal: Economic Policy*, 10(2), 217-41.
- Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *All Ireland Journal of Higher Education*, 9(3).
- McMullin, C. (2023). Transcription and qualitative methods: Implications for third sector research. *Voluntas*, 34, 140–153. <https://doi.org/10.1007/s11266-021-00400-3>.
- Nyumba, O. T., Wilson, K., Derrick, C. J., & Mukherjee, N. (2018). The use of focus group discussion methodology: Insights from two decades of application in conservation. *Methods in Ecology and Evolution*, 9(1), 20-32.
- Oduro, P., Mensah, F. A., Quansah, F., Lawer, R. A., & Ankoma-Sey, V. R. (2021). Understanding primary school teachers' remediation strategies in assisting pupils with reading (phonic) difficulties. *International Journal of Social Sciences & Educational Studies*, 8(4), 189.
- Onwuegbuzie, A. J., Dickinson, W. B., Leech, N. L., & Zoran, A. G. (2009). A qualitative framework for collecting and analyzing data in focus group research. *International Journal of Qualitative Methods*, 8(3), 1-21.
- Ponelis, S. R. (2015). Using interpretive qualitative case studies for exploratory research in doctoral studies: A case of information systems research in small and medium enterprises. *International Journal of Doctoral Studies*, 10, 535.
- Saldaña, J. (2016). *The coding manual for qualitative researchers* (3rd ed.). Los Angeles: Sage Publications Ltd.
- Saul, M. (2018). Lev Vygotsky.
- Shaheen, M., Pradhan, S., & Ranajee, R. (2019). Sampling in qualitative research. In M. Gupta, M. Shaheen, & K. P. Reddy (eds.), *Qualitative techniques for workplace data analysis*. IGI Global DOI: 10.4018/978-1-5225-5366-3.
- Stuart, M. (2006). Learning to read the words on the page: The crucial role of early phonics teaching. In M. Lewis & S. Ellis, S. (eds.) *Phonics Practice, Research and Policy*, 23-33.
- Tenny, S., Brannan, G. D., Brannan, J. M., & Sharts-Hopko, N. C. (2017). Qualitative study. Qualitative Study - Abstract - Europe PMC Retrieved 25/03/2023
- Torgerson, C., Brooks, G., & Hall, J. (2006). *A systematic review of the research*

literature on the use of phonics in the teaching of reading and spelling.

Nottingham: DfES Publications.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Vygotsky, L. S. (1986). *Thought and language*. London: The MIT Press.

Wyse, D., & Bradbury, A. (2022). Reading Wars or reading reconciliation? A critical examination of robust research evidence, curriculum policy, and teachers' practices for teaching phonics and reading. *Review of Education*, 10(1), e3314.

Wyse, D., & Bradbury, A. (2023). Teaching phonics and reading effectively: 'A balancing act' for teachers, policy makers and researchers. *Review of Education*, 11(3), e3429.

Zettler-Greeley, C. M., Bailet, L. L., Murphy, S., DeLucca, T., & Branum-Martin, L. (2018). Efficacy of the nemours brightStart! Early literacy programme: treatment outcomes from a randomized trial with at-risk prekindergartners. *Early Education and Development*, 29(6), 873-892.