

STRATEGIES USED TO TEACH PHONOLOGICAL AWARENESS IN SELECTED
PRIMARY SCHOOLS OF SERENJE DISTRICT OF ZAMBIA.

By

Samesize F Tembo

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DECLARATION

I, **SAMESIZE F TEMBO** do hereby solemnly declare that this dissertation represents my hard work and dedication and do hereby state that it has not previously been submitted by anyone for a degree at this or any other institution and that all material contained herein has been duly acknowledged. I furthermore declare that the views and opinions contained in this report do not in any way represent those of the University of Zambia.

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APPROVAL

This dissertation of **SAMESIZE F TEMBO** is approved as fulfilling the partial requirements for the award of the degree of Master of Literacy at the University of Zambia.

Examiner: SignedDate

Examiner: SignedDate

Examiner: SignedDate

Chairperson: Board of Examiners : SignedDate

Supervisor: SignedDate

DEDICATION

Unusually, an individual finds an opportunity to thank the people who matter the most in their life. I, therefore, dedicate this work to my Father in Heaven for the grace and uncommon flavours he has shown to me throughout my study.

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ABSTRACT

The purpose of the study was to examine and understand the strategies used to teach phonological awareness in lower primary schools in Serenje District of Zambia. To determine the strategies teachers used to teach phonological awareness in lower primary schools of Serenje District; to discuss factors affecting the use of strategies to teach phonological awareness in lower primary schools of Serenje District; to establish ways of enhancing the use of strategies to teach phonological awareness in lower primary schools of Serenje District. The study used a qualitative approach and a descriptive survey design which employed questionnaires and in-depth interviews, an open-ended interview guide, lesson observation check list and the researcher's personal field notebook to collect data. Non-probability criterion homogenous purposive sampling procedure was used to select Deputy Head teachers, primary senior teachers and primary teachers. The sample size comprised 15 participants selected purposively. Qualitative data was analyzed thematically. The study revealed that generating rhymes, multi-sensory, picture card snap, sound sorts, and treasure chests were some of the strategies teachers used to teach phonological awareness in lower primary schools. The study also revealed that learning styles, motivation, personality and language were factors that affected the use of strategies to teach phonological awareness. It was also found that lack of phonological awareness skills in teachers posed challenges in using strategies to teach phonological awareness in lower primary schools. It was further revealed in the study that those teachers who found it difficult to teach phonological awareness, they ended up teaching only three instead of the five competences in a single literacy lesson. The study concludes that frequent practice of learned phonetic skills leading to strategies used to teach phonological awareness will encourage the growth of the child's mind. Direct, explicit instruction followed by activities that include abundant teaching strategies have been found greatly successful. Based on the findings, the study recommends that the teaching of phonological awareness should be incorporated in the syllabus being followed by primary teacher training colleges. Teachers should also teach all the five competences in a single literacy lesson if phonological awareness is to be taught successfully. Teachers should build the confidence level of the pupils by implementing questioning techniques in reading discussions, that are age-specific and where all answers to questions are accepted.

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CHAPTER ONE: INTRODUCTION

1.0 Overview

This chapter covers the background of the study, the statement of the problem, the purpose of the study, the research objectives, and the research questions. Additional issues include the significance of the study, the assumptions, limitations, and delimitations of the study. The chapter ends with the operational definitions.

1.1 Background to the Study

Global literacy rates have been steadily rising over the past few decades; however, 10% of youth still emerge from the worlds education systems without possessing basic literacy skills. The problem of how to attain high levels of literacy has become a global concern in both developed and developing countries. The World literacy statistics indicate that Africa has the largest number of countries with 60% of people illiterate (UNESCO, 2013a).

Although Zambia has made significant progress in improving access to primary education, the percentage of children who are illiterate remains high. Based on the Early Grade Reading Assessment (EGRA) among grade 2 pupils in 2015, 65% of Zambian school children scored zero, indicating that they could not read any of the words provided. Similarly, in the most recent study of 2018, the World Development Report found that only 55% of grade 2 children in Zambia could not read a single word of a text. This demands that governments, various non-governmental organizations (NGOs), private sectors and individuals devise efforts with a common view of curbing the situation.

The literacy development of learners is dependent on adequate and appropriate literacy skills acquired in the early grades. One of the literacy skills is phonological awareness (PA) which is defined as the ability to recognize and manipulate the sounds of oral language. Researchers have found that phonological awareness instruction is beneficial for beginning readers starting as early as the age of (four) (Málková et al., 2016).

The PA skills can be developed before the acquisition of other literacy skills (e.g., decoding and writing skills) using appropriate approaches and instructional strategies (Phillips et al., 2008). Researchers further found that the instructional strategies that teachers have used lag behind in the use of effective instructional strategies as cited in the National Association for the Education of Young Children (NAEYC 1998, 2006). The most widely accepted view from decades of study is that most children who struggle to learn to read have a basic deficit in phonological awareness and associated processing abilities. (Melby-Lervåg & Lyster, 2012; Phillips et al., 2015).

According to Castles and Coltheart (2004), children with phonological awareness difficulties may have trouble identifying environmental sounds with appropriate objects, and they are less likely to engage in sound-related activities. When pupils struggle with phonological awareness, it will be difficult for them to decode the sound-to-symbol code for reading. Early reading skills, particularly the capacity to sound out words in print, referred to as "decoding," will be slowed. Spelling problems can also be caused by phonological awareness issues. A child's ability to map the sounds of words to letters and clusters of letters that form sounds is required for spelling. Children's word reading development focuses on their ability to translate written words into spoken code, as evaluated by the accuracy and speed with which they read aloud. Thus, pupils who have a strong understanding of phonological awareness may be better able to understand how the alphabetic principle works (Wei & Zhou 2013).

1.2 Statement of the Problem

Much of the research in phonological awareness has been done on the teaching of Literacy in lower primary schools to improve literacy levels. Some research seems to suggest that the acquisition of phonological awareness skills in preschool is a strong predictor of reading success for children learning to read in languages with less transparent orthographies such as that of English than in transparent ones. In Zambia, research records low literacy levels in these lower primary schools despite various efforts (Mulama, 2006; Tambulukani and Bus 2011; Mwanza 2012). There is robust empirical evidence regarding predictors of success in reading and writing when learners are subjected to effective instructional strategies in teaching phonological awareness at an early stage (Dessementet & Chambrier, 2015; Fei, 2015; Lin, 2019; Abdel-Maksod et al., 2020). Researchers further found that the instructional strategies that teachers have used lag behind in the use of effective instructional strategies. Teachers seem not to be aware of this evidence and often do not know how to apply it in practice as cited in the National Association for the Education of Young Children (NAEYC 1998, 2006). Even though the Ministry of General Education has incorporated skills of phonological awareness in the teaching of initial literacy, it is not clear how teachers use strategies used to teach phonological awareness in primary schools. It is against this background that the present study endeavored to discuss the strategies used to teach phonological awareness in Lower Primary Schools in Serenje District Central Province of Zambia.

1.2 Purpose of the Study

The purpose of this study was to examine and understand the strategies used to teach phonological awareness in lower primary schools in Serenje District.

1.3 Research objectives

1.3.1 Specific objectives

This study was guided by the following objectives

1. To determine the strategies teachers, use to teach phonological awareness in lower primary schools of Serenje District.
2. To discuss factors affecting the use of strategies to teach phonological awareness in lower primary schools of Serenje District.
3. To establish ways of enhancing the use of strategies to teach phonological awareness in lower primary schools of Serenje District.

1.3.2 Research Questions

This study will be guided by the following research questions:

1. What strategies do teachers use to teach phonological awareness in lower primary schools of Serenje District?
2. What factors affect the use of strategies used to teach phonological awareness in lower primary schools of Serenje District?
3. In what ways can the strategies be enhanced and used in teaching phonological awareness in lower primary schools of Serenje District?

1.4. Significance of the Study

It is hoped that the findings of this explanatory research will provide the baseline data necessary for larger research studies in the Ministry of General Education (MoE). It is also hoped that the findings will provide wider knowledge in the planning and effective strategies for teaching phonological awareness in lower primary schools. In addition, it is hoped that the study will act as an eye opener not only to individual leaders but also to participants and other researchers on strategies and the effectiveness of using these strategies in teaching phonological awareness. Furthermore, the successful conduction of this study will lead to the discovery of challenges faced by teachers in teaching phonological awareness. This study might lead to the discovery of better ways of effective use of strategies in teaching phonological awareness which may result in improving Literacy levels not only in Serenje District but also countrywide.

1.5 Limitations of the Study

This study was conducted in Serenje District hence, its findings may not be generalized to other settings because there was no representation of all provinces in Zambia.

1.6 Delimitation of the Study

The scope of the study was confined to Serenje District in Zambia.

1.7. Operational Definitions

The definition of concepts provides the context in which the terms have been used in the study (Maxwell, 2005). The researcher was obliged to define each term as he wanted the reader to know what they stood for. Thus, the section below is the list of the terms that have been used in this study.

- Basic literacy:** The education that empowers people with essential knowledge and skills for their own sake.
- Critical literacy:** a continuous process which makes one reflect and read the world, and the texts and derive their conclusions other than passively accepting what was given or told.
- Conscientization:** A process of raising people hitherto downtrodden, the consciousness or awareness that they can change things or solve their own problems.
- Illiteracy:** not ignorance but lacking a specific skill or knowledge leading to social exclusion in certain aspects especially in educational, social and economic activities in ones community
- Literacy:** The state of being or the ability of one to read, write and perform basic arithmetic
- Curriculum:** A deliberately designed framework that includes all the learning areas of an institution
- Structured:** Something normally planned and organized
- Unstructured:** Something that is planned and organized haphazardly
- Primary School:** Lower grades consisting of grades one to seven classes.
- Respondent:** Selected individuals taking part in the provision of the research
- District Education Board Secretary:** The highest and in charge of a district in the Ministry of Education hierarchy
- Education Standard Officer:** In charge of the academic inspectorate in the Ministry of Education hierarchy at the district level
- MoE:** Ministry of Education
- Phonemic awareness** -The ability to manipulate sounds or phonemes in spoken words.
- Phonological Awareness** - The ability to perceive and manipulate sounds in spoken words and awareness that language is made up of words, syllables, rhymes and Sounds (phonemes).
- Initial Literacy** - Learning to read and write for the first time usually happens when the child is enrolled in school.
- Phonological Awareness Instruction** - Any teaching, explanation, advice and help given to a learner by a teacher in phonological awareness.
- Basic Education** - The education that a learner receives from Grades 1 to 3

Teaching - The process of imparting knowledge and skills to learners

SACMEQ: The Southern and Eastern Africa Consortium for Measuring Educational Quality

Initial Literacy - Learning to read and write for the first time usually happens when the child is enrolled in school.

CHAPTER TWO: LITERATURE REVIEW

2.1 Overview

This chapter reviewed the strategies teachers use to teach phonological awareness in primary schools and looked at the literature review according to sub-themes in line with study objectives which included to; find out strategies used to teach phonological awareness; discussing factors that affect the use of strategies used to teach phonological awareness and establish ways of enhancing the use of strategies to teach phonological awareness. This section also provided a critique of the material under review.

2.1.1 Phonological awareness

Phonological awareness is the ability to identify, process, and manipulate phonological units that compose spoken words of different complexity and size. It includes the understanding of different ways that the words in our spoken language can be broken down into their various components which can be then manipulated Catts et al., (2004). Phonological awareness in children, especially in the early stages of reading, improves and accelerates learning to read, and at the age of six it is a strong predictor of their future reading ability. Hence, a child's level of phonological awareness acquisition accounts for the child's readiness to read Manis et al, (2000).

Phonological awareness refers to the ability to shift focus from a language or word as a meaningful entity to a language or word as a sound structure and recognition of speech sounds inside words or the understanding that words can be broken down into sequences of constituent sound segments. It has been repeatedly found in many studies that it is directly related to reading ability and is a predictor of future reading ability (Lieberman, 1989; Bryant et al., 1990).

It is also reported to be the primary decoding mechanism in English and other languages decoding words or non-words by sounding them out, as when one is asked to decode the non-word.

The exact nature of the underlying language problem that is manifested as poor phonological awareness and phonological decoding is unknown at present but is under investigation (Adams, Foorman, Lundberg & Beeler, 1998) (Matafwali & Bus 2013). Most educators describe phonological awareness as the ability to recognize and manipulate sounds. Phonological awareness is also described as the capacity to comprehend the sounds in a word rather than the word meanings (Trehearne & Healy, 2003). It is the capability to comprehend the structure of spoken words. The structure of spoken language is composed of words, and words are composed of sounds, rhymes, and syllables.

Gillon (2004), refers to phonological awareness as the ability to break down words into smaller pieces, whereas Goswami (2008) defines it as a child's ability to manipulate and identify component sounds that create words of various sizes.

Similarly, Lane (2007) included the skill to find, segment, match, blend, or manipulate the sounds in a spoken language in different levels, such as words, syllables, onsets — rimes, and phonemes as phonological awareness. Phonological awareness can capture the attention of the researchers in an EFL setting. Wei and Zhou (2013) identified phonological awareness as the understanding that sentences are comprised of words, words consist of groupings of sounds or syllables, and syllables are comprised of particular sounds or phonemes.

Likewise, Hu (2019) gave the meaning of phonological awareness as the ability to perceive and manipulate speech, and it is divided into three levels: shallow syllable awareness, deep phoneme awareness, and intermediate onset-rhythm awareness. Tasks are used in phonological awareness to measure distinct processing skills of all levels of phonological awareness which include differentiation, detection, segmentation, blending, deletion, and substitution. As discussed here, it can be concluded that phonological awareness is the ability to manipulate and distinguish speech sounds and to understand that speech sounds can be divided into smaller parts from phonemes into syllables from syllables into words and from words into sentences. Phonological awareness is important for early reading in children. It is a primary skill for decoding in English and other languages.

Furthermore, it can be a predictor of future reading ability. Currently, in education, most professionals believe that phonological awareness plays a role in the development of beginning readers and writers. However, there are differing views regarding the issue. Some educators believe that phonological awareness is a skill that needs to be developed before a student can maximize their success in reading. Others believe that phonemic awareness comes as a result of early reading practice. Berg and Stegeman (2003) concluded a study on phonological awareness in the United States of America.

The study revealed that phonological awareness can be developed before reading mastery and that it facilitates the subsequent acquisition of reading skills. However, some scholars have a different opinion. Based on research conducted by Edlen-Smith (1999), many regular education teachers who were trained using a holistic approach to literacy are not convinced of the importance of literacy in phonemic awareness instruction. Some of those teachers believe that as children learn to read and write, their phonemic awareness will gradually develop (Manning, 2006).

The gap lies between educators who believe pupils cannot reach their fullest potential as readers unless she or he has had instruction in phonemic awareness, and those who believe phonemic awareness comes as a result of reading development. There can be a middle ground, however. Many educators are now realizing that phonemic awareness is a contributor to reading 'success as well as a result of it.

As Yopp & Yopp (2000) remark, while sensitivity to the sound basis of language, or phonemic awareness, supports literacy development, it is also an outcome of literacy experiences. They go on to say that phonemic awareness instruction should be viewed by educators as only one part of a much broader literacy curriculum and that an overemphasis on phonemic awareness in the first years of education would limit children's opportunities for more comprehensive literacy development.

It is also important to note that researchers such as Katch (2004) and Center, Freeman and Robertson (2001) agree that phonemic awareness is only important in the context of meaningful reading and writing. With this background in mind, I investigated the effectiveness of phonemic awareness instruction. According to Stanovich (1992), phonological awareness is defined as an individual's ability to reflect upon and manipulate the sound structure of spoken words. Many researchers, such as Treiman and Zukowski (1991) have argued that the development of phonological awareness in children follows a hierarchical pattern, progressing from the ability to isolate large sound units (words or syllables) to intermediate units (onsets vs. rimes) to small units. Another study conducted by Ehri and Flugman (2018) added that phonological awareness includes the awareness of speech sounds, syllables, and rhymes. It is also the ability to hear and manipulate the sound structure of language. This is an encompassing term that involves working with the sounds of language at the word, syllable, and phoneme levels. Later, children develop the ability to blend and segment individual phonemes.

A study by Kilpatrick (2016) in New York alluded that advanced phonemic awareness includes the ability to manipulate phonemes by substituting, reversing, and deleting phonemes and continues to develop into third grade and beyond. Learners with good phonological awareness are in a great position to become good readers, while pupils with poor phonological awareness almost always struggle in reading.

Torgerson et al (2019) defined phonological awareness as a key early indicator of emergent and proficient reading, including an explicit awareness of the structure of words, syllables, onset-rime, and individual phonemes. Phonological awareness (in particular phonemic awareness) is an integral component of reading instruction.

The ability to hear and manipulate the sounds of spoken language phonological Awareness (PA) is the beginning foundation of reading and is a critical component to future reading skills for every learner including children with language processing disorders (dyslexia, auditory processing, speech deficits, etc.). Therefore, the teaching of phonological awareness demands teachers in primary schools to possess adequate knowledge of various strategies for teaching PA and use these skills effectively. Some of these skills include practicing rhyming, practicing syllable division and sound segmentation.

2.2. Phonological Awareness Strategies

Language is a vital tool for communication. It is not only a means of communicating thoughts and ideas, but it supports the development of friendships, economic relationships and cultural ties. Listening, speaking, reading and writing are the four language skills needed to be developed for successful communication. Reading has five pillars (phonemic awareness, phonics, fluency, vocabulary and comprehension). So, reading is the most important skill in language learning.

Despite its importance, reading is one of the most challenging areas in the educational system, because good readers should be actively involved with the text, and be aware of the processes they use to understand what they read (Küçükoğlu, 2013; Schwabe, McElvany, & Trendtel, 2015). According to Al-Shboul, Ahmad, Nordin, and Rahman (2013), pupils are afraid of making errors and worry about unknown vocabulary, unfamiliar topics and culture.

2.2.1. Rhyming Strategy

Rhyming provides the pupils with an opportunity to begin developing an awareness of sounds and it is one of the early phases of phonological awareness. Rhyming allows the pupils to explore the rhythm Daniele Fanelli (2020). Another advantage of rhyming is enhancing the pupils' ability to express with some animation in their voice instead of just saying a statement in a monotone voice. Moreover, this strategy develops higher-order thinking levels. In the first level (remembering and understanding), the pupils could know what a rhyming word is. In the second level (applying), the pupils could draw what rhymes with minimum understanding. In the third level (analyzing), the pupils know how these two words are alike. In the final level (evaluating and creating), the pupils could create a sentence which includes a key vocabulary word used as a rhyming (Ellery, 2017).

2.2.2 Alliteration Strategy

The earliest aspect of phonological awareness is the ability to recognize rhyming and alliteration. So, Neaum (2017, p. 152) asserted that the pupils need the opportunity to "engage with rhymes, songs and poems to tune their ears into the sound of rhyme and alliteration.

" This opportunity to recognize and interact with rhymes, songs and poems and to engage in language play has the very benefit of drawing pupils' attention to words. Alliteration is an effective strategy to increase the pupils' attention to the sounds. Alliteration is the identification of the common first sounds of the words.

Bryant and Goswami (2016) explained that the pupils can recognize alliteration long before going to school, this relates to success in learning to read. The progression of rhyming and alliteration affects the pupils' ability to blend and segment, manipulation and identification. Thus, the developmental sequence seems to take this form. First, the pupils should begin with rhyming and alliteration, and then they are taught to learn to read and write. Then, at the same time they start to learn to read and later isolate phonemes.

2.2.3. Blending and Segmentation Strategy

Segmentation is the ability to separate the component sounds of a word. In contrast, blending is the ability to combine the separated clusters of two or three consonants which appear together in a word. Each letter in a blend makes a sound and these sounds are then blended. For example, in the word play, the p and the l must be blended to read the full word. Blending and segmentation are significantly related to each other, in single-word reading and reading comprehension. Blending and segmentation support the strong relationship between PA performance and reading achievement (Evans, 1998).

Daly, Chafouleas, Persampieri, Bonfiglio, and LaFleur (2004) asserted the causal role of blending and segmenting in the development of reading proficiency. Yeh and Connell (2008) confirmed that pupils who lack phoneme segmentation and blending skills are exposed to be poor readers and there is a relationship between blending and segmentation strategy and reading comprehension. They supported an important conclusion that the combination of phoneme segmentation. Phoneme blending and letter—sound instruction is more effective in promoting phoneme segmentation skills than either an approach emphasizing rhyming or an approach emphasizing vocabulary instruction. Vloedgraven and Verhoeven (2009) conducted a study in Bangkok. The study examined children's phonological awareness throughout the elementary school grades. Phonological awareness was assessed using five different sets of items that measured rhyming, phoneme identification, phoneme blending, phoneme segmentation, and phoneme deletion.

A sample of 1405 children from kindergarten through fourth grade participated. Results showed phonological awareness is dimensional across different tasks and grades. In addition to some overlap between the item sets, those for rhyming, phoneme identification, and phoneme blending were easier than those for phoneme segmentation and phoneme deletion. The results lend support to the assumption that phonological awareness is a continuum of availability for phonological representations which can range from partial availability to full availability.

More importantly, Ellery (2017) demonstrated that blending and segmenting strategies effectively increased higher-order thinking. When the pupil uses blending and segmenting, remembering and understanding Daniele Fanelli (2020) (recall) levels are increased by remembering the words in the sentences. The second level (applying) is increased by establishing the syllable or sound he heard in the word. The third level (analyzing) is increased by saying the word slowly to know each sound or phoneme in the word. The final level (evaluating) this level is increased by investigating words by their syllables and how many letters are represented in the highlighted syllable. In summary, all previous studies asserted the importance of phonological awareness in reading and oral reading fluency especially in any alphabetical system. Depending on that, struggling with phonological awareness leads to difficulty in reading development. According to the continuum development of phonological awareness, pupils use blending and segmentation to split the word into its smallest units (phonemes). Phonological awareness strategies facilitate reading fluency in an easy way (Lonigan, (2006).

2.2.4 Practice Rhyming

Hooyman & Kramer (2006, p. 200) conducted a study in Ethiopia on “How to manage rhyming is the first step in teaching phonological awareness and helps lay the groundwork for beginning reading development.” Rhyming draws attention to the different *sounds* in our language and that words come apart. For example, if your child knows that *jig* and *pig* rhyme, they are focused on the ending.

2.2.5 Practice Syllable Division

Gillon, (2004) stated that breaking up words into syllables or chunks is the second step of teaching phonological awareness.

Syllabication helps children learn to read and spell difficult words. When a child is stuck on a difficult word, they can use syllabication rules to figure it out. One activity that helps a child pull apart the syllables in a word is to count them by clapping each syllable.

2.2.6 Practice Sound Segmentation

Pulling apart words into different sounds is what we call sound segmentation. For example, the word *bat* has three sounds — /b/, /a/, /t/. The word *ship* also has three sounds — /sh/, /i/, /p/. Teaching sound segmentation is the final process in teaching phonological awareness.

This step is the one that leads to beginning blending in reading. Kamalata (2016) stated that throughout the lower elementary school years, phonological awareness and reading ability in language were consistently improved.

2.2.7 The use of Strategies to Teach Phonological Awareness

In their study, Phillips et al. (2008) stated that, despite the use of various instructional strategies in teaching phonological awareness, some major educational organizations such as the International Reading Association and the National Association for the Education of Young Children found that teachers have lagged in the use of evidence-based instruction.

The authors suggested that this may be due to teachers' lack of clear pedagogical understanding of evidence-based instructions for teaching phonological awareness. Similarly, in Zambia studies conducted by Kamalata (2016) in three schools revealed that the commonest teaching strategies used by teachers in the teaching of phonological awareness in the first and second grades were the question and answer and lecture strategies followed by demonstrations which lacked the creativity to make lessons learner-centered. Teresa et al (2000) say that teachers should ensure that learners participate in a variety of reading, writing and oral language activities if phonological awareness is to develop in learners.

In addition, Hayward et al. (2017) suggested that, if teachers identify the particular PA errors that pupils make, they can provide more focused instruction. For example, helping children segment sounds using Elkonin Boxes. In addition, the specific errors made by pupils can be easily determined when teachers use appropriate tools for formative assessment. This review, clearly shows that teachers must be well-equipped with specific literacy skills to use appropriate strategies to teach phonological awareness.

Teacher knowledge in literacy skills such as phonological awareness is very important if effective teaching is to take place. Teachers who have knowledge in the subject area they teach are likely to carry out the teaching task effectively. Further, a successful literacy programme largely depends on the teachers role in the delivery of quality instructions in literacy (MESVTEE, 2013).

Therefore, student teachers in colleges and universities should be equipped with the necessary skills and knowledge needed to teach initial literacy in schools.

Many studies such as the one conducted by Borko et al (1988) found that student teachers who had a strong subject knowledge tended to plan lessons well and were more responsive to the needs of particular groups of pupils. Grossman, Wilson & Shulman (1989) also found that student teachers with specialist knowledge tended to teach it in a way which encouraged children to develop complex conceptual structures on their own.

Phonological awareness is very critical to a teacher because these skills are a foundation for building reading skills (MOE, 2013). For example, a study conducted by Duhaze (2014) in West Africa wanted to find out whether training teachers in using scientific research on phonological awareness and letter names to resolve reading difficulties for students had an effect on learners. The findings showed that the training of teachers had real effects on pupils. The results obtained suggested that the training of teachers from West Africa had a measurable impact on learners. Learners who were taught by these teachers who were trained improved in their reading levels.

Lyon (1999) states that due to the vast knowledge on the importance of teaching phonological awareness to children learning initial literacy, teacher preparation programmes should ensure that teachers possess the foundational knowledge necessary for providing early systematic reading instructions. If a teacher has to teach effectively, he/she needs to possess the necessary knowledge phonological awareness. There was a study that was conducted by Lyon regarding perceptions and knowledge of teachers in phonological awareness.

Lyon (1999), recommended that teacher preparation and professional programmes must develop preparation programmes to foster the necessary content and pedagogical expertise at both pre service and in-service levels in order for them to deliver effectively.

Swerling et al (2005) also proposes that investigating knowledge that teachers have in literacy is vital because it has obvious implications for teacher education and professional development in the field of literacy and this was the basis of their study. Their study assessed teacher's literacy - related disciplinary knowledge and self-perceptions in relation to their preparation and experience. Using 132 participants, the study sought to find out if well prepared or experienced teachers perceived themselves as more knowledgeable than teachers with less preparation and experience. After these teachers were tested and a regression analysis done, the research findings were that high background (experienced) teachers scored below average on the five knowledge tasks which included phonological awareness.

This study demonstrated that even experienced teachers who perceive themselves as more knowledgeable can perform poorly if they are not trained in the area they are teaching.

The study further revealed that some of these teachers were specialists who were even helping other teachers teach reading. A similar study conducted by Washburn (2011) and Swerling et al (2005) informed this current study on the importance of phonological awareness skills necessary for the teachers in the process of teaching and learning literacy.

It is however, worth mentioning that although many studies have indicated that teacher knowledge about phonological Awareness is important for effective teaching of literacy, this knowledge cannot be acquired if teachers do not use appropriate strategies in its implementation .However, there is gap because these studies did not inform this study on the strategies used to teach phonological awareness. It is for this reason that in filling the gap, this study wanted to find out strategies teachers use to teach phonological awareness in primary schools of Serenje district.

2.3. Factors that affect the use of Strategies used to teach Phonological awareness

One of the factors that affect oral reading performance is PA (Van den Boer, Van Bergen & De Jong, 2014). Moreover, there is a significant relationship between phonological awareness and reading skills: this has been supported in many studies such as (Tunmer & Rohl 1991; Cupples & Iacono, 2000; Trehearne, Healy, Cantalini, & Moore, 2003; Swanson, Rosston, Gerber & Solari, 2008 & Landon, 2017). It is the basis for decoding spoken words into phonemes (the smallest sound units of language). Also, decoding syllables (segments of speech that are uninterrupted by obstructions to airflow), onsets (the initial sound of a word), and rimes (the unit that follows the onset) (Elhassan, Crewther, & Bavin, 2017).

PA is very important in the area of oral language which relates to the ability to think about the sounds in a word rather than just its meaning. It has two leading roles in reading: as an important predictor of reading achievement, and as a reading strategy (Swanson, Rosston, Gerber & Solari, 2008; Dahmer, 2010 & Melby-Lervåg & Lervåg, 2011). PA teaching serves to establish new knowledge in the pupils, with the sequence of normal development or typical learning as a guide (Schuele & Boudreau, 2008).

Phonemic Awareness is one component of phonological awareness. It refers to knowledge of words at the level of individual sounds, and how to segment, blend, or manipulate individual sounds in words. Phonics is the teaching of the alphabetic principle and the knowledge that different sounds of a language are represented by written symbols. Phonics is the last stage of phonemic development.

This means that it is based on prior knowledge of phonology and phonemic awareness. Pupils should be taught the letters of the alphabet first, then consonants, vowels, blends (e.g., sh, ch), and phonics generalizations (Schuele & Boudreau, 2008 & Pilat & Kilanowski-Press, 2011).

Phonological awareness is developed along a continuum of overlapping skills, beginning with the manipulation of larger units of sound and progressing to smaller units of sound. Teachers must have a firm understanding of phonological awareness and how it affects reading development. Additionally, teachers must understand how to integrate phonological awareness instruction with classroom instruction. Progressing along the continuum, pupils move from segmenting sentences into individual words to segmenting words into individual syllables and then blending the segmented syllables back into words (Smith, 2018).

Despite the use of various instructional strategies in teaching phonological awareness, some major educational organisations such as the International Reading Association (2006) and the National Association for the Education of Young Children (NAEYC 1998, 2006) have noted that teachers in the past years have lagged in the use of such instructions. Teachers likely lack a clear pedagogical understanding of these instructions to teach phonological awareness. Furthermore, research carried out elsewhere revealed that teachers limited knowledge concerning the meaning of phonological awareness, how it relates to reading acquisition and the ways to instruct it in the classroom context led to their failure to believe that phonological awareness is an essential component of reading instruction. In addition, approximately one-third of the teachers perceived phonological awareness to be causally related to reading Lou (2003). A review of the research revealed that learners literacy development can be achieved always when they are exposed to various literacy skills in early grades including evidence-based phonological awareness instructions.

2.4. Ways of enhancing the use of Strategies to teach Phonological Awareness

There have been so many efforts made worldwide by researchers in trying to improve literacy levels among children in schools through a variety of strategies. Alcock, et al. (2018) found that, for children in sub-Saharan Africa, the performance of children who were out of school and those who were in school, could not be distinguished as their performance was almost the same. The findings further indicated that children need specific types of literacy skills to develop phonemic awareness (e.g., instruction in onset-rime units (C-VC). Across studies, the researchers suggested the use of explicit instruction in the teaching of phonological awareness.

Carsonet et al. (2012) in their work on the influence of a short, intensive period of classroom PA revealed that when variables such as duration, intensity and content of PA instructions are understood may support the effective and efficient integration of PA teaching into the classroom environment. It further revealed that, when pupils are assessed and an error analysis is included in the assessment process, teachers can use the information to identify pupils' developmental levels and to inform instruction.

Finally, the use of strategies used to teach phonological awareness in Lower Primary Schools in Serenje District of Central Province of Zambia seems to suffer from many factors such as non-exposure to various literacy skills in early grades including evidence-based phonological awareness instruction. These problems need to be addressed with the view to finding a lasting solution. It is from this point of view that I intend in this study to find out the strategies teachers use to teach phonological awareness, to discuss factors affecting the use of strategies to teach phonological awareness and to establish ways of enhancing the use of strategies to teach phonological awareness in primary schools with the view of improving the literacy levels not only in Serenje as a district but also in entire Zambia as a nation.

2.5. Theoretical and Conceptual Framework

This study used both a theoretical framework and conceptual framework as it looks at a one-dimensional perspective of the subject matter based on the use of techniques used to teach phonological awareness which needs the utilization of the two concepts for easy understanding the theoretical framework is defined as the "blueprint" for the entire dissertation inquiry.

It serves as the guide on which to build and support the study and also provides the structure to define how you will philosophically, epistemologically, methodologically, and analytically approach the dissertation as a whole. It is also "a structure that guides research by relying on a formal theory...constructed by using an established, coherent explanation of certain phenomena and relationships" (Eisenhart 1991, p. 205). Thus, the theoretical framework consists of the selected theory (or theories) that undergirds the researcher's thinking about how the researcher understands and plans to research the topic, as well as the concepts and definitions from that theory relevant to the topic under study. In this study the theoretical framework adapts from Lane (2007) and Jones et al. (2012). The present study will investigate the use of phonological awareness instruction in improving the English word reading ability of lower primary pupils in Serenje District of Zambia.

Hulme et al. (2005) stated that letter-sound knowledge should be introduced in phonological awareness training. Therefore, in the current study, letter-sound knowledge is integrated. Pupils will learn the letter name and the sound of each letter to be familiar with the sound. Letter-sound knowledge will help them to decode the new word in the future. Then, they will be taught to have awareness of words in a sentence by tapping and segmenting words in a sentence or a phrase. After they have an awareness of words, syllable awareness will be taught. They will do activities that are segmenting, blending, deleting and identifying syllables within a word.

2.5.1 Phoneme Awareness

Phoneme awareness refers to the ability to disassemble a word and manipulate individual sounds. It all relates directly to phoneme knowledge. A phoneme is the smallest distinguishing element of a spoken sound that differentiates two words. It is the pupils' last and most in-depth knowledge of speech (Stahl & Murray, 1994).

The comparisons between "tall" and "ball," "rat" and "cat," and "fin" and "fan" demonstrate how using different consonants or vowels can affect the meaning of two words. Even though they do not know which letter relates to which sound, some children may recognize that words begin with the same sound. In phonological awareness, blending and segmenting separate sounds within words is difficult to master and is closely linked to learning to read (Adams et al., 1998; Snowling et al., 1998). Because phonemic awareness keeps increasing in a symbiotic (hand-in-hand) relationship with learning to read, some pupils may struggle at first. Pupils, on the other hand, will benefit from classroom exposure to phonemic awareness exercises like reading and wordplay. When kindergarten pupils do well in sound awareness tasks, they will probably need to be guided to acquire phonological awareness. They will further benefit from the typical classroom focus on how words work.

Phoneme segmentation is when phonemes are being counted. Elkonin (1963) developed a strategy for improving phonemic segmentation skills that has grown in popularity in recent years. Picture cards with boxes under each picture showing the number of phonemes in the word are used in the Elkonin boxes technique. While slowly pronouncing the word sound by sound, the learner places a marker in each box to represent each sound in the word. This Elkonin boxes activity can be adapted to allow the teacher and the learner to verbally practice the skill. The teacher shows how to count phonemes by raising one finger for each phoneme pronounced. With teacher support, the student should be able to count phonemes independently.

Phoneme deletion is the same as the removal of a phoneme. Pupils must be able to recognize and modify sounds within a word. Pupils are tasked with removing a certain sound from a target word.

For this activity teacher may ask the pupils to say the word “seat” Then, the teacher later asks them to say “seat” without the /t/ sound. Again, when doing this activity, start with the initial sounds and work your way up to the final and, finally, medial noises. In summary, phonological awareness is the ability to hear, understand, and manipulate spoken language sounds.

Phonological awareness is a set of abilities that includes a student's capacity to acknowledge how many words can be found in a sentence (word level), segment and blend words of at least three syllables (syllable level), recognize and generate rhyming words (rhyme level), divide the beginning or ending sounds in words, segment and blend sounds in a word with three sounds, change a sound in a word to make a new word in familiar games and songs (sound level).

2.5.2 Letter-Sound Knowledge

All pupils must be taught how to become increasingly sophisticated and self-sufficient decoders. Because the language is opaque, there are not enough letters of the alphabet to express all of our speech sounds, according to the English orthography, which is based on an alphabetic system of 26 letters and about 44 sounds (phonemes) (Garcia & Cain, 2013).

On the other hand, learning letter-sound correspondence to introducing single letter sounds and advancing to combining the letter sounds might be challenging, how to pronounce sounds in words is highly predictable (Bayettod.). However, letter-sound knowledge alone will not assure that pupils will be autonomous and effective readers, because it is possible to decode words without comprehending their meaning.

Therefore, Gillion (2008) suggested integrating phonological awareness activities with letter sound knowledge training. As the same as Dessemontet and Chambrier (2014) included letter-sound knowledge with phonological awareness in their reading intervention. Letter-sound knowledge is now widely accepted in languages with alphabetic orthographies that letter knowledge and phoneme awareness are crucial precondition skills that act in tandem to enhance early reading in children. Many longitudinal studies have found strong connections between letter knowledge and later decoding ability (Badian, 1998; Roth, Speece & Cooper 2002; Georgiou & Kirby 2008).

Letter—sound knowledge is essential for a pupil's understanding of the alphabetic principle: how individual speech sounds in spoken words are represented by letters in printed words (Byrne and Fielding-Barnsley, 1989). Through the understanding of letter-sound correspondences. “It is an important component for learning to read since it allows pupils to adopt a self-teaching strategy to decode new words by sounding them out letter by letter.

A learner can add unfamiliar words to his or her collection of words that he or she can identify by sight by successfully decoding them. Learning letter names and sounds may also serve as a meter for the sort of visual—phonological learning required for reading (Melby-Lervåg, Lyster, & Hulme, 2012).

Letter knowledge is related to the precursor to phoneme awareness. It is important and sufficient to promote phoneme awareness development. Before segmentation and blending abilities have been established, the teacher should teach letter-sound representations along with phonological awareness intervention (Ball & Blachman, 1988, 1991; Blachman, Tangel, Ball, Black, & McGraw, 1999). Over early inclusion of letter-sound representations might confuse if the child has not yet understood that words are comprised of sounds, (Spector, 1995). Furthermore, pupils with strong knowledge of phonemic awareness recognize that words are comprised of separate sounds (Caldwell & Leslie, 2013; Roe & Smith, 2012; Schuele & Boudreau, 2008) because they have developed the ability to audibly segment and blend sounds in words (Rightmyer, McIntyre, & Petrosko, 2006).

Pupils who know letter sounds perform better on phonemic awareness activities, according to research (Mann & Wimmer, 2002), and the inclusion of letters representing sounds being modified generalizes to reading and spelling better than comparative interventions (Bradley & Bryant, 1985). Caravolas and Carroll (2005) stated that phoneme awareness cannot exist independent of letter knowledge. Similarly, Lane (2007) and Gillion (2008) claimed that phonological awareness activities should be integrated with letter-sound knowledge training. Hulme (2020) investigated a phonological and reading intervention that included letter-sound knowledge and phoneme awareness. It was found that these two skills, as well as later word-level reading and spelling skills, improved significantly. The development in letter-sound knowledge and phoneme awareness can completely mediate the development of childrens word-level literacy skills five months after the intervention ends.

To sum up, phonological awareness, letter name knowledge, and letter-sound knowledge can build this conceptual understanding and support reading and writing improvements. This can be achieved when pupils employ their knowledge of the normal links between sounds and letters to sound out unfamiliar words (Ehri et al., 2001; Foorman et al., 2003; Phillips & Torgesen, 2006; Share & Stanovich, 1995).

2.5.3 Letter-Sound Knowledge Activities

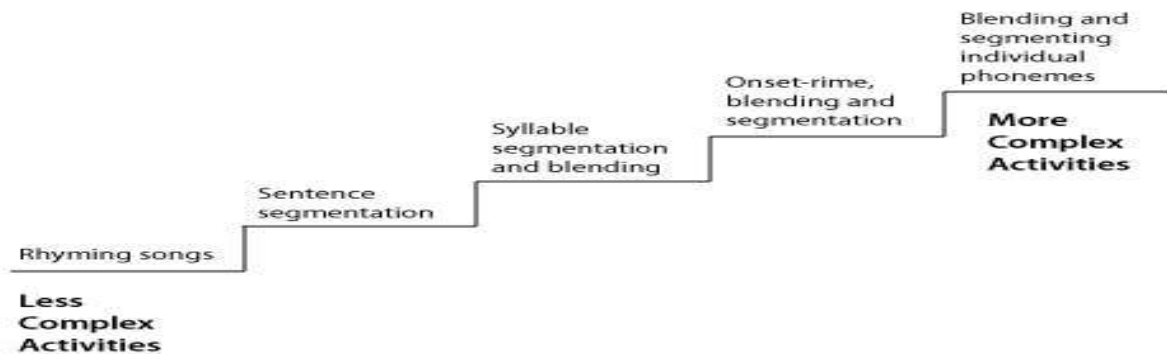
As we are aware letter-sound knowledge correlates with phonological awareness, especially on the phoneme level.

It is important to teach pupils letter-sound knowledge to provide a strong basis for future learning. Jones et al. (2012) suggested steps of activity to help pupils gain alphabet knowledge and administer their knowledge to the context of reading and writing.

1. Pupils are taught to identify the name and sound of the uppercase and lowercase forms of each letter.
2. Pupils quickly learn to recognize the letter in context in books and other written text such as identifying the letter in charts of classmate’s names
3. Pupils learn how to build letter forms for writing.

Moreover, Berninger et al. (2006) suggest that instruction that includes both visual and verbal modelling of letter writing improves pupils' letter formation automaticity as well as their word reading ability. Writing alphabet letters can bring young children's focus on the key features that determine one letter from another, while also enhancing their knowledge of letter names and sounds (Aram, 2005). Furthermore, pupils' handwriting movements while writing letters can facilitate their letter memorization and identification (Longchamp et al., 2005).

Figure 1: Theoretical framework adapts from Lane (2007) and Jones et al. (2012)



2.6. Conceptual Framework

A conceptual framework according to the UK National Ecosystem Assessment (2011) report is a structure that stands for the main aspects of a phenomenon at hand presenting its make-up and relatedness. The conceptual framework is important as it makes it easier for users to comprehend the scope of the phenomenon; realize the knowledge gaps in the subject as well as benefit from its use as a tool for the analysis of the data. In this study, therefore, three theories relating and relevant to the topic; Emergent Literacy, theory of Literacy Development and Gesells Theory will be discussed. The focus, however, will be on Gesells theory due to its relatedness to this study.

2.6.1 Emergent Literacy

The work of Marie Clay, a New Zealand educator, heralded changes in the way researchers and teachers viewed early reading. Her studies indicated that children know a great deal about reading and writing before they come to school, and they can experiment with and apply their knowledge in various ways (Clay, 1975). Reading readiness seemed to be an inaccurate term since Clays research showed that there was *not* a specific sequence of skills children needed to master before reading and writing. The children she studied seemed instead to "emerge" into literacy with writing, reading, and oral language abilities developing together.

Emergent literacy was recently defined as "the view that literacy learning begins at birth and is encouraged through participation with adults in meaningful activities; these literacy behaviours change and eventually, become conventional over time" (Neuman, Copple, & Bredekamp, 2000, p.123). From a very young age, children who are exposed to oral and written language gradually gain control over the forms of literacy. Print-related knowledge develops similarly to the way children learn oral language (Morrow, 1997). When children are actively engaged with interesting and meaningful reading and writing experiences, they develop literacy knowledge early in their lives.

2.6.2 Gesells theory

Gesell's theory is known as a maturational-developmental theory. It is the foundation of nearly every other theory of human development after Gesell. Early in the 20th century, Dr Gesell observed and documented patterns in the way children develop, showing that all children go through similar and predictable sequences, though each child moves through these sequences at his or her rate or pace. This process is comprised of both internal and external factors. The intrinsic factors include genetics, temperament, personality, learning styles, as well as physical and mental growth.

Simultaneously, development is also influenced by factors such as environment, family background, parenting styles, cultural influences, health conditions, and early experiences with peers and adults. Gesell was the first theorist to systematically study the stages of development, and the first researcher to demonstrate that a child's developmental age (or stage of development) may be different from his or her chronological age.

2.6.3 Theory of Literacy Development

The theory was developed by Holdaway in 1979 which states that learning to read was a natural development that is closely linked to a child's natural development of oral language skills. Holdaway's theory of literacy further contends that literacy development begins in children's homes and is based on meaningful learning experiences. These experiences include the four key components which are observation, collaboration, practice and performance (Godwin et al, 2013).

This can be done by employing big books and shared reading to foster natural literacy development and can create the same positive feelings about story time that children have when they read at home. He believes that these natural storytelling times build pupils' oral language, print tracking, and the concept of letters, and words (Godwin et al, 2013).

CHAPTER THREE: METHODOLOGY

3.0 Overview

This chapter described the methodology of the study under the following sub-themes: Study epistemology, research design, study population, study sample, sampling techniques, data collection, and data collection instrument.

3.1 Study Epistemology

Epistemology is the creation and dissemination of knowledge in a particular area of inquiry.

It is concerned with possibilities, nature, sources and limitations of knowledge in the field of study (Burns, 2010). This study was founded on the constructivist paradigm which was premised on a particular pattern or set of assumptions concerning reality (ontology), a method of knowing reality (the knower and the known). To understand the phenomenon well, the researcher closely interacted with participants (head teachers, deputy head teachers, senior teachers and class teachers) through an interview guide and questionnaire.

Constructivism postulated that meaning was socially constructed and since meaning was attached to a phenomenon, the phenomenon was multiple, varied and subjective. (Creswell, 2007). It was arrived at through discussions and interactions with participants who experienced the phenomenon. Moreover, the phenomenon was understood by focusing on the context in which the participant lived and worked (Creswell, 2007).

3.2 Research Design

A research design is the arrangement of conditions for collection and analysis of data in a manner that aims to combine relevance to research to the research purpose with economy in procedure. It is also the conceptual structure within which research is conducted containing a blueprint for the measurement and analysis of data (Kothari, 2013) Therefore, an appropriate methodology enabled the researcher to come up with appropriate data that was valid and reliable to draw conclusions. A descriptive survey design was to collect information by interviewing or administering a questionnaire to a sample of individuals (Orodho, 2002). It described the state of affairs as it existed. Kerlinger (1969) reported that descriptive studies were not only restricted to fact-finding but also resulted in the formulation of important principles of knowledge and solutions to significant problems.

3.3 Study Population

A study population is a group of people with objects and items from which a sample is taken for measurement.

It is the entire group of people from which a sample was taken (Kombo and Tromp, 2009). According to Kasonde (2013), all individuals or objects within a certain population usually have certain binding characteristics or traits. The populace of primary and secondary school teachers in Serenje District was 830. The population for this study comprised the all-head teachers, all deputy head teachers, all senior teachers and all class teachers of government primary schools in Serenje District. This was because Administrators who managed teachers who taught lower sections themselves were found in these schools and targeted for this study.

3.4 Study Sample

According to Leedy (2005), a sample is a subset of a population. A sample size may be defined as the size of the subset of a population. Khotari (2004) states that a sample of a research should be truly representative of population characteristics without any bias so that it may result in valid and reliable conclusions. A sample size allowed the researcher to conduct a study of individuals from the population so that the result of their study could be used to derive conclusions that applied to the entire population. Serenje district had a total number of 830 primary school teachers. The total sample for the study was 15 broken down as follows: 4 deputy head teachers (1 per 4schools), 4 primary senior teachers (1 per 4schools), and 7 primary teachers (2 per 3schools and 1 from 1school) in Serenje district. The study comprised 10 female respondents while 5 respondents were male. This was based on the fact that there were more female teachers than male teachers in public primary schools of Serenje district.

3.5 Sampling Procedures

According to Kombo and Tromp (2006), Data collection refers to the gathering of specific information aimed at proving or refuting some facts. The purpose of collecting data was to help the researcher clarify the facts. The importance of sampling in any type of research is highlighted by Punch (1998 p193) who asserts, "We cannot study everyone, everywhere doing everything. Sampling decisions were required not only about which people to interview or which events to observe but also about settings and processes." Sampling is closely linked to the purpose and research questions of the study.

In this study, homogeneous sampling was used where a purposeful sampling method was deployed. All the participants in the sample were chosen because they have similar or identical traits. In this study, they were all in the education sector and teaching pupils in lower grades. The selected participants were the ones that were useful to a researcher. Homogeneous samples tend to be small, made up of similar cases and helpful to the researcher who understood the phenomenon in depth without generalizing findings to a larger population.

The participants met the eligibility criteria as described above in the paragraph. Participants were contacted, the purpose of the study was explained and an agreement to participate was obtained. The researcher picked the participants because of a need for experts in strategies used to teach phonological awareness in lower primary schools in Serenje District (Polit & Hungler, 2004).

Permission was sought from relevant authorities at the District Education Board Secretary (DEBS) of Serenje to carry out the research in the four selected schools. The researcher later reported to the four (4) Head teachers of the schools where data was to be collected. A letter of permission from the DEBS office was presented to the Head teacher of the school after which permission was granted. The participants were briefed about the nature of the study. This was followed by the seeking of informed consent from the teachers. The researcher then started collecting data using lesson observations checklists where notes were taken. The purpose of conducting these observations was to capture the strategies that teachers were using to teach phonological awareness.

3.6 Research Instruments

Research instruments are tools or guides used by researchers to collect research data (Mkandawire, 2019). This study utilized five data collection instruments. These included questionnaires; an open-ended interview guide; a demographic form, lesson observation check list and the researcher's personal field notebook.

3.6.1 Questionnaires

It is a research instrument used in the gathering of data over a large sample in a more accurate manner (Kasonde-Ngandu, 2013). In this study, a questionnaire was used to collect data from teachers in lower primary schools examining strategies used to teach phonological awareness in lower primary schools in Serenje District. Because of its ability to be presented to the respondents in the same format, way and content, the researcher found a questionnaire to be ideal for the collection of data to support the study. The use of a questionnaire provided the advantage of reducing the researchers influence on the responses that were to be provided by participants on various items.

3.6.2 In-depth Individual Interview Guide

An interview protocol was used as the primary instrument for collecting data. According to Wojnar and Swanson (2007), the meaning of phonological awareness can only be captured through one-on-one communication between the researcher and the participant. This involves active listening, interaction, and observation to capture the pure representation of authenticity in favours of the biased, preconceived representation. The interviews in this study involved responsive and relational dialogues with primary teachers in lower grades (Chilisa 2012).

These dialogues were guided by an interview protocol, but in conducting these, the researcher was flexible enough to permit unanticipated or serendipitous moments (Simons, 2009). Interviews were audio recorded, transcribed and then analyzed to determine the themes/meaning units that emerged and to ultimately describe the essence of the strategies used to teach phonological awareness in lower primary schools (Moustakas, 1994). Conversations were driven by questions regarding the participants encounter with the strategies used to teach phonological awareness in lower primary schools. The interview was primarily advantageous because it provided access to the participants world. The role of an interview in a phenomenological study was excellently summed up by Patton (2002 p104) who stated that it is about how they perceive it, describe it, feel about it, judge it, remember it, make sense of it, and talk about it with others.

To gather such data, one must undertake in-depth interviews with people who have directly experienced the phenomenon of interest; that is, the strategies used to teach phonological awareness in lower primary schools. Interviews were audio recorded with the written consent of each participant, and, depending on the nature and depth of the conversation, interviews were between one hour to two in length. The researcher took notes in the very rare cases that the voice recorder malfunctioned and to capture the serendipitous moments such as the nonverbal expressions of the participants such as facial expressions. Before the interview dialogues, the researcher attempted to bracket her own experiences and biases from those of the participants (Creswell, 2007).

Homogeneity is important because teachers who differ greatly have such different resources, problems, experiences, and perceptions they may share and that makes it easy for the researcher to see differences in knowledge (Krueger, 1988 with Merton, 1990). These interviews facilitated the collection of rich data exploring the essence of the strategies used to teach phonological awareness in lower primary schools. The interviews were conducted within an average of 1 hour 30 minutes. All care was exercised to minimise errors and reduce background noises and interruptions. Tape recording equipment was checked regularly. All participants reported that the study results were clear and an accurate representation of their understanding of the strategies used to teach phonological awareness in lower primary schools.

3.6.3 Lesson Observation check list

According to Kombo and Tromp (2006), an observation is a tool that provides information about actual behaviour. In this study, lesson observation checklists were used to record the teaching strategies teachers were using to teach phonological awareness. The observations were structured and only those aspects which were appearing on the observation check list were recorded.

Lesson observation checklists were also used to establish, strategies teachers were using to teach phonological awareness and challenges teachers face to teach phonological awareness during lesson progression. Refer to appendix F for the lesson observation check list.

3.7.3 Researchers Field Notebook

The final tool for data collection was a field notebook kept by the researcher. This notebook contained all the field notes, thoughts and feelings before and after each interview. The notebook was also used to facilitate relationships with the participants by replicating the cultural differences, attitudes, feelings and morals of the researcher. Additionally, the researcher incorporated peculiar assumptions regarding the strategies used to teach phonological awareness in lower primary schools in Serenje District. This cognitive process of putting down ones philosophies to prevent verdicts on what one had witnessed and heard is called bracketing (Speziale & Carpenter, 2007) and was significant in the phenomenology method. The researcher needs to remain mindful while collecting and analysing data for the interpretation to remain a reflection of the participant rather than that of the researchers philosophies.

3.7 Data Collection

The researcher was responsible for the initial contact of all eligible participants by sending out a letter of invitation (Appendix A). If participants were interested in participating, there was the participants-initiated contact with the researcher through phone or physical linkup. The researcher then followed through phone calls (Appendix B). Phone calls were intended to explain the purpose of the study and to explore teachers willingness to participate. Prospective participants then agreed or declined participation. All potential participants agreed to participate. When a participant indicated willingness to take part in the study, a convenient interview time and location was established. All participating participants were asked to take part in two semi-structured, open-ended interviews. Study information and consent forms were distributed before the commencement of the interview. The researcher conducted all interviews with permission. All interviews were tape-recorded as quotations were the primary source of data in the qualitative research. Interviews, lesson observations and field notes were transcribed and presented verbatim.

3.9. Data Analysis

Data analysis refers to examining the information collected in a research and making inferences and deductions (Kombo & Tromp, 2006). In this study, the researcher used Qualitative as a method of data analysis. A qualitative approach was used to analyze verbal information that was collected from interviews with the teachers. From the interviews, the data gathered was grouped into identified themes and categories.

Based on the identified themes and categories, interpretations and discussions were made. Some direct quotations from respondents responses were included in the text. The lesson observations were also transcribed and presented verbatim. This helped to establish the strategies that teachers were using to teach phonological awareness.

3.9.1 Qualitative Data Analysis

The data collected in this study was subjected to rigorous analysis to obtain the desired meaning from which conclusions were drawn. Flick (2013, p 5) defines qualitative data analysis as “the classification and interpretation of linguistic (or visual) material to make statements about implicit and explicit dimensions and structures of meaning-making in the material and what is represented in it”. The researcher considered the descriptive design adopted to guide this study where the qualitative method was used to analysis data. Scholars propose stages of data analysis with slight differences in the order taken.

For instance, Table 6 below provides an illustration of three approaches to qualitative data analysis:

Table 3. 9.2: Illustration of three approaches to qualitative data analysis

S/N	Murheji; & Albon, (2015)	Lodico et al, (2006)	Creswell; (2014)
1	Becoming familiar with data	Preparation & organising of data	Organising & preparing of data analysis (transcribing) typing field notes, categorising, sorting arranging data into different types.
2	Coding the data	Receiving and exploring the data	Reading and looking at all the data getting general ideas
3	Categorising the code	Coding into categorise	Starting coding of the data
4	Identification of themes & relationships among the codes	Constructions of people, places & activities	Using the coding process to generate a description of the setting or people as a well categories or themes for analysis
5	Developing concept and arriving at generalized statement	Building themes & testing hypothesis	Advancing how the developing & themes will be represented in the qualitative narrative
6		Reporting and interpreting data	Making an interpretation in qualitative research of findings or results

Source: Own illustration based on current study

One advantage of qualitative data is that the researcher starts analysis right at the point when data is being collected, at the time of the interviews or discussions with the respondents. In this study, the researcher started familiarising himself with the data from the point of collection. All interview data with teachers was recorded on an MP3 audio device. After every interview, the researcher listened to the audio recordings and made brief notes in her notebook. The brief notes highlighted general ideas that came from participants. The researcher also transcribed the audio recordings, thus becoming even more familiar with the data collected and helping to reflect on what the interviews had revealed. This practice is recognised as applicable by Creswell (2014) saying:

Data analysis in qualitative research will proceed hand-in-hand with other parts of developing a study namely; the data collection and write-up of findings. While interviews are going on, for example, researchers may be analysing an interview collected earlier, writing memos that may ultimately be included as a narrative in the final report and organising the structure of the final report.

This enabled the researcher, especially since he used in-depth interviews to be able to improve her interviewing techniques and collect even richer data in succeeding interviews. The data was subjected to rigorous reading and re-reading to ensure little or nothing relevant was missed during analysis. Lodico et al., (2006, p. 305) observe that “qualitative researchers should continually read, reread, and re-examine all of their data to make sure that they have not missed something or coded them in a way that is inappropriate to the participants.” The researcher went through each script to edit spellings, removing names of respondents and process for ethical reasons and highlighting key concepts that emerged from the interviews. (The verbatim records needed to remain without alteration). This was to prepare the data for coding.

After making corrections to the printed transcripts, the researcher made corrections on soft copies and named and ordered the transcripts. After all necessary coding was done, the researcher made sense of the coded data by running word frequency charts from the biographic participant data, cluster analysis and comparison diagrams. These provided the basis for qualitative data analysis in this study. Thus, by use of cluster analysis, the researcher was able to identify coded themes and export the data under each theme to the main document. The comparison diagram helped the researcher to identify similar and different ideas between codes. Thus, similar concepts were grouped at the center while differences were set on each side.

The reason some scholars contend that analysis is an ongoing process is because the researcher interacts and starts making sense of the data right from the time data starts being collected.

Creswell (2014) acknowledges that data collection and data analysis must be a simultaneous process for qualitative research.

3.9.1 Methodological Rigour

Rigour in qualitative studies is a critical component of the research process. Strategies for enhancing the integrity of the study occurred throughout the procedure. Due to the fundamental differences in philosophical underpinning and the goals of the two main paradigms, qualitative studies cannot use the same terms to evaluate reliability and validity as in the quantitative approach (Polit & Beck, 2008). However, the ability to demonstrate rigour in a research study is imperative to the credibility of that study.

Several authors have adapted different means of measuring rigour and validity in the qualitative methodology (Maggs-Rapport, 2001; Meyrick, 2006; van Manen, 1990; Whitemore, Chase & Mandle, 2001). Parallel to reliability and validity in quantitative research, standards for trustworthiness are a unique approach adapted to qualitative research (Lincoln & Guba, 1985). The criteria developed by Lincoln and Guba were used to determine the trustworthiness of this study. The criteria addressed in this research study were credibility, dependability, confirmability, transferability and authenticity.

3.9.2 Credibility

Numerous steps were taken to ensure credibility in this study. First, the researcher is a professional within the field of education. Using this advantage, before collecting data, the researcher created a rapport with participants to introduce himself as a member of the teaching profession and to assure them of the significance of the study.

In this study, the researcher achieved credibility through conducting a peer debriefing to review the research methodology to avoid biasness. Further, after interviews in data analysis, the researcher sent text messages to participants requesting them to provide any other terms that were difficult to discuss and any other data that they could have forgotten to tell the researcher.

3.9.3 Dependability

One other strategy used in qualitative research to ensure dependability is documentation, Ary et al. (2010) call it an audit trail. In this study, data documentation was critical from the onset of data collection through analysis to reporting. Data was collected and stored according to the type collected.

In this study, the researcher allowed fellow researchers to peer review the research design, data collection strategies, and analysis and data interpretations in order to provide feedback. The researcher also maintained consistency in data collection procedures across different participants.

3.9.4 Confirmability

Confirmability is another measure of trustworthiness in qualitative research. It is a measure of bias on the researcher. With this in mind, the researcher should be able to present findings that are not skewed to his or her interests. Ary et al. (2010) equate confirmability to objectivity in qualitative research. Ary et al. (2010, p. 504) say confirmability and objectivity “both deal with the idea of neutrality or the extent to which the research is free of bias in the procedures and the interpretation of results” Confirmability concerns the aspect of neutrality (Korstjen & Moser, 2018). “You need to secure the inter-subjectivity of the data. The interpretation should not be based on your particular preferences and viewpoints but needs to be grounded in the data” (Korstjen & Moser, 2018, p. 122). An audit trail can be used as a strategy to ensure confirmability. Data analysis followed steps as described in 3.10.1. In this study, the qualitative findings from questionnaires confirm the results from interviews and vice versa. The researcher therefore, presented the data as it came from the participants to avoid biasness.

3.9.5 Transferability

The fourth criterion is that of transferability or “fittingness” and is the ability of the findings to have meaning to others in similar settings (Speziale & Carpenter, 2007). Comprehensive field notes were documented to provide ample descriptive data within the findings for others to evaluate the ability to find similar meanings in other contexts (Polit & Beck, 2008). The researcher achieved this by clearly describing the research methods, data collection process and interpretation.

3.9.6 Authenticity

Authenticity is the final criterion for enhancing quality and integrity in qualitative research. Authenticity is the ability of the researcher to fairly and faithfully report the experiences of the participants as they are lived (Polit & Beck, 2008). In this study, the researcher first established rapport with participants by building good relationship with them. Good and trusting environment was created for their free sharing of thoughts and experiences. The researcher also went back to the participants to validate the findings achieved by means of involving the participants in the research process through sharing with them the findings to ensure that their experiences and perspectives were accurately presented. To make it more authentic, the researcher provided a detailed explanations in this study of data through direct quotes from the participants, vivid description of the research context and thorough documentation off the research process

In conclusion, to establish trustworthiness the researcher earned the trust of the readers by means of following necessary steps in each criteria of measuring rigour of the research process to determine the trustworthiness of this study. Integrity within research began with the research questions and continued throughout the entire procedure. In this study, verification and discussion of findings were continuously communicated between the thesis supervisors and the student researcher. Ongoing openness and flexibility throughout data collection and analysis was maintained with continued reflections to search for the true meaning of the essence. Regular communication with the thesis supervisors verified and enhanced trustworthiness.

3.10 Ethical Considerations

Ethical considerations are rules and regulations that the researcher followed when conducting this study. Kombo and Troup (2009) suggested that researchers whose subjects were human beings or animals considered the conduct of their research, and gave attention to ethical issues associated with carrying out their study. Given the unpredictable nature of qualitative research, ethical dilemmas within issues surrounding informed consent, anonymity and confidentiality, data generation, publication, and researcher-participant relationships must be acknowledged and given special attention (Speziale & Carpenter, 2007). To remain ethically sound when working with human subjects, the ethical principles of autonomy, justice, non-maleficence and beneficence were implemented. The following section details the ethical issues that will be considered in this study.

Ethical issues were upheld in the study. First and foremost, a clearance letter was obtained from the Directorate of Postgraduate Studies and the researcher sought consent from the University of Zambia relevant authorities, the District Education Board Secretary (DEBS), and Participants were assured that the data was collected would be kept confidential and only be used for research purposes. Further, the researcher assured the participants that names and personal details would not be revealed or published. Names of participants will be represented by pseudonyms this ensures anonymity.

Additionally, the researcher ensured that participation by the participants was voluntary. This was done by explaining to them the procedure, relevance and purpose of the study. Ultimately, the researcher took full responsibility for the study and any unforeseen consequences it might attract. All the mentioned activities were done to ensure that the rights of the participants were respected and that their dignity as human beings was safeguarded. Further, Cohen *et al.*, (2000) explain that ethical issues are matters which are highly sensitive to the rights of others.

Respondents who did not wish to respond to a particular question were free to remain silent. Participants on which the interview guide was administered were informed that interviews were lasting about 35 minutes per person while those on which the questionnaire was used equally informed that they were to spend about 25 minutes to answer. Respondents were free to withdraw from the study whenever they felt so. Data which was collected was securely kept and used strictly for academic purposes.

CHAPTER FOUR: PRESENTATION OF FINDINGS

4.0 Overview

The previous Chapter highlighted the method used to collect data for this study. This Chapter presents the findings whose data was collected through the questionnaires and in-depth interview guide. The results presented in this chapter are of the study conducted from 2022 to 2023, whose focus was and understand the strategies used to teach phonological awareness in lower primary schools in Serenje District.

The insights from this chapter provide a context for the subsequent chapters.

This chapter presents the findings of the study. These findings are in line with the research questions which included:

1. What strategies do teachers use to teach phonological awareness in lower primary schools of Serenje District?
2. What factors affect the use of strategies used to teach phonological awareness in lower primary schools of Serenje District?
3. In what ways can the strategies be enhanced and used in teaching phonological awareness in lower primary schools of Serenje District?

The three research questions above formed the reflection point throughout Chapter Four and Chapter Five, as demonstrated by the themes that subsequently emerged.

4.1 Demographic Characteristics of the Participants

Table 4.1: Demographic Characteristics of the Participants

	Participants	Deputy Head Teacher (DHT)	Primary Senior Teacher (PST)	Primary Teacher (PT)
Gender	Frequency %	Frequency %	Frequency %	Frequency %
Male	5 33	1 7	2 13.3	3 20
Female	10 67	3 20	2 13.3	4 27
Total	15 100	4 27	4 27	6 46

Table 1 shows the participants who were drawn from Serenje District in Central Province of Zambia. Out of 15 participants who participated in the study, seven (7) were primary teachers, where three (3) were male representing 20% and four (4) were female accounting to 27%, in addition, four (4) were Deputy head teachers and four (4) were primary senior teachers and seven (7) were primary teachers). By gender, five (5) representing 33% were male and 10 translating into 67% were female. Deputy Head teachers were one (1) male representing 7% and 3 translating 20% were female. Primary senior teachers two (2) were male accounting for 13.3% and 2 were female accounting to 13.3%. The general findings in this study were that the majority of the participants were females.

In relation to the ages of respondents in the sample, majority of the respondents seven (7). Were ages between 35 — 44 years. The distribution of the respondents in relation to status and age of the respondents as shown the table below.

Table 4.1.2: Respondents by Status and Age Range (n= 15)

Age Range	Status of Respondents			Total
	Deputy Head teachers(HT)	Primary senior teachers (PST)	Primary teacher (PT)	
24 years & below	0	0	1	1
25 — 34 years	1	2	3	6
35 - 44 years	3	3	1	7
45 — 50 years	1	0	0	1
Total	5	5	5	15

According to the table above, out of this number three (3) were primary teachers, two (2) were primary senior teachers while the remaining one (1) was a head teacher. A minority of the respondents who participated in the study one (1) were aged 24 years and below. The average age of teachers who participated in the study, was between 25 — 34 years, while, that of Deputy head teachers and primary senior teachers was between 35 — 44 years. The oldest respondents were among the Deputy head teachers whose age were 45 years and above.

4.1.3 Table below, shows distribution of Participants by Pseudonyms

DEPUTYHEAD TEACHERS	PRIMARY TEACHERS	SENIOR	PRIMARY TEACHERS
DHT 1	PST 1		PT 1
DHT 2	PST 2		PT 2
DHT 3	PST 3		PT 3
DHT 4	PST 4		PT 4
			PT 5
			PT 6
			PT 7

In relation to pseudonyms DHT represents Deputy Head teacher while PST represents Primary senior teacher and PT represents PT in this current study.

Table 4.1.3 below, shows the distribution of respondents by status.

On the question of the status and qualification of teachers who participants in the in the present study in teaching strategies used in phonological awareness in lower primary schools, their distribution was as shown in the table 4.1.3 below.

Table 4.1.4: Status and Qualifications of Participants Respondents (n =15)

Status	Qualifications of teachers Respondents				
	Primary school certificate	Teachers Diploma	University Degree	Higher University Degree	Total
PT	2	3	2	0	7
PST	0	2	2	0	4
DHT	0	0	3	1	4
Total	2	5	7	1	15

According to the above table, there were fifteen (15) participants in teaching strategies used in phonological awareness in lower primary schools who participants in the study.

Out of the total number 15 of respondents. Seven (7) were primary teachers, four (4) were primary senior teachers while the remaining four (4) were Deputy head teachers. There were more primary teachers who participated in the study as compared to primary senior teachers and Deputy head teachers. One reason being that there are more teachers compared to primary and Deputy head teachers in schools.

In order to establish the length of experience in teaching strategies used in phonological awareness in lower primary schools, participants were asked on how long they had been teaching in schools. The responses were as indicated in table 4.1.5 below.

Table 4.1.5: Length of Service of Participants Teaching in Schools n =15

Teaching experience	
Range in years	No. of Teachers - Respondents
2 — 3 years	01
4 — 6 years	02
7 — 9 years	05
10 years & above	07
Total	15

Table 4.1.5 above, shows that out of 15 participants, the majority of them had served in primary schools for a period of ten (10) years & above whilst the least number of respondents had worked for two (2) to three (3) years in lower grades. It is evident from the statistical information generated in this study that most respondents who contributed to this study had sufficient knowledge, skills and experience in teaching strategies used in phonological awareness in lower primary schools.

4.2 Research Question 1

What strategies did teachers use to teach phonological awareness in lower primary schools?

One of the objectives of this study was to establish strategies teachers use to teach phonological awareness in lower primary schools in the study districts. One of the questions asked to establish strategies used by teachers to teach phonological awareness was what strategies lower primary teachers use to teach phonological awareness.

The analysis revealed major themes concerning strategies teachers use to teach phonological awareness in lower primary schools. A set of subthemes also emerged. The strategies that the participants came up to teach phonological awareness in lower primary schools with were as follows; using codes or near codes.

- Generating Rhymes
- Multi-sensory mapping
- Picture Card Snap
- Sound Sorts
- Treasure Chest

Below is a detailed presentation of the findings cited above to understand the strategies used to teach phonological awareness in lower primary school:

4.2.1 Generating Rhymes

Many pupils enter preschool having already obtained knowledge of letters and sounds through language play or exposure. However, for those who need these concepts and skills, explicit, systematic instruction in phonemic awareness is necessary.

Regarding participant's understanding of the strategies used to teach phonological awareness in lower primary school, all fifteen (15) respondents reported that pupils in a lower primary can manipulate phonemes and identify letters and they progress at a faster pace in learning to read. The findings revealed that in the field of literacy, phonemic awareness is a conceptual understanding of language which is a skill. Eight (8) out of fifteen (15) participants reported that to identify the phonemes in [cat], pupils must understand that there are sounds at the beginning, middle, and end that can be manipulated. The findings revealed that identifying beginning and ending sounds is much easier than recognizing medial phonemes revealing the need for explicit, systematic instruction in phonemic awareness that is integrated within a literacy program in schools.

Generating Rhymes was identified as one of the strategies in which phonological awareness can be taught to pupils in the lower primary grades. What teachers mean by generating rhymes is an instructional strategy that develops explicit phonemic awareness skills for pupils in lower grades.

For example, during the activity, pupils were engaged in isolating, blending, and manipulating sounds on several levels, pupils first identify the rhyme within an authentic context, such as a poem or song. Playing with language enables pupils to practice making words through rhyme generation. These methods guarantee the achievement of phonological awareness to pupils in lower primary grades. Four (4) out of fifteen (15) respondents revealed that implementing the rhyme generation activity is to encourage pupils to develop critical phonemic awareness skills such as manipulation of the onset and rime. The onset is the beginning sound/letter, such as /b/ in bat.

All respondents reported that the identification of rhymes is an initial phonemic awareness skill that many pupils pick up through language play which occurs during the morning communication or shared reading time.

The results showed that ten (10) out of fifteen (15) respondents were of the view that phonemic awareness and letter knowledge are key predictors of pupils success in learning to read.

In support of this view, one female teacher participant PT3 supported the strategies she uses to teach phonological awareness in lower primary schools and observed that:

As a teacher of languages, I use rhyme generation during any segment of the literacy block, depending on my pupil's needs. For example, I choose when to demonstrate the activity and I coach my pupils in phonemic awareness skills during guided reading.

On the other, nine (9) out of fifteen (15) of the teachers participants reported that teaching phonological awareness to lower grades required the use of different strategies. this was evidenced in the observation made by one male teacher participant, who said that:

With me I get a picture of a shopping mall show it to my pupils and ask them if they know what it is and what happens there. After discussing the picture, I present the poem Shopping Mall”

In buttressing the explanation that rhyme generation is a strategy used to teach and understand phonological awareness in lower primary schools, PT1 reported that:

To provide explicit teaching, teachers need to scaffold the English language for learners understanding of rhyme. Lower primary pupils need a picture sort activity to grasp the concept of “rhyme” before the Rhyme Generation lesson.

4.2.2. Multi-Sensory Mapping

Regarding multi-sensory mapping, as one of the strategies teachers use to teach phonological awareness in lower primary schools, respondents reported that it uses all modalities (auditory, visual, kinesthetic-tactile) to facilitate retention and processing of sounds.

Nine (9) out of fifteen (15) reported that this strategy uses techniques such as tracing, illustrating, and chanting sounds to enable young learners to process sounds in multiple ways. Twelve respondents reported that as pupils play and use sounds through the senses, they begin to grasp the alphabetic principle. In support of the notion that multi-sensory mapping is a strategy used to teach and understand phonological awareness in lower primary schools, PT7 had this to say:

Multisensory Mapping is used as an intervention strategy for dyslexic or striving readers. It should be implemented as a supplementary activity to provide pupils with multiple opportunities to process sounds, rather than as an introduction to phonemic awareness.

Contributing on the same issue of multisensory mapping as one of the strategies teachers use to teach phonological awareness in lower primary schools, respondents DHT3, added that:

Teachers need to present the target sound in context and pupils join in a poem or song as keywords are highlighted. After singing the song or chanting the poem, the teacher leads pupils in a choral reading selecting target sounds. For example, the teacher selects target sounds such as “c” or “t” from keywords in the song or poem and identifies them for pupils.

Contributing on the same issue of the strategies teachers use to teach phonological awareness in lower primary schools a female Senior teacher respondent PST2, observed that:

As a teacher I help my pupils to match letters and sounds, calling on individual pupils to match the target sound with a picture in a sound sort activity. After the sound sort activity, allow pupils to write the letter that represents the sound in the air, chanting the sound at the same time.

Reacting to the same question on what strategies teachers use to teach phonological awareness in lower primary schools, one female primary school teacher PT7, reacted by saying:

As a linguist teacher, I allow pupils to trace the letter and invite individual pupils to use corn meal to trace the letter as they recite the sound. Immediately after tracing the letter, pupils should generate words that begin or end with the target sound.

On the other hand, eleven (11) out of fifteen (15) respondents reported that the existing atmosphere in the teaching and learning phonological awareness was rather hostile and accommodative for teachers to make any significant contribution to the learning of DB learners. In support of these observations, one female PT5 noted as follows:

The use of review target sounds and letters helps teachers to distribute pictures and letter cards with raised bumps or sandpaper. Allow the pupils to work with partners to repeat the process as a review. Allowing prior sounds and letters to be added to the review.

4.2.3 Picture Card Snap

On the whole, the findings showed that picture card Snap provides emergent and early readers with scaffolder practice in identifying and classifying sounds. As a way of assessing lower grades phonological awareness learners often struggle with phonemic awareness activities since teachers ask them to treat speech sounds as objects to be manipulated. Twelve (12) out of 15 respondents reported that with specific training in identifying and manipulating sounds, young readers can make significant progress in reading and sound-spelling at a much earlier age. In support of this strategy participant PST2 observed that:

With me in my class, I use picture card snap to help my pupils remember words and repeated practice in matching initial, medial, or final sounds to pictures. I recommend lower primary teachers use it too.

Contributing on the same issue of what strategies teachers use to teach phonological awareness in lower primary schools, a male primary teacher participant PT1, observed that:

I feel as a teacher of English, it is imperative to use picture snap cards for beginners (pupils) as a game, putting pupils in small groups so that every instruction you give as a teacher can be followed with less difficulty.

Indicated below are participant DHT2, experiences in examining and understanding the strategies used to teach phonological awareness in lower primary schools.

I have experience in teaching pupils phonological awareness using picture cards selecting pictures to represent target sounds and “Odd-man out” pictures to complete the pack of cards.

The results showed that eight (8) out of fifteen (15) of the respondents believed that identifying sounds and taking several oral responses to find the picture from a group of three that begins with the same sound, [m] help in phonological awareness in lower grades. Contributing to the same, another participant PT6, said that:

When teaching pupils allow them to identify the sound at the beginning of [moon]. [Mmm] is the first sound we hear in [moon]. Lets all say it together: [mmm]. Ask pupils if they can think of other words that have the same initial sound as [moon].

4.2.4 Sound Sorts

Sound Sorts is an instructional strategy that facilitates student's attention to phonemes. As emergent and early readers focus on and think about sounds, they are developing metalinguistic awareness. Some pupils experience difficulties with phonemic awareness instruction because they are unable to see speech sounds as objects that can be manipulated. Sound sort activities provide pupils with opportunities to step back and focus on the sounds they hear in words.

All fifteen (15) participants reported that activities that involve blending and segmenting of sounds facilitate emergent and early readers decoding and encoding skills and ten (10) out of fifteen (15) said that pupils should focus on initial, medial, or ending sounds and categorize them, they improve their ability to identify and manipulate sounds. It was imperative to examine and understand the strategies used to teach phonological awareness in lower primary schools. The findings showed that all fifteen (15) respondents articulated that teachers should focus on the target sound sort. For example, the teacher says [bat, net, fit]. All have the same ending sound, /t/.

4.2.5 Treasure Chest

The theme of Treasure Chest is an instructional strategy that focuses on the skills of segmenting and blending sounds. A treasure chest is used when working in pairs, pupils use picture cards to practice segmenting words into phonemes and blending phonemes into words. When a peer answers correctly they place a penny in a treasure chest which encourages learners to score more marks to fill the treasure chest.

Contributing to the debate on what strategies teachers can use to teach phonological awareness to lower grades a male head teacher participant DHT2, reported that:

The objective of the Treasure Chest activity is to provide emergent or early readers with repeated practice in segmenting and blending phonemes which are best suitable for a literacy center and it can also be used as an independent work packet to be used at home with parents.

To sum up, the findings showed that the current study identified the strategies used by teachers in teaching phonological awareness in lower primary grades.

The following were the strategies employed by lower primary teachers; generating Rhymes multi-sensory mapping; picture Cards; Snap sound Sorts and pressure Chest.

4.3 Research Question 2

What factors affected the use of strategies used to teach phonological awareness in lower primary schools?

It should be remembered that one of the objectives of this study was to establish factors that affect the use of strategies used to teach phonological awareness in lower primary schools. The analysis revealed two (2) major themes concerning factors that affect the use of strategies used to teach phonological awareness in lower primary schools. These are situational factors and individual factors. For each of the superordinate themes, a set of sub-themes also emerged

The Factors that participants came up with that affect the use of strategies used to teach phonological awareness in lower primary schools were as follows using codes or near codes that the participants came: Themes which came out were situational factors giving codes and near codes:

- Learning style
- Personality

Theme which came out were Individual factors giving codes and near codes

- Language
- Motivation
- Age

4.3.1 Learning style

Learning style is individually characteristic, stable, and habitual. It is used to describe perceptual individual approaches to learning, i.e., how to perceive, store, retrieve, or recall information. Cognitive style is a branch of learning style. It was imperative to establish whether learning style can be factors that affect the use of strategies to teach phonological awareness in lower primary schools.

The responses from participants were that teachers methodology is directly hooked to the uses of learning strategies. The study also revealed that in the task of oral training, pupils are bound to apply all kinds of verbal strategies.

There is evidence that task type has a marked influence on pupils use of both cognitive and metacognitive strategies. Here is evidenced by the contribution of respondent PT3, who said:

A teacher should spend much time explaining the use of words, phrases and sentences in extensive reading class, to his/her pupils and tend to use bottom-up theory. What they learn is the meanings of words, phrases and sentences and they cant catch the veracity of content.

Out of fifteen participants who participated in the study, ten (10) approved that six major learning style preferences: visual, auditory, tactile, group and individual differences. The learning style preferences are not fixed according to the change in the teaching environment and other factors. In support of the above-stated view, which most respondents stated that Learning is best when the learning opportunity matches the learners preference. Learners style preferences will influence the kinds of strategies they choose to learn new material.

In contrast, five out of 15 respondents alluded that a learner with a field-independent style tends to reside at the lexical level, deferring his/her comprehension of written materials, and learning alone. He/she pays more attention to the meanings of words, phrases and sentences cant read between the lines and cant cooperate with peers and teachers. If a teacher tends to convey input to pupils with a grammatical teaching method, his/her pupil undoubtedly makes the best of the conversion strategy. It can be deduced that in the task of oral training, pupils are bound to apply all kinds of verbal strategies. There is evidence that task type has a marked influence on pupils use of both cognitive and metacognitive strategies.

4.3.1.2 Personality

In an attempt to establish if personality is one of the factors that affect the use of strategies to teach phonological awareness in lower primary schools, the study revealed that seven (7) out of fifteen (15) respondents were with the view that there is immense evidence to prove the close relationship between personality and strategy use. Contributing on the same issue to establish whether or not personality is one of the factors that affect the use of phonological awareness in lower primary schools, one female Deputy head teacher DHT2 observed that:

I strongly support that extroverted learners do better in requiring basic interpersonal communication than introverted learners who do better at developing cognitive academic language ability. However, the relationship between individual traits and reported strategy use is also puzzling in some cases.

There was also a strong instinct to hypothesize the connection of personality with the choice of strategy use. In the point of many language teachers, personality constitutes a main factor contributing to success or failure in language learning. Researchers investigate considerably the multi-faceted personality traits.

4.3.1.4. Motivation

The study also revealed that motivation is a compelling factor in teaching phonological awareness. Its effects are obviously to be seen in the success of phonological awareness. It seems easy to accept the assumption that learning is mostly likely to occur when we want to learn.

However, the concept of motivation is with ease overlapped with other attributes. Thus, a crucial but complicated motivation is always the object of research. In support of motivation as one of the factors that affect the teaching of phonological awareness in lower primary grades, Participants PST1 confirmed that:

Motivation is an important factor in strategies for phonological awareness. Its necessary to identify the types of motivation that assist in the successful acquisition of a second language.

There are two types of motivation---integrative motivation and instrumental motivation. Integrative motivation has been identified as the learners orientation about the goal of learning a second language.

Another female teacher participant in factors that affect the use of strategies used to teach phonological awareness in lower primary schools participant PT8, had this to say:

The strength of motivation can have a conductive effect on the quality of learning strategies they employ. "The degree of expressed motivation is the most powerful influence on the choice of learning phonological awareness strategies." E.g., learners with strong instrumental motivation for obtaining good grades in the course are likely to employ formal practice and general study strategies.

4.3.1.4.1 Age

The participant was asked if age is one of the factors that affects in use of strategies to teach phonological awareness. Results showed that all fifteen (15) participants acknowledged that an adolescent or adults formal language is related to the cognitive development of an older learners brain. Older learners are in situations which require much more complicated language. They can go about learning linguistic rules by consciously studying. They have to pay more attention to some rules when they use the language, on the other hand, meta-awareness younger children dont wholly lack,

they often use informal language and they have little care about the correctness of language use because they think language is only a tool to convey meaning.

On the whole, the findings showed that teachers participants on what factors affect the use of strategies used to teach phonological awareness in lower primary schools, Sentiments by participants PT7, were that:

Adults are too timid to naturalize learning while young children are risk-takers. So, there is a greater opportunity for young learners to approach the target language through meaning-focused strategies and risk-taking effective strategies and they seldom compensate for them inadequacy of knowledge of the target language with the help of them mother tongue. Old learners prefer to form-focused strategies memorizing, rehearsing and proneness to cover their weaknesses in the target language with more communication strategies. All of these postulations have been substantiated.

To sum up, the findings showed that the current study identified the factors that affect the use of strategies used to teach phonological awareness in lower primary schools. The themes which came out were Situational factors giving codes and near codes Language was learning style and Personality. The themes which came out were Individual factors giving codes and near codes Language was motivation and age.

4.4 Research Question 3

In which ways could the strategies be enhanced and used in teaching phonological awareness in lower primary schools?

It should be recalled that other objectives of this study were to find out which ways can the strategies be enhanced and used in teaching phonological awareness in lower primary schools. One of the questions, respondents were asked was whether or not teaching phonological awareness can be enhanced. The response given by respondents revealed major themes concerning ways can the strategies be enhanced and used in teaching phonological awareness in lower primary schools.

The analysis revealed two (2) major themes concerning ways can the strategies be enhanced and used in teaching phonological awareness in lower primary schools. These are Teacher Knowledge and Provide intervention. For each of the superordinate themes, a set of sub-themes also emerged.

The ways can the strategies be enhanced and used in teaching phonological awareness in lower primary schools were as follows using codes or near codes that the participants came: Themes come out were Teacher Knowledge giving codes and near codes

- Mapping Phonemes
- Recognizing Rhymes
- Manipulating Phonemes
- Blending Phonemes
- Segmenting Phonemes

The themes which came out were Teacher knowledge-giving codes and near codes Language

4.4.1.1 Teacher Knowledge

Phonological Awareness (PA) plays a fundamental role in reading development. Phonemic awareness can be taught and learned, and children benefit from direct instruction in phonemic awareness and explicit systematic phonics Some of the most important themes identified in the course of analysis in finding ways and strategies to enhance the use in teaching phonological awareness in lower primary schools was that of highlighting phonological awareness concepts in songs, rhymes, poems, stories, and written texts. This was evidenced in the following verbal account where participant PT4, indicated:

Ways that can enhance the use of phonological awareness teaching in lower primary schools is to identify familiar short poems such as “I scream you scream we all scream for ice cream!” Have children clap their hands with each word.

4.4.1.2. Provide Intervention

Considerations of timing, intensity, duration, and scope provide a framework for intervention. However, the study revealed that seven (7) out of fifteen (15) respondents were with the view that providing highly effective intervention, for pupils who are at greatest risk for reading disabilities, requires careful attention to and execution of the details of instructional design, for example, the sequence of teaching within each step of the instructional sequence, organization of instructional stimuli, strategies for teaching, phonological awareness in lower primary pupils.

Participants described predominantly that the most important concerning timing is that intervention is provided before pupils lag too far behind their peers and that intervention relates to curricular demands or expectations.

In buttressing the explanation that intervention is vital participant DHT3, reported that:

The curriculum framework in Zambia (ZECF) guides and sets binding regulations for all levels of learning has the expectations and supports phonemic awareness intervention as early as kindergarten. It becomes possible to identify pupils who have not benefited adequately from classroom instruction, who are not moving toward mastery of phonological awareness, and thus, who may need more explicit intervention.

Regarding duration and intensity, all fifteen (15) participants reported that intensity and duration of intervention should be considered. Duration is defined as the total length of intervention and intensity as the frequency of intervention. In support of the notion, Participant DHT3 stated that

“instruction or intervention provided substantial benefit, with longer programs not necessarily leading to greater benefit.”

4.5. Findings from Oral Interviews.

In all the four (4) schools, teachers whose were interviewed mentioned that the strategies used to teach phonological awareness were blending, substitution, segmentation, deletion and sound identification though sound identification was less utilized. When asked what the problem with sound identification was, one of the respondents said:

Sound identification as an activity demands me as a teacher to produce it correctly before learners During a grade one (1) literacy lessons, sometimes I mis sound particular letters and Syllables such as /nkw/ an in the word nkwele (Icibemba) meaning I climb (English)

5.6. Findings from Lesson Observations.

From the seven (7) lessons observations done in the four (4) schools, four (4) teachers included blending, substitution and sound identification activities which are sub skills of phonological awareness in a single PLP Lesson delivery while the three (3) teachers taught all the phonological awareness components in two separate lesson plans.

One teacher from school B said that;

I manage to teach all the phonological awareness components within the given time. This is because learners understand fully when all the components have been presented

Another teacher from school E had this to say;

I find it difficult to teach all the components due to time and that learners become tired as a result, learners find it difficult to break through. When I teach all the components in a single lesson plan, learners stop paying attention as it takes more than one hour

Lesson observation was done in all the four (4) schools where various activities were noted during lesson progression done by observed teachers. For example, in school A, an activity involving substitution was observed during the lesson. In this activity, the teacher with pupils substituted the vowel sound attached to the diagraph /mb/ with other vowel sounds to come up with the syllables mba, mbe, mbi, mbo and mbu (Icibemba). During the lesson progression, the syllables were combined or blended to form words such as; the syllables le + mba were blended to form “lemba” Write the same pattern was seen in the other schools. Lesson observations confirmed what the teachers claimed they were doing.

4.6.1. Strategies teachers are using to teach Phonological Awareness Activities.

The third question sought to find out strategies teachers were using to teach phonological awareness. In order to get this information, lesson observations were conducted in all the four (4) school. From the observations conducted, important information pertaining to lesson procedure ,creativity on the part of the teacher, medium of instruction and availability of P L P learning and teaching materials was also gathered. It was also revealed that teachers were using strategies in their teaching such as; generating rhymes, multi-sensory mapping, picture card snap, sound sorts and treasure chest

4.6.1.1. Lesson Procedure

In all the four (4) schools, teachers whose lessons were observed were following the lesson procedure as outlined in the Grade 1 Literacy Teachers“ Guide. They began with either a song or game to capture the learners“ attention. This was followed by revising the syllables learnt in the previous lesson. The new lesson was introduced by the teacher uttering words that had the sounds or diagraphs to be taught on that day. The teacher asked learners to identify the first sound and once identified wrote it on the board in capital and small letters. This was followed by revision of the vowel sounds which the learners had learnt earlier. The teacher and pupils started blending the diagraphs with vowels leading to the formation of different syllables. After examples were given, learners were asked to make words from syllables orally. Further, the teacher and pupils made simple sentences from the words formed. The teacher concluded the lesson by asking learners to read the syllables, words and sentences formed which were written on the board. Generally, this pattern was followed in all the four (4) schools.

4.6.1.2. Creativity on the part of the teacher

The teachers in the four (4) schools followed the lesson procedure as prescribed by the literacy teachers' guide. For example, the teacher at school B taught the lesson as it was outlined in the teacher's guide. She had included a number of oral language activities such as songs in her lesson. At the beginning of the lesson, learners sang a song. The teacher and learners also sang a song which had sounds which they were going to learn that day. After the digraphs were blended with vowels to make syllables, a song which had syllable sounds learnt on that day was sung. Further, the teacher used teaching aids to teach. She had written the syllables to be learnt on a chart. She also made syllable cards in advance.

4.6.1.3. Materials for Primary Literacy Programme

In all the four (4) schools, there was a shortage of materials for the Primary Literacy Programme which was introduced in 2013. At the time, data was collected, each school had only a copy of the PLP Teacher's Guide which was photocopied and distributed among teachers for Grade 1. The schools did not have pupil's books. This meant that all the exercises were written on the board by the teacher and this was time consuming.

4.6.1.4. Medium of Instruction

In all the four (4) schools, primary teachers used local language (Icibemba) as language of instruction to teach the Grade one (1) learners a Primary Literacy Programme (PLP) lesson. They also used translanguaging to accommodate those learners who could not understand Icibemba as a local familiar language (Medium of instruction) in all the schools in Serenje district

One of the respondents at school D said that;

Apart from ichibemba as language of instruction, I also use Ichilala and Nyaja for the clarity and better understanding for learners with problems in understanding Icibemba

4.6.2 Phonological Awareness Training for Teachers Teaching Literacy

The fourth question was aimed at finding out if teachers had received training in phonological awareness during their pre service training or during Continuous Professional Development (CPD) meetings. The findings presented below present two sets of information. These are findings from those teachers who had not received any training both from colleges where they were trained and in CPD meetings and those who had received training in workshops (Teacher Group Meetings (TGM) and Continuous Professional Development Meetings) but not in the colleges where they trained from.

4.6.3 Not received training both in colleges and workshops.

In response to whether teachers had received training both in colleges and workshops, one of the respondents from school E had this to say;

I have not received training in phonological awareness both at the college where I was trained and in Continuous Professional Development Meetings at the at my school.

My lecturers at college only talked about phonics and not phonological awareness. I have not yet received any orientation or training in phonological awareness in the

Teacher Group Meetings because I had missed the meetings

4.6.4 Received Training in Workshops and not in College

Thirteen out of the fifteen respondents mentioned that they had only received training in phonological awareness in workshops, teacher group meetings and school in-service teacher meetings.

One of the respondents said,

“I was oriented in phonological awareness in a T G M when the Primary Literacy Programme was introduced.”

Other teachers said that they had not received any training in phonological awareness in colleges where they did their training. One of the respondents said,

The concept is quite new to me and I only knew about it in T G Ms. I came to know about phonological awareness fully at the time I was being oriented with the Primary Literacy Programme by her friends who had attended the workshop.

Another respondent said:

“I can't remember phonological awareness being taught. What I remember being taught is phonics. The word became common during orientation workshops for the new literacy curriculum. Phonological awareness is now commonly used in literacy assessments by the Ministry of Education

4.7 Summary of the Chapter

In conclusion, this chapter has presented the findings of this study. On the first objective asked what strategies teachers use to teach phonological awareness in lower primary schools. The following were the strategies employed by lower primary teachers; generating Rhymes multi-sensory mapping; picture Cards; Snap sound Sorts and pressure Chest. The second research question was asked and answered by finding out factors that affect the use of strategies used to teach phonological awareness in lower primary schools.

The identified themes which came out were situational factors giving codes and near codes, language were learning style and personality. Furthermore, themes which come out were individual factors giving codes and near codes language were motivation and age. The third objective of this study asked was in which ways the strategies can be enhanced and used in teaching phonological awareness in lower primary schools. Themes which came out were teacher knowledge giving codes and near codes, language mapping phonemes, recognizing rhymes, manipulating phonemes, blending phonemes and segmenting phonemes. Furthermore, the study found that teachers had not received training in phonological awareness during their pre- service training but were instead trained or oriented in workshops and teacher group meetings.

CHAPTER FIVE: DISCUSSION OF FINDINGS

5.1 Overview

The previous chapter presented the findings of the study on understanding the strategies used to teach phonological awareness in lower primary schools in Serenje District of Zambia. This chapter presents a discussion of the findings. The discussion of the study findings is an essential part of this study which brings to reality the findings by referring to existing knowledge (Hofstee, 2006). A definition by Bell and Water (2014) states that the discussion of research findings contains valid findings that answer the research questions and fulfil the research set objectives. The study referred to the literature and theories presented in the earlier chapters of the study to reflect, confirm and extend the current knowledge base and discussion on understanding the strategies used to teach phonological awareness in lower primary schools.

The three objectives that guided the study were: (i) To determine the strategies teachers, use to teach phonological awareness in lower primary schools of Serenje District; (ii) to discuss factors affecting the use of strategies to teach phonological awareness in lower primary schools of Serenje District; (iii) to establish ways of enhancing the use of strategies to teach phonological awareness in lower primary schools of Serenje District. The findings from the various respondents fulfilled the set objectives and answered the research questions. The findings were validated by other similar studies from different parts of the world. However, objectives have been discussed separately. Below is the discussion of the findings:

5.2 Strategies teachers used to Teach Phonological Awareness in Lower Primary Schools

The first research objective sought to establish the strategies teachers used to teach phonological awareness in lower primary schools of Serenje District. The findings as presented in chapter 4 showed that teachers used photos, songs, games, switching from one language to another, mapping, talking walls, and activities. These findings are in tandem with Mkandawire et al (2023) who observed that primary school teachers use diverse strategies to teach reading and these includes mixing languages when teaching, use of real life materials, games and talking or word walls. The findings from the study indicated that teachers used different strategies to teach phonological awareness in lower primary schools.

The findings are in line with Adams, (1998) who also found that there are so many ways to incorporate more than one modality into instructions. The study revealed that one of the strategies was of generating Rhymes for pupils in the lower primary which phonological awareness can be taught to pupils in the lower primary grades in an instructional strategy that develops explicit phonemic awareness skills to pupils in lower grades.

For example, during the activity, pupils are engaged in isolating, blending, and manipulating sounds on several levels, pupils first identify the rhyme within an authentic context, such as a poem or song.

Further analysis of the study findings revealed that multi-sensory mapping uses all modalities like auditory, visual, and kinesthetic-tactile to facilitate the retention and processing of sounds. The study findings by Bryant et al., (1990) confirm the phenomenon. As a result, the phenomenon that teaches phonological awareness in the lower primary is the ability to shift focus from a language or word as a meaningful entity to a language or word as a sound structure and recognition of speech sounds inside words or the understanding that words can be broken down into sequences of constituent sound segments.

Following the idea by Lyon (2000) that the strategies used by teachers offer developing early readers with specific, repeated practice in matching initial, medial, or final sounds to pictures. With specific training in identifying and manipulating sounds, young readers can make significant progress in reading and sound-spelling at a much earlier age. The research findings revealed that Sound Sorts is an instructional strategy that facilitates students attention to phonemes. As emergent and early readers focus on and think about sounds, they are developing metalinguistic awareness. Some pupils experience difficulties with phonemic awareness instruction because they are unable to see speech sounds as objects that can be manipulated. Sound sort activities provide pupils with opportunities to step back and focus on the sounds they hear in words and the research results by Matafwali and Bus (2013) showed that reading ability is a predictor of future reading ability. The study established that the developmental sequence of PA is typically described as progressing from metalinguistic awareness of rhyme, to awareness of syllables, and lastly to phonemes.

Qualitative findings from (Goldstein et al. 2017) indicated that phonemic awareness skills, particularly phonemes segmentation and phoneme blending, are sophisticated PA skills that should develop during lower grades. The study findings indicated the above to be true as one participant indicated that the skills required for understanding relations between spoken language and orthography, facilitating phoneme-grapheme coupling, on various issues relating to difficulties such as PA and speech perception in noise is necessary.

In summary, it can be echoed that teachers use different strategies to teach phonological awareness to learners in lower primary schools. Many learners, therefore, received instructions in lower grades.

5.3 Factors affecting the use of Strategies to Teach Phonological Awareness in Lower Primary Schools

In this study, strategies used to teach phonological awareness in lower primary schools identified risk factors that require intervention which include low levels of language proficiency, vocabulary knowledge speech perception and phonological awareness. Limited resources and libraries in primary schools contributes to low performance of learners. Furthermore, lack of phonological awareness skills in teachers posed challenges use of strategies to teach phonological awareness in lower primary schools.

In this study, another factor that affected the teaching of phonological awareness in lower primary voice by the teacher was the lack of knowledge by teachers in primary schools. It was revealed in the study that some teachers lack the knowledge in blending sounds within words and there are also signs of interferences in the ability of the pupils to fluently read out words. The following words came from a teacher: The reading ability of pupils in this school is low; this is due to the fact teachers do not teach them the knowledge on blending sounds with words. To confirm this finding, Joseph (2018) highlights that the most common cause of difficulties in acquiring early word reading skills is a weakness in the ability to process the phonological features of language.

The study findings also established that teachers do not have awareness in lower primary grades. It was uncovered that many children have no reading competition among pupils in this school to motivate them to read always. Another teacher commented that: The motivation level to encourage pupils to read story books in this school is low. It would have been better if the teachers could externally motivate the pupils to develop their interest in learning to read. The study also revealed that language teachers themselves do not possess the requisite skills to motivate pupils to read and to become habitual readers. These findings are in line with McRae and Guthrie (2009) who explained that a teacher's assertion is not enough motivation because teachers themselves do not possess the skills in teaching how to read.

The study findings revealed that the majority of the teachers interviewed had not received training in phonological awareness during their pre — service training. Instead, these teachers received this training in phonological awareness during in —service workshops such as Teacher Group Meetings. It is worth pointing out that the time spent on orienting or training teachers in workshops and teacher group meetings is short and usually not enough thus making teachers not to fully benefit from such trainings. One of the respondents mentioned that she was oriented to teach phonological awareness by another teacher who had attended a workshop on the same.

The findings of the study tie with Duhaze (2014) position to the effect that training of teachers had a measurable impact on learners as the learners taught by these trained teachers improved in their reading levels. One of the implications of the findings of the study conducted by Washburn (2011) was that if pre service student teachers are not trained before completing their training, they were going to have serious challenges teaching basic language constructs related to literacy. This present study revealed that no teachers had received pre — service training in phonological awareness in college. This means that most teachers started teaching without any knowledge in phonological awareness. The implication of the finding is that these teachers did not understand phonological awareness until such a time when they were oriented or trained during in — service workshops. Some teachers were Even if some teachers attempted to teach phonological awareness, they were having serious challenges. The study also revealed that one teacher had not received training both during workshops and the time spent at college.

This respondent mentioned that she had missed all literacy related workshops because of circumstances beyond her control. The teacher did not look confident and was not willing to have her lesson observed. The implication of this finding is that learners taught by this particular teacher were either not learning phonological awareness or learning it in a wrong way. The foregoing finding was in line with the views of Darling-Hammond (2000) to the effect that pre —service student teachers not trained before completing their training were going to have serious challenges teaching basic language constructs related to literacy.

There was a shortage of teaching and learning materials in all the selected schools. The teachers' guide was a photo copied one and sometimes shared among teachers. The schools also did not have pupil's books and this made teachers to write all exercises for the learners on the chalk board. If these books were available, teachers were just going to instruct learners to write the exercises from the book. This state of affairs meant that time was lost cleaning the board and examples which learners were given by the teacher were also rubbed. Further, the time lost meant that teachers were also unable to complete the work which was to be covered on that particular day. Lack of readers also meant that learners had no practice reading stories. The implication of this finding is that teacher were not likely to finish teaching all the work they had planned to teach in a term or year. The study further revealed that blending, substitution and sound identification were the components of phonological awareness that teachers were teaching during literacy lessons. According to Adam et al (1998) phonological awareness is divided into four main components namely segmentation, blending, substitution, deletion and sound isolation (identification).

However, it was found in this study that only three components were being taught by some teachers leaving other components which contributes to the development of phonological awareness in learners. Wagner et al (1994, 1997) who conducted a similar study in English found that sound deletion, segmentation and sound blending had a unique influence development of phonological awareness. Perfetti et al (1987) also found that phoneme deletion skills were a product of reading ability while phoneme synthesis (segmentation) seemed to support later reading.

5.4 Ways of enhancing the use of Strategies to Teach Phonological Awareness in Lower Primary Schools

There are several ways to enhance the use of strategies to teach phonological awareness to lower primary schools. The first way was mapping Phonemes. The study findings revealed that teachers teach learners to connect the sound they hear with letters or letters that represent that sound. It was also evident that phoneme mapping supports the development of automaticity in one-on-one. Mapping phoneme strategy helps learners know how to pronounce letters (graphemes) and letter combinations that make up the sounds (phonemes) in words. In supporting these study findings, Alcock, et al. (2018) revealed that, for children in sub-Saharan Africa, the performance of children who were out of school and those who were in school, could not be distinguished as their performance was almost the same.

The study findings also found that Blending Phonemes was one way to enhance how to teach phonological awareness in lower primary schools in the study district. The study findings also revealed that teachers needed to teach blending in teaching lower primary school which is a skill of joining individual speech sounds (phonemes) together to make a word. Carson et al. (2012) asserted that in their work on the influence of a short, intensive period of classroom PA variables such as duration, intensity and content of PA instructions are understood may support the effective and efficient integration of PA teaching into the classroom environment. The study findings further revealed that teachers were of the view that, when pupils are assessed and an error analysis is included in the assessment process, teachers can use the information to identify pupils developmental levels and to inform instruction. It was clear from the study that it was possible to enhance phonological awareness in lower primary learners.

With regards to learners understanding of the medium of instruction, the study revealed that some learners in the classes they taught did not understand Ibibemba as the language of instruction. Asked about what they did to ensure that these learners were also taught, they revealed that they used other languages such as Nyanja and Ichilala in line with translanguaging. The use of translanguaging helped the teacher explain the concepts explicitly at hand thereby making it easy for learners to understand.

5.5 Summary

This chapter has discussed the findings of the study to examine and understand the strategies used to teach phonological awareness in lower primary schools in Serenje District Central Province Zambia. From the findings, it is clear that teachers use different strategies to teach phonological awareness. The chapter has, however, provided several strategies that may influenced the current form of phonological awareness in lower primary grades. These ranged from generating Rhymes multi-sensory mapping; picture Cards; Snap sound Sorts and pressure Chest. It was evident from the study that there were factors that affected the use of strategies used to teach phonological awareness in lower primary schools such as situational factors Language learning style and personality and individual factors such as language motivation and age. In addition, it was clear from the discussion that, strategies can be enhanced and used in teaching phonological awareness in lower primary schools through increasing levels of understanding in language proficiency, vocabulary knowledge speech perception and phonological awareness.

CHAPTER SIX: SUMMARY, CONCLUSION AND RECOMMENDATION

6.1 Overview

The previous chapter discussed the findings of the study. This chapter summarizes the research findings. At this stage, it must be confirmed that this study endeavoured to examine and understand the strategies used to teach phonological awareness in lower primary schools in Serenje District Zambia. However, this investigation was confined only to six selected primary government schools in Serenje District. Furthermore, in this chapter, the conclusion is drawn based on the findings of the study and thereafter some recommendations based on the study findings. Finally, the chapter ends by suggesting areas for further research on the findings of the study.

6.2. Summary of the Study

Arising from the previous chapters, the purpose of this study was to examine and understand the strategies used to teach phonological awareness in lower primary schools in Serenje District Central Province of Zambia.

The study was guided by Lane (2007) and Jones et al. (2012). The model was modified to make it more relevant to the study of the use of phonological awareness instruction in improving the English word reading ability of lower primary pupils in Serenje District Zambia. Through the use of this model, the researcher was able to explore the strategies used to teach phonological awareness in lower primary schools. It also helped the researcher understand the processes of teaching phonological awareness in lower grades.

The present study was guided by the following objectives; to determine the strategies teachers, use to teach phonological awareness in lower primary, schools of Serenje District, to discuss factors affecting the use of strategies to teach phonological awareness in lower primary schools of Serenje District and to establish ways of enhancing the use of strategies to teach phonological awareness in lower primary schools of Serenje District. The findings from the first question showed that teachers used photos, songs, games, switching from one language to another, mapping, talking walls, and activities. Through this question, it was revealed that one of the strategies was generating Rhymes for pupils in the lower primary which phonological awareness can be taught to pupils in an instructional strategy that develops explicit phonemic awareness skills.

Further, the study revealed that multi-sensory mapping uses all modalities like auditory, visual, and kinesthetic-tactile to facilitate the retention and processing of sounds. Indeed it has to be echoed that teachers use different strategies to teach phonological awareness to learners in lower primary schools

In second question, this study identified risk factors that require intervention which include low levels of language proficiency, vocabulary knowledge speech perception and phonological awareness. Limited resources and libraries in primary schools contributes to low performance of learners. Teachers' inadequate skills to teach phonological awareness in lower primary grades posed a learning gap. The study findings also established that teachers do not motivate learners in phonological awareness in lower primary grades. Through this question, it was also revealed that language teachers themselves did not possess the requisite skills to motivate pupils to read and to become habitual readers.

The third and last question, the study findings revealed mapping phonemes being one of the ways where teachers teach learners to connect the sound they hear with letters or letters that represent that sound. It was also evident that phoneme mapping supports the development of automaticity in one-on-one. Mapping phoneme strategy helps learners know how to pronounce letters (graphemes) and letter combinations that make up the sounds (phonemes) in words. The study findings further revealed that teachers were of the view that, when pupils are assessed and an error analysis is included in the assessment process, teachers could use the information to identify pupils' developmental levels and to inform instruction

Fifteen (15) respondents participated in the study, consisting of four (4) Deputy head teachers; four (4) primary senior teachers and seven (7) primary teachers. Deputy head teachers and primary senior teachers were chosen using purposive sampling techniques and teachers using simple random sampling. In-depth interviews and questionnaires were generated.

To ensure the reliability and validity of the data collected to support the study, the researchers ability to demonstrate rigour in a research study was imperative to the creditability of that study. The researcher adapted different means of measuring rigour and validity in the qualitative methodology. The criteria developed by Lincoln and Guba were used to determine the trustworthiness of this study such as; credibility, dependability, confirmability, transferability and authenticity. The qualitative data were analyzed using the inductive analysis method. This involved coding and grouping of the emerging themes and subthemes in the present study.

6.3 Conclusion

The study findings provide evidence that examines and understands the strategies used to teach phonological awareness in lower primary schools in Serenje District in Central Province in Zambia. The findings in many ways reverberate with the literature reviewed in chapter 2.

The problem that this study wanted to address emerged from the fact that nothing was known about the strategies used to teach phonological awareness in lower primary schools in Serenje District in Central Province in Zambia.

The study was guided by the following objectives:

1. To determine the strategies teachers, use to teach phonological awareness in lower primary schools of Serenje District.
2. To discuss factors affecting the use of strategies to teach phonological awareness in lower primary schools of Serenje District.
3. To establish ways of enhancing the use of strategies to teach phonological awareness in lower primary schools of Serenje District.

Fifteen (15) respondents participants in the study consisting of four (4) Deputy head teachers, four (primary senior teachers) and seven (7) teachers were selected using a purposive sampling technique. Primary data was generated using questionnaires and in-depth interview guides. To ensure the reliability and validity of the data collected to support the study, the researcher used member-checking qualitative techniques to establish tenets of credibility in trustworthiness. It was done through the sharing of a summary of the interview scripts and findings with the participants to review whether the findings depicted the strategies used to teach phonological awareness in lower primary schools in Serenje District.

6.3. Recommendations

Based on the findings above, the following key recommendations emerged:

- The Ministry of General Education through colleges of Education should ensure that phonological awareness should be stressed in the curriculum development of teachers in training colleges and universities to achieve quality and effective teachers in Zambia.
- The government to promote the teaching of phonological awareness in primary schools and improve the curriculum on early language and literacy.
- The NGO should support the programs financially help in sensitizing the community on the importance of literacy programs and help provide a secured place where literacy can be taught
- MoE should ensure that through Continuous Professional Development (CPD) teachers in primary schools are oriented on the importance of teaching phonological awareness in lower primary grades
- Teachers in lower Primary schools should teach activities which stimulate phonological awareness skills such as mapping and generalized rhymes.

6.4 Areas for Further Research

Arising from the research findings of the study, some aspects of this study area may not have been studied and these may need to be studied. The areas of the study which may be studied include: Having looked at the strategies used to teach phonological awareness in lower primary schools in Serenje District of Central Province of Zambia, the researcher would recommend that a similar study be done in another District of rural setting so that the findings could be compared and inferred for the whole country

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APPENDICES

Appendix A: Informed Consent Form

Dear Respondents,

My name is **Samesize F Tembo**, I am currently a student at the University of Zambia pursuing a master degree in literacy. This research is a major requirement for me to complete my programme. Thus, this exercise is purely academic.

1. **Purpose**
2. **Consent**

Participation in this exercise is voluntary. You are free to decline to participate in this exercise at any point.

1. **Confidentiality**

All data collected from this research will be treated with utmost confidentiality. Participants are therefore assured that they will remain anonymous and untraceable in this research.

1. **Rights of Respondents**

All efforts will be made to ensure that the rights of participants are protected and respected. Participants are assured that they will suffer no harm as a result of participating in this exercise. Participants are free to seek any clarification at any point of the exercise and to inform the researcher if they feel uncomfortable about any procedure in this research.

Declaration of Consent

I have read and fully understood this document. I therefore agree or disagree to participate in this exercise.

Signature:.....

Date:.....

Appendix B: Questionnaire for primary Teachers

Instructions

Do not write your name on this paper.

Treat this work as a contribution towards building up knowledge on inclusive practices in the district. Put a tick on your choice or circle your response or fill in the appropriate responses in the space provided.

All responses must be written in the space provided.

PART A BIO DATA

1. Where is the school located in the district?

- (a) Urban area:
- (b) Peri-urban area:
- (c) Rural area:

2. What is your gender?

- (a) Male
- (b) Female

3. How old are you (in years)?

- (a) < 24 years
- (b) 25 — 29 years
- (c) 30 — 34 years
- (d) 35 — 39 years
- (e) 40 — 44 years
- (f) 45 — 49 years
- (g) > 50 years

4. What is your highest professional qualification?

- (a) Primary Teachers Certificate
- (b) Secondary Teachers Diploma
- (c) University Degree
- (d) Higher University Degree
- (e) Others(s) specify

5. How long have you been teaching?

- (a) Less than one year
- (b) 1 — 3 years
- (c) 4 - 6 years
- (d) 7 — 9 years

(e) 10 or more years

[]

1. what Position do you hold.....
2. Grade taught in the school

PART B QUESTIONS

1. What do you know about phonological awareness?

.....
.....
.....

2. Would you tell me some of the strategies teachers use to teach phonological awareness?

.....
.....
.....

3. What are some of the strategies do you use to teach phonological awareness?

.....
.....
.....

4. Where you trained how to teach phonological awareness while at college? Yes [] No. []

5. Have you received any training (Continuous Professional Development-CPDs) at your school on the teaching of phonological awareness? Yes [] No. []

6. As a grade lower grade teacher, what would be your list of factors that affect you in the use of strategies used to teach phonological awareness?

.....
.....
.....

7. Which ways can phonological awareness be enhanced in primary schools of Serenje District?

.....
.....
.....

Thank you for your cooperation

Appendix C: Questionnaire for Primary School Senior Teacher

Instructions

Do not write your name on this paper.

Treat this work as a contribution towards building up knowledge on inclusive practices in the district. Put a tick on your choice or circle your response or fill in the appropriate responses in the space provided.

All responses must be written in the space provided.

PART A BIO DATA

1. Where is the school located in the district?

- (a) Urban area: []
- (b) Peri-urban area: []
- (c) Rural area: []

2. What is your gender?

- (a) Male []
- (b) Female []

3. How old are you (in years)?

- (a) < 24 years []
- (b) 25 — 29 years []
- (c) 30 — 34 years []
- (d) 35 — 39 years []
- (e) 40 — 44 years []
- (f) 45 — 49 years []
- (g) > 50 years []

4. What is your highest professional qualification?

- (a) Primary Teachers Certificate []
- (b) Secondary Teachers Diploma []
- (c) University Degree []
- (d) Higher University Degree []
- (e) Others(s) specify []

5. How long have you been teaching?

- (a) Less than one year []
- (b) 1 — 3 years []
- (c) 4 - 6 years []
- (d) 7 — 9 years []
- (e) 10 or more years []

1. what Position do you hold.....

2. Grade taught in the school

PART B QUESTIONS

3. What do you know about phonological awareness?

.....
.....
.....

4. Would you tell me some of the strategies teachers use to teach phonological awareness?

.....
.....
.....

5. What are some of the strategies do your teachers use to teach phonological awareness?

.....
.....
.....
.....

6. Where you trained how to teach phonological awareness while at college? Yes [] No.[]

7. Have you received any training (Continuous Professional Development-CPDs) at your school on the teaching of phonological awareness? Yes [] No. []

8. As a senior teacher, what would be your list of factors that affect teachers in the use of strategies used to teach phonological awareness?

.....
.....
.....

9. Suggest in what ways can the use of strategies to teach phonological awareness in primary schools of Serenje District further be enhanced?

.....
.....

Thank you for your cooperation

Appendix D: Questionnaire: Deputy head teachers

Instructions

Do not write your name on this paper.

Treat this work as a contribution towards building up knowledge on inclusive practices in the district. Put a tick on your choice or circle your response or fill in the appropriate responses in the space provided.

All responses must be written in the space provided.

PART A BIO DATA

1. Where is the school located in the district?

- (a) Urban area: []
- (b) Peri-urban area: []
- (c) Rural area: []

2. What is your gender?

- (a) Male []
- (b) Female []

3. How old are you (in years)?

- (a) < 24 years []
- (b) 25 — 29 years []
- (c) 30 — 34 years []
- (d) 35 — 39 years []
- (e) 40 — 44 years []
- (f) 45 — 49 years []
- (g) > 50 years []

4. What is your highest professional qualification?

- (a) Primary Teachers Certificate []
- (b) Secondary Teachers Diploma []
- (c) University Degree []
- (d) Higher University Degree []
- (e) Others(s) specify []

5. How long have you been teaching?

- (a) Less than one year []

- (b) 1 — 3 years []
 - (c) 4 - 6 years []
 - (d) 7 — 9 years []
 - (e) 10 or more years []
6. What Position do you hold.....
7. Grade taught in the school

PART B QUESTIONS

1. What do you know about phonological awareness?

2. Would you tell me some of the strategies teachers use to teach phonological awareness?

3. What are some of the strategies do your teachers use to teach phonological awareness?

4. Where you trained how to teach phonological awareness while at college? Yes [] No. []
 Have you received any training (Continuous Professional Development-CPDs) at your school on the teaching of phonological awareness? Yes [] No. []
5. As a Deputy Head Teacher, what would be your list of factors that affect you in the use of strategies used to teach phonological awareness?

6. Suggest in what ways can the use of strategies to teach phonological awareness in primary schools of Serenje District further be enhanced?

Thank you for your cooperation

Appendix E: Interview Guide for Deputy Head teachers, Primary Senior Teachers and Primary Teachers

1. 1. What would you want the teachers to do to promote the teaching of phonological awareness in primary schools?
2. What would you want the government to do to promote the teaching of phonological awareness in primary schools?
3. What would you want the community to do to promote the teaching of phonological awareness in primary schools?
4. What would you want the NGO to do to promote the teaching of phonological awareness in primary schools?
5. What would you want Teachers Training Colleges and Universities to do to promote the teaching of phonological awareness in primary schools?

Appendix F: Lesson Observation Sheet

Name of the School:

TERM:Grade Observed :Teacher Gender :

No of Learners : Teacher Qualification:

Observation Component

1 Teaching and Availability of Teaching Materials.

(a) Is phonological awareness being taught during literacy lesson?.....

(b) What methods are used to teach phonological awareness?

(c) Is the teacher following the lesson Procedure?

(d) Is their creativity on the part of the teacher?

(e) Does the teacher have materials for P L P?

2 Teaching strategies Used by Teacher

(a)

(b)

(c)

(d)

(e)

(f)

Appendix G: Approval Letter



THE UNIVERSITY OF ZAMBIA DIRECTORATE OF RESEARCH AND GRADUATE STUDIES

Great East Road Campus | P.O. Box 32379 | Lusaka10101 | Tel: +260-211-290 258/291 777 Fax: (+260)-211-290 258/253 952 | E-mail: director.drgs@unza.zm | Website: www.unza.zm

APPROVAL OF STUDY

IORG No. 0005376
HSSREC IRB No. 00006464
REF NO. HSSREC-2024-JAN-045

6th February, 2024

Mr. Samesize F. Tembo
The University of Zambia
P. O. Box 32379
LUSAKA

Dear Mr. Tembo

RE: “STRATEGIES USED TO TEACH PHONOLOGICAL AWARENESS IN SELECTED PRIMARY SCHOOLS OF SERENJE DISTRICT OF ZAMBIA”

Reference is made to your submission of the protocol captioned above. The HSSREC resolved to approve this study and your participation as Principal Investigator for a period of one year.

REVIEW TYPE	ORDINARY REVIEW	APPROVAL NO. HSSREC:- 2024- JAN - 045
Approval and Expiry Date	Approval Date: 6 th February, 2024	Expiry Date: 5 th February, 2025
Protocol Version and Date	Version - Nil.	5 th February, 2025
Information Sheet, Consent Forms and Dates	<input type="checkbox"/> English	To be provided
Consent form ID and Date	Version - Nil	To be provided
Recruitment Materials	Nil	Nil
Other Study Documents	Questionnaire.	
Number of Participants Approved for Study		

Specific conditions will apply to this approval. As Principal Investigator it is your responsibility to ensure that the contents of this letter are adhered to. If these are not adhered to, the approval may be suspended. Should the study be suspended, study sponsors and other regulatory authorities will be informed.

CONDITIONS OF APPROVAL

- No participant may be involved in any study procedure prior to the study approval or after the expiration date.
- All unanticipated or Serious Adverse Events (SAEs) must be reported to HSSREC within 5 days.
- All protocol modifications must be approved by HSSREC prior to implementation unless they are intended to reduce risk (but must still be reported for approval). Modifications will include any change of investigator/s or site address.
- All protocol deviations must be reported to HSSREC within 5 working days.
- All recruitment materials must be approved by HSSREC prior to being used.
- Principal investigators are responsible for initiating Continuing Review proceedings. HSSREC will only approve a study for a period of 12 months.
- It is the responsibility of the PI to renew his/her ethics approval through a renewal application to HSSREC.
- Where the PI desires to extend the study after expiry of the study period, documents for study extension must be received by HSSREC at least 30 days before the expiry date. This is for the purpose of facilitating the review process. Documents received within 30 days after expiry will be labelled "late submissions" and will incur a penalty fee of K500.00. No study shall be renewed whose documents are submitted for renewal 30 days after expiry of the certificate.
- Every 6 (six) months a progress report form supplied by The University of Zambia Humanities and Social Sciences Research Ethics Committee as an IRB must be filled in and submitted to us. There is a penalty of K500.00 for failure to submit the report.
- When closing a project, the PI is responsible for notifying, in writing or using the Research Ethics and Management Online (REMO), both HSSREC and the National Health Research Authority (NHRA) when ethics certification is no longer required for a project.
- In order to close an approved study, a Closing Report must be submitted in writing or through the REMO system. A Closing Report should be filed when data collection has ended and the study team will no longer be using human participants or animals or secondary data or have any direct or indirect contact with the research participants or animals for the study.
- Filing a closing report (rather than just letting your approval lapse) is important as it assists HSSREC in efficiently tracking and reporting on projects. Note that some funding agencies and sponsors require a notice of closure from the IRB which had approved the study and can only be generated after the Closing Report has been filed.
- A reprint of this letter shall be done at a fee.

- All protocol modifications must be approved by HSSREC by way of an application for an amendment prior to implementation unless they are intended to reduce risk (but must still be reported for approval). Modifications will include any change of investigator/s or site address or methodology and methods. Many modifications entail minimal risk adjustments to a protocol and/or consent form and can be made on an Expedited basis (via the IRB Chair). Some examples are: format changes, correcting spelling errors, adding key personnel, minor changes to questionnaires, recruiting and changes, and so forth. Other, more substantive changes, especially those that may alter the risk-benefit ratio, may require Full Board review. In all cases, except where noted above regarding subject safety, any changes to any protocol document or procedure must first be approved by HSSREC before they can be implemented.

Should you have any questions regarding anything indicated in this letter, please do not hesitate to get in touch with us at the above indicated address.

On behalf of HSSREC, we would like to wish you all the success as you carry out your study.

Yours faithfully,



Dr. J. I. Ziwa
DR. J. I. Ziwa

**CHAIRPERSON
THE UNIVERSITY OF ZAMBIA HUMANITIES AND
SOCIAL SCIENCES RESEARCH ETHICS COMMITTEE - IRB**

cc: Director, Directorate of Research and Graduate Studies
Assistant Director (Research), Directorate of Research and Graduate Studies
Assistant Registrar (Research), Directorate of Research and Graduate Studies