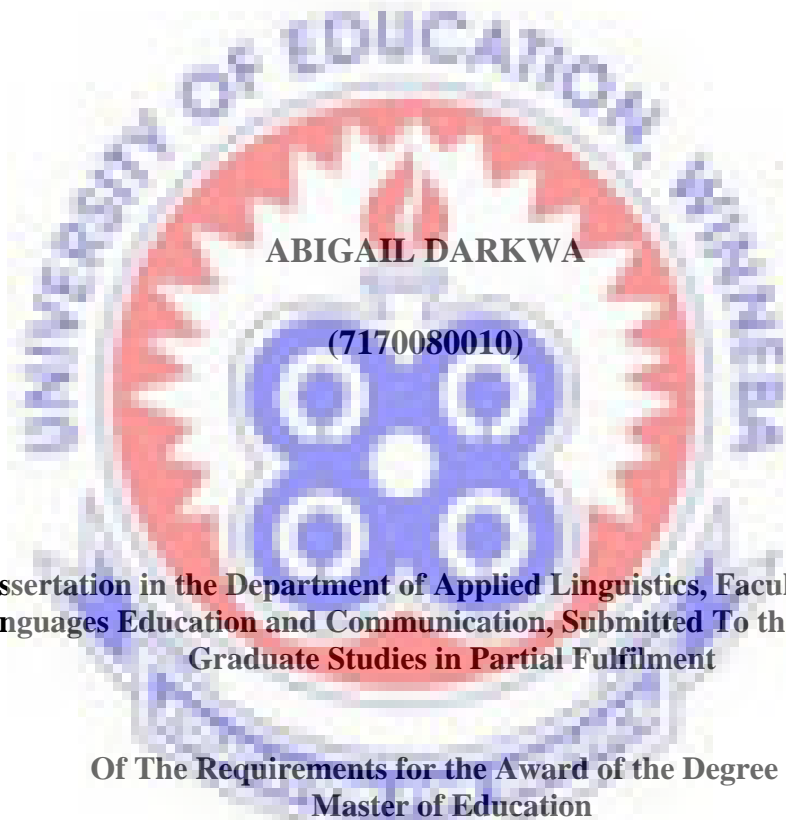**UNIVERSITY OF EDUCATION, WINNEBA**

TEACHING LETTER SOUND IDENTIFICATION WITH AUDIO VISUAL AIDS

ABIGAIL DARKWA

(7170080010)

A Dissertation in the Department of Applied Linguistics, Faculty of Foreign Languages Education and Communication, Submitted To the School Of Graduate Studies in Partial Fulfilment

Of The Requirements for the Award of the Degree of Master of Education (Teaching English as a Second Language) In The University of Education, Winneba

SEPTEMBER, 2019

DECLARATION

STUDENT'S DECLARATION

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

SIGNATURE:……………………………………

DATE:……………………………………………

SUPERVISOR'S DECLARATION

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

NAME OF SUPERVISOR: Dr. Mrs. Rebecca Akpanglo-Nartey

SIGNATURE:…………………………………………

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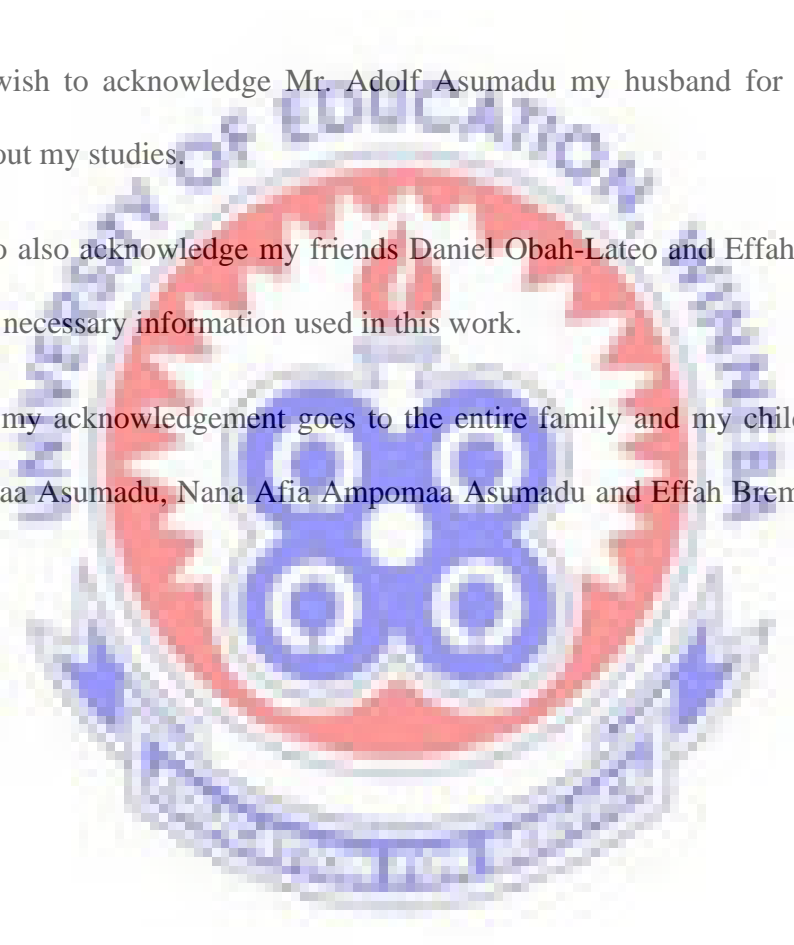
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ACKNOWLEDGEMENT

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DEDICATION

I dedicate this work to my grandmother, Mrs. Patricia Boateng and my children.

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ABSTRACT

The study examined the effectiveness of using audio-visual aids in teaching letter sound identification to KG 2 pupils at the Jema D/A Primary School and the Jema Islamic Primary School. A total number of 59 pupils and 4 teachers from the two selected schools participated in the study. Pre-intervention and post intervention tests were conducted to test the effectiveness of using audio-visual aids in teaching letter sound identification. The research looked at how to assess the letter sound identification ability of the pupils of the Jema D/A and Islamic primary schools, and to examine the effectiveness of using audio-visual aids to teach letter sound identification at the Jema D/A and Islamic primary schools and to explore the Jema D/A and Islamic primary school teachers' experiences with using audio-visual aids to teach letter sound identification. Analysis of the intervention tests clearly indicates that the use of audio-visual aids in letter sound identification is highly effective. The pre-intervention test results of the pupils of both schools revealed that the pupils' ability to identify letter sound was low. However, after using audio-visual aids, the performance of the pupils in identifying letter sounds significantly improved. At the Jema D/A Primary School, the use of audio-visual aids helped increase the highest score in the pre-intervention test from 76% to 100% and the lowest score from 20% to 64%. Similarly, at the Jema Islamic School, the use of audio-visual aids helped increase the highest score in the pre-intervention test from 76% to 96% and the lowest score from 20% to 64%. Therefore, it is highly recommended that to teach letter sound identification effectively, audio-visual aids should be used always. Audio-visual aids should be provided to the schools for the teaching of letter sound identification to help children to blend sounds and read. The teachers should be given training on the use of audio visual aids so that they can be confident about using them to teach and help the children to acquire and build their phonemic awareness and other early reading skills.

Keywords: letter sound identification, audio-visual aids, phonemic awareness
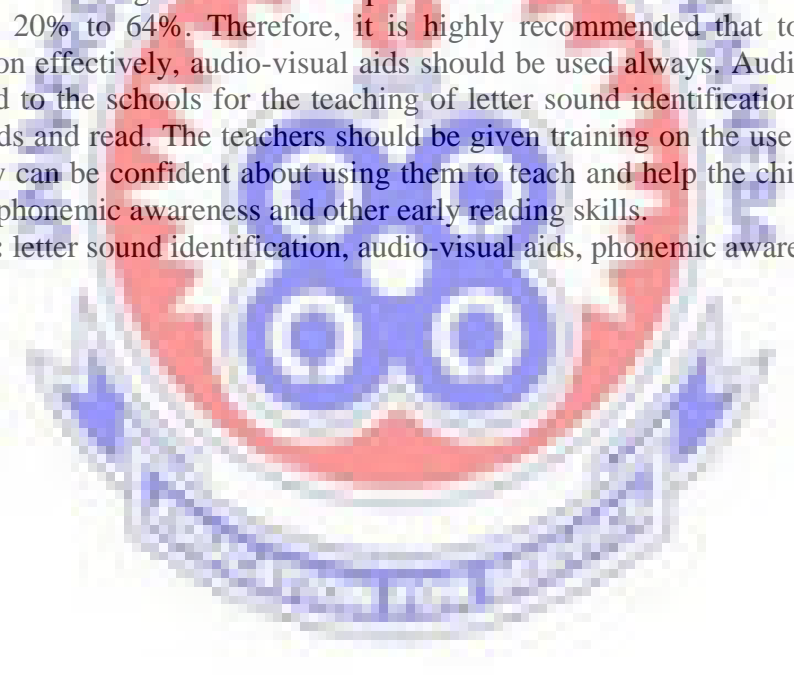
CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Letter sound identification is key to children's ability to read, (John & Ehri, 1983; Ehri, 1989). The importance of the knowledge of the letter sound identification cannot be underestimated in the child's development of reading. The awareness of the relationship between letters and their corresponding sounds helps in their ability to pronounce words appropriately. According to Mioduser, Tur-Kaspa, & Leitner, (2001), children's phonological awareness develop and they are able to identify letters and spell correctly if they are able to understand the relationship between a letter and its sound.

The development of letter sound identification (or phonemic awareness) skills enables children to become successful with learning to read. In other words, it is widely acknowledged among language experts and researchers that phonemic awareness is one of the best predictors of success in learning to read (Adams, 1990; National Research Council, 1998; Learning First Alliance, 1998; Reading Panel, 2000; Atwill et al., 2007), and that without phonemic awareness children's success in reading is negatively affected (Atwill *et al.* 2007; Brice & Brice, 2009).

Language experts and researchers argue that because phonemes are the units of sound that are represented by the letters of the alphabet, an awareness of phonemes is key to understanding the logic of the alphabetic principle to the learnability of phonics and spelling (Mioduser *et al.,* 2001; Atwill *et al.* 2007; Brice & Brice, 2009). According to Kame'enui *et al.* (1997), children lacking phonemic awareness skills cannot group words with similar and dissimilar sounds, blend and split syllables, blend sounds into words, segment a word as a sequence of sounds (e.g., **fish** is made up of three

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phonemes, **/f/, /i/, /sh/**), and detect and manipulate sounds within words (e.g. change **r** in *run* to **s**).

Depending on several factors, phonemic awareness which is the ability to manipulate sounds within a syllable can be very weak in some children while it is strong in others (Adams et al., 1998). According to Adams (1990), about one-third of middle-class children fail to attain phonemic awareness by the end of first grade. When children enter school, there are substantial differences in their level of phonemic awareness, and their response in kindergarten produces an even larger range of individual differences by the end of the school year.

There are individual differences among children in phonemic awareness when they enter school, and these differences, according to language experts, are mainly genetic endowment and pre-school linguistic experience. Research conducted over the last 20 years has shown that children vary significantly in the phonemic component of their natural capacity for language (Liberman, Stankweiler & Fischer 1989).

This phonemic ability or talent is a trail that is strongly heritable, in other words, children can vary in their talent for processing the phonemic features of language. In the same way they vary among one another in musical ability, height, or hair colour. In fact, large scale of studies involving identical twins have shown that about half of all the variation in linguistically related phonemic is inherited (Olsen, Forsberg, & Wise 1994).

The child's pre-school linguistic environment can also exert a strong influence on the child's phonemic structure. Early experience with nursery rhymes, for example, can help children to begin to notice and think about the phonemic structure of words.

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Several research studies have shown that children who know more about nursery rhymes at age three are those who tend to be more highly developed in general phonological awareness at age four and phonemic awareness at age six (Bryant *et al*., 1990).

In order for struggling readers to develop phonemic awareness they need to be given opportunities to practice phonemic awareness skills. Most instructions can be cooperated into the context of meaningful reading or writing (Waddington, 2000; Yopp, 1992). In this regard, using audio-visual aids, especially in second language teaching, is important to consider in helping children to develop the ability to identify letter sounds and ultimately become successful with reading.

In the words of Singh (2005:43) an audio-visual aid is, "any device which by sight and sound increases the individual's practice outside that attained through reading printed materials." An important observation is that when audio-visual aids are used in classroom instructions they arouse the interest of learners and help the teacher to explain concepts easily (Singh, 2005;Gopal, 2010; Eze, 2013).

The world today has far advanced in technology and continues to advance such that the use of audio-visual aids in the classroom has become necessary substitute or support to the traditional methods of teaching and learning with printed books. Currently, early reading training programs make wide use of advanced computer technology with sophisticated features that are potentially relevant to the instruction of reading skills (e.g. high-quality sound and visual capabilities, interactive mechanisms, speech synthesis and recognition).

Of particular interest are features that could offer specific support to the learning needs of children with reading difficulties, such as digitized speech which enables immediate association between graphemes (letter forms) and phonemes (Mioduser et al., 2001).

Computer-assisted learning (CAL) is growing across the world having proven its effectiveness in educational programs designed for young children (Torgesen & Barker, (1995). Many researchers have suggested that computer-assisted reading support can be effective in helping children at risk of reading failure (Magnan & Ecalle, 2006; Nicolson, Fawcett, & Nicolson, 2000).

Gopal (2010) stressed that audio-visual materials help the teacher to overcome physical difficulties of presenting subject matter. That is to say, with audio visual materials, the barrier of communication and distance is broken. This is important because, according to Dike (1993) "once the phenomenon is visualized, the picture and knowledge becomes very clear and permanent." Eze (2013) also explains that the human being learns more easily and faster by audio visual processes than by verbal explanations alone.

Given this background, it is important to examine the effectiveness of teaching letter sound identification with audio-visual aids at the Jema D/A Primary School and the Jema Islamic Primary School in the Kintampo south District of the Bono East Region of Ghana.

1.2 Statement of the Problem

Through a few days of observation, I discovered that majority of the kindergartners of the Jema D/A Primary School and the Jema Islamic Primary School lacked phonemic awareness. When reading unfamiliar words, many of the children lacked the ability to

decode the printed letters back into segments and blend them together to form the word. They did not know when a vowel had a short sound, a long sound, or how two letters next to each other made a certain sound.

Phonemic awareness, which is the ability to manipulate sounds within a syllable, is widely acknowledged among researchers and language instructors as the strongest factor in learning to read or spell (Adams, 1990; National Research Council, 1998; Learning First Alliance, 1998; National Reading Panel, 2000). However, depending on several factors including genetics, environment, and instructional methods, phonemic awareness can be very weak in some children while it is strong in others (Adams et al., 1998). According to Adams (1990), about one-third of middle-class children fail to attain phonemic awareness by the end of first grade.

As a predictor of success in learning to read, lack of phonemic awareness results in failure or poor reading ability in children. Research has found that if a child does not learn to read by the fourth grade (lower primary) there is an 88% chance that the child will never learn how to read (Lane et al., 2005). This as a results can affect the child's reading and comprehension forever in the child's educational life

It is widely acknowledged among educational experts and researchers that phonemic awareness can be very weak in some children while it is strong in others (Adams et al., 1998). Available literature reveal that the causes of poor or lack of phonemic awareness depends on several factors including genetics, environment, and instructional methods (e.g. Wagner et al., 1997; Adams et al., 1998; Goswami, 2000; Gopal, 2010).

However, there is inadequate literature in the Ghanaian context that support or refute these factors, especially instructional methods, as causes of weak phonemic awareness

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in some children. Much is not known about the link between effectiveness of instructional methods and children's ability to identify letter sounds from empirical studies. In other words, the effectiveness of using audio-visual aids in letter sound identification in pre-schools or kindergarten schools has not been adequately tested in Ghana. To fill this knowledge gap, this study seeks to assess the use and impact of audio-visual aids on the ability of kindergartners to identify letter sounds at the Jema D/A Primary School and the Jema Islamic Primary School in the Bono East Region of Ghana. Therefore, the main question the study seeks to address is: "What is the effectiveness of using audio-visual aids in teaching letter sound identification at the Jema D/A Primary School and the Jema Islamic Primary School?"

1.3 Purpose of the Study

The purpose of this study is to examine the effectiveness of teaching letter sound identification with audio-visual aids at the Jema D/A Primary School and the Jema Islamic Primary School. The ultimate purpose is to increase the phonemic awareness of struggling readers in these schools in order to help them increase their reading ability.

1.4 Specific Objectives of the Study

1. To assess the letter sound identification ability of the pupils of the Jema D/A and Islamic primary schools.

2. To examine the effectiveness of using audio-visual aids to teach letter sound identification at the Jema D/A and Islamic primary schools.

3. To explore the Jema D/A and Islamic primary school teachers' experiences with using audio-visual aids to teach letter sound identification.

1.5 Research Questions

The study is guided by the following research questions:

1. What is the level of letter sound identification ability of the pupils of the Jema D/A and Islamic primary schools?

2. What is the effectiveness of using audio-visual aids to teach letter sound identification at the Jema D/A and Islamic primary schools?

3. What are the experiences of the teachers of the Jema D/A and Islamic primary school with using audio-visual aids to teach letter sound identification?

1.6 Delimitation of the Study

For the purpose of in-depth investigation and assessment of the use of audio-visual aids in teaching letter sound identification, this study was limited to only the Jema D/A Primary School and the Jema Islamic Primary School in the Kintampo South District of the Bono East Region of Ghana. The limitation of the study to only these two schools in the region is also due to lack of enough resources to extend the study to other schools.

The study focuses on examining the effectiveness of audio-visual aids as instructional methods for phonemic awareness instruction. The study excludes other factors of phonemic awareness such as genetics, environment, and teaching phonemics awareness in smalls groups which influence children's ability to identify letter sound.

1.7 Significance of the Study

Research has found that if a child does not learn to read by the fourth grade (lower primary) there is an 88% chance that the child will never learn how to read (Lane et al., 2005). This implies that it is necessary to help children at lower primary (kindergarten to primary 3) by all possible means to increase their ability to read before they reach the stage where reading becomes difficult to learn. This makes the study on phonemic awareness instruction very necessary.

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It is hoped that the results of this study serves as empirical evidence on the impact or effectiveness of using audio-visual aids to teach letter sound identification at lower primary for teachers of the Jema D/A Primary School and the Jema Islamic Primary School and other primary schools in the Kintampo South District as well as the Bono East Region of Ghana.

The study also explores the experiences of the teachers of the Jema D/A Primary School and the Jema Islamic Primary School in teaching letter sound identification using audio-visual aids. This helped the teachers to acknowledge the effectiveness of audio-visual aids in phonemic awareness instruction.

Finally, the results of the study adds to the body of knowledge or literature on phonemic awareness instruction for educational policy makers, English Language teachers at the lower primary in Ghana, and researchers.

1.8 Limitation of the Study

Due to time and resource constraint, the study was limited to only two schools in Jema which has several schools. Due to this, the results of the study cannot be well generalized to the District.

Also, the researcher realized that some of the kindergartners felt intimidated and could not express themselves or do their best in identifying the letter sounds during the tests, especially the pre-intervention test, due to the fact that unlike their teachers they were not familiar with the researcher who tested them. Because of this, the researcher had to take the children through games and songs for the children to be familiar and build relationship with the researcher.

To some extent, this affected the validity of the test results as such children did not give their best according to their ability. However, it was just a small fraction of the children who felt intimidated. The majority were able to give their best. In addition, a major constraint to the work was associated to the activities within that same period. These activities include the sporting activities, cultural activities and the Independence Day celebration. This made it difficult for the researcher to meet the teachers and the pupils. As a result, the researcher have to wait for these schools to resume back to classes before collecting the data for the study which expanded the period and duration of the study.

1.9 Organization of the Study Report

The study report is organized and presented in five main chapters. Chapter One presents the introduction to the study, which include the background of the study, statement of the problem, objectives of the study, research questions, scope of the study, significance of the study, limitations of the study, organization of the study. Chapter Two presents the review of relevant literature on concepts, theoretical and empirical findings on phonemic awareness. Chapter Three gives detailed description of the research methodology of the study. Chapter Four presents and analyzes the results of the study. Finally, Chapter Five summarizes the findings of the study, draws conclusions, and makes recommendations

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter is a review of literature on the concept, theories, and related empirical findings on phonemic awareness and teaching of letter sound using audio-visual aids. The review supports the study which advocates the use of audio-visual aids for effectiveness and acquisition of phonemic awareness skills.

2.1 The Concept of Letter Sound Identification (Phonemic Awareness)

Phonemic awareness is the basis for reading and comprehension. Letter sound identification help children to blend and read letter sound words. Letter sound identification is an important concept in linguistics, in helping children to be successful in learning to read. It is an aspect of Phonemic awareness which is "the ability to hear and manipulate the sounds in spoken words and the understanding that spoken words and syllables are made up of sequences of speech sounds" (Yopp 1992, p. 48). Similarly, Rigby (1997) defines phonemic awareness as "the ability to hear the individual sounds that make up words; an understanding that speech is composed of individual sounds.

According to Snow *et al.* (1998, p. 112), phonemic awareness refers to the ability to focus on and manipulate phonemes in spoken words. Phonemic awareness is the insight that every spoken word can be conceived as a sequence of phonemes. In other words, phonemic awareness refers to the ability to recognize and manipulate the phonemes of a word, which is an essential skill of an alphabetic system and involves applying knowledge of the relationship between phonemes (sound) and graphemes (print) (Goswami & Bryant, 1990).

The letter-sound correspondence emphasized by phonemic awareness serves as the foundation for future reading development (National Reading Panel, 2000; McCardle and Chhabra, 2004). Moreover, the abilities to know which letter corresponds to which sound and apply the letter-sound correspondence to read words are called "alphabetic principle" (Ball & Blachman, 1991), which may help children extend their vocabulary learning to unfamiliar words.

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Children need to identify letters of the alphabet before identifying its sounds to blend and read. Juel (1988) pointed out that phonemic awareness, along with alphabetic principle, was one of the determinants to later reading performance because the abilities to decode would contribute to word recognition, and the development of word recognition would in turn facilitate the abilities to read connected text.

Children who are able to identify sounds of the letters are able to identify words easily, blend and segment words. Armbruster *et al.* (2004) specified that children with phonemic awareness at least have four skills: (a) the ability to identify which words share the initial sound with other words, revealed by being able to isolate the first sound in a word; (b) the ability to blend individual sounds orderly and pronounce the whole word accurately; (c) the ability to segment a word into individual sounds; (d) the ability to relate individual sounds to graphemes (e.g., the letter "h" is the written representation of the phoneme of /h/).

2.2 Phonemic Awareness and Reading

Children who acquire letter sound become successful in reading and comprehension at stage three. Children's ability to identify letter sounds help them to read fluently. It is widely acknowledged that phonemic awareness is one of the best predictors of success in learning to read (Adams, 1990; National Research Council, 1998; Learning First Alliance, 1998; National Reading Panel, 2000), and that without phonemic awareness students' success in reading will be greatly affected (Atwill et al. 2007; Brice & Brice, 2009). These educationists and researchers hold that, because phonemes are the units of sound that are represented by the letters of an alphabet, an awareness of phonemes is key to understanding the logic of the alphabetic principle and thus to the learnability of phonics and spelling.

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According to Kame'enui et al. (1997), children lacking phonemic awareness skills cannot: group words with similar and dissimilar sounds; blend and split syllables; blend sounds into words; segment a word as a sequence of sounds (e.g., **fish** is made up of three phonemes, **/f/,/i/,/sh/**); and detect and manipulate sounds within words (e.g. change **r** in *run* to **s**).

In other words, phonemic awareness is essential to learning to read in an alphabetic writing system, because letters represent sounds or phonemes (Ball & Blachman, 1991; Bradley & Bryant, 1983; Lundberg et al. 1988). Therefore, without phonemic awareness, phonics makes little sense. In a nutshell, phonemic awareness:

- requires readers to notice how letters represent sounds,
- gives readers a way to approach sounding out and reading new words,
- helps readers understand the alphabetic principle (that the letters in words are systematically represented by sounds).

Phonemic awareness did not gain attention until after Stanovich's identification of phonological deficits as a central factor for students with reading difficulties (Tracey & Morrow, 2006). Chall (1979) described phonemic awareness in the pre-reading stage, the stage at which children from birth to six years old begin to notice that spoken words may be segmented, that parts may be added to other words, that some parts sound the same, and that some parts can be blended to form whole words.

Marie Clay (1993), well known for her development of Reading Recovery, found in 1979 that many six-year-olds who were not sufficiently learning to read or making adequate progress also seemed not to hear the order of sounds in words. Clay (1993) implemented a speech training program developed by a Russian psychologist, Elkonin

(1973), to teach children how to manipulate sounds. This training required students to separate words into sound boxes, called Elkonin Boxes.

The NRP increased the attentiveness to phonemic awareness when it published its meta-analysis on scientifically-based reading instruction in 2000, crediting phonemic awareness as one of the five components of a scientifically-based reading approach. Adams (1990) helped bring phonemic awareness to light when she summarized phonemic awareness in five different levels:

1. The most primitive level is measured by knowledge of nursery rhymes and involves nothing more than the child having an ear for the sounds of words.

2. At the next level, oddity tasks require the child to methodically compare and contrast the sounds of words for rhyme or alliteration; this task requires not just sensitivity to similarities and differences in the overall sounds of words but also the ability to focus attention on the components of the sounds that make the words similar or different.

3. The task at the third level, blending and syllable-splitting, requires that the child has a comfortable familiarity with the notion that words can be subdivided into those small, meaningless sounds corresponding to phonemes and, secondly, that she or he be comfortably familiar with the way phonemes sound when produced in isolation and, better yet, with the act producing the phonemes by oneself.

4. The phonemic segmentation task requires not only that the child has a thorough understanding that words can be completely analyzed into a series of phonemes but further that she or he be able to analyze them into a series of phonemes, completely and on demand.

5. The phoneme manipulation task requires still further that the child has sufficient proficiency with the phonemic structure of words and that she or he be able to add,

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delete, or move any designated phoneme and regenerate a word (or a non-word) from the result (Adams, 1990, p. 80)

Children who lack phonemic awareness are unlikely to benefit from instruction in phonics (Juel & Gough, 1986) because they do not understand what letters and spellings are meant to represent. Instruction in phonics teaches children to retrieve sounds as they look at letters. Phonemic awareness instruction takes a step back and helps children concentrate on the order of the individual sounds of the letters they hear in words (Adams, 1990; Chase & Tallal, 1991; Torgersen, Wagner & Rashotte, 1994)

Phonemic awareness is an important component to learning to read and spell because English is alphabetic. In alphabetic language letters represent sounds. A review of research related to beginning reading by Adam (1990) stressed the importance of functional understanding of the alphabetic principle. Adam concluded, faced with an alphabetic script, the child level of phonemic awareness on entering school may be the single most powerful determinant of the success he or she will experience in learning to read. Children who starts school with the lack of phonemic awareness will have difficulty acquiring the alphabetic principle, which will hinder their ability to decode words (Blachman, 1991).

Ball & Blachman (1991) concluded from an intervention study with kindergarten pupils that, young children can be taught to segment spoken words into phonemes. Furthermore, their research suggests that the most pedagogically useful phonemic awareness training includes letter-name and letter-sound instruction primarily because it makes explicit relationship between sound segment and letters.

Recent research indicates that, "reading depends first and foremost on visual letter recognition" (McCormick & Zutell, 2011, p. 448). Studies have shown that the

knowledge of letter names is the best predictor of success in reading. McCormick & Zutell (2011) stresses that when children struggle with reading it promotes displeasure, indifference and avoidance for reading, and that those children who fall behind in reading early in their schooling usually continue to lack behind their classmates.

Children who read will tend to read more, but children who struggle with reading tend to read less and their reading skills do not advance (McCormick & Zutell, 2011). Lennon & Slesinski (1999) suggest that early reading deficits may result in overall problems with academic learning. They agree that, in order to advance, students require direct and intensive instruction at the beginning stages of reading.

According to Foorman *et al.* (2003), in kindergarten it is important that reading instruction contains phonemic awareness activities that help children grasp the idea of how letters relate to speech sounds. Phonemic awareness is important because it is the ability to consciously blend sounds into words, segment words into sounds and rapidly name letters (Foorman et al., 2003), this study substantiates that phonemic awareness and the ability to rapidly name letters has to be achieved in order to read words, which requires the skill to read new words.

2.3 Theoretical Foundation of the Study

This study is based on the constructivist learning theory, which originates from the work of cognitive scientists like Jean Piaget, John Dewey, Jerome Bruner, and Vygotsky among others. Constructivist teaching is based on the belief that learning occurs as learners are actively involved in a process of meaning and knowledge construction as opposed to passively receiving information. Through interaction with the physical situations, or concrete objects, a child's physical experience accumulates and he is able to conceptualize, think creatively and logically. The child therefore

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develops skills to abstract problems. According to this theory, learners are the makers of knowledge and meaning (Winograd & Flores, 1986).

Constructivists' teaching fosters critical thinking and creates motivated and independent learners. Constructivists suggest that learning is more effective when a student is engaged in the learning process rather than attempting to receive knowledge passively. Children learn best when they are allowed to construct a personal understanding based on experiencing things and reflecting on those experiences.

Piaget's theory focuses on how learners interact with their environment to develop complex reasoning and knowledge. As children interact with their environment and new objects, they learn and develop ideas. According to Piaget, knowledge is the interaction between the individual and the environment. He further asserts that experimenting and manipulation of physical objects is the main way by which children learn.

Jerome Bruner's theory concurred with Piaget's that learning is promoted by direct manipulation of objects, for example, in math education, the use of algebra tiles, coins and other items that could be manipulated. After a learner has the opportunity to directly manipulate the objects, he/she should be encouraged to construct visual representations, such as a drawing of a shape or a diagram.

John Dewey rejected the notion that schools should focus on repetitive memorization and proposed a method of directed living where students would engage in real world practical workshops in which they would demonstrate their knowledge through creativity and collaboration. He called for education to be grounded in real experience.

According to Vygotsky (1962), learning always occurs and cannot be separated from a social context. He affirms that knowledge construction occurs within social context that involves student-student, student-expert collaboration on real world problems or tasks that build on each person's language, skills and experience shaped by individual's culture.

Vygotsky (1962/1978) constructed the zone of proximal development which has given teachers and researchers a better understanding of early childhood learning, literacy, and language. He presented a detailed "analysis of the relationship between thought and speech, and argues that the primary function of speech is communication or social interaction" (Freeman, 2009)). In learning language acquisition and developing reading and writing literacy practices, Vygotsky's notion applies to the emergent reader as they develop and acquire their skills. Emergent literacy suggests that children learn as they are engaged in language activities such as phonemic awareness.

The development of phonemic awareness shifts the student from sounds and syllables of letter identification to formulating whole words and being able to understand the relationship in the words. Once the student understands the letter to sound relationship over time, students will be able to identify the sound relationship as in the example remove (c) from c-a-t, you have a-t. With practice, children are learning segmenting of letters and sounds which will increase reading and writing abilities. This view of literacy learning constitutes participation of the student in a communicative interaction. In addition "children's capabilities as literate beings are recognized and legitimized in the classroom and community" (Larson and Marsh, 2005).

2.4 Empirical Studies on the Relationship Between Phonemic Awareness and Reading

A large number of studies provide evidence that phonemic awareness is both highly predictive of and causally related to the ease with which children learn to read and their later reading ability (Ehri et al., 2001; Lonigan, 2003; Snow et al., 1998). As found by Lyon (1995) the best predictor of reading difficulty in kindergarten or first grade is the inability to segment words and syllables into constituent sound units (phonemic awareness).

Shaywitz (2003) maintains, reading and phonemic awareness are mutually reinforcing. According to Shaywitz phonemic awareness is necessary for reading, and reading, in turn, improves literacy. A report submitted to USA by National Reading Panel in 2000 concluded that phonological awareness instruction has moderate and significant effects on reading and spelling abilities and explicit instruction is beneficial for typically developing children, because young children are at risk for reading difficulties. (Francis, 2012)

Lundberg et al. (1987) examined the effects of phonemic awareness training on reading and spelling. The participants were kindergarten children divided into two groups. The experimental group received 20-25 minutes training per day focusing on rhyme production, word segmentation, syllable segmentation and synthesis (blending), deletion of initial phonemes and segmentation and synthesis (blending) of phonemes, while the control group did not receive any instruction.

After entering the first grade for seven months, the experimental group outperformed the control group on measures in speed and accuracy of silent word decoding with only trend level (<.10) significance. The experimental group only significantly outperformed

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the control group on measure in dictated spelling test, and the effects were maintained until second grade, demonstrating the causal relationship between phonemic awareness and reading.

Deficits in phonemic awareness have been addressed to link to reading disabilities (Lyon, & Shaywitz, 2003). Catts et al. (2001) found that a kindergarten measure of phonemic awareness was one of five factors to predict the label of reading disabilities in second grade. Although several other factors have been correlated with poor reading ability, Catts and Fey (1995) found that phonemic awareness skills in kindergarten were the best predictors of second-grade reading ability.

Synder and Downey (1997) also concluded that phonemic awareness deficits are the most prominent oral language deficits in children and adults with reading disabilities. Furthermore, interventions to increase phonemic awareness in preschool and kindergarten, prior to formal reading instruction, have been shown to positively affect reading readiness (Adams, 1990; National Research Council, 1998; Gillon, 2000, 2005; National Early Literacy Panel, 2008).

According to findings of these studies, in the early stages of learning to read, children rely on sounding out words – associating printed letters with the sounds of oral language and blending these sounds together. If children have not developed the insight that oral words are composed of a limited number of units called sounds, they will not be able to use this fundamental approach to word identification. Being able to think about the sounds in spoken words (phonemic segmentation) is critical and directly related to spelling ability, and being able to blend sounds together to form oral words (phonemic blending) is critically important and directly related to acquiring reading skills.

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In a quantitative meta-analysis evaluating the effects of phonemic awareness instruction on learning to read and spell the National Reading Panel (Ehri et al. 2001) revealed that the impact of phonemic awareness instruction on helping children acquire phonemic awareness was large and statically significant. Phonemic awareness instruction exerted a moderate, statistically significant impact on reading, not only word reading but also reading comprehension benefitted (Ehri et al. 2001).

In a longitudinal study Catts et al. (2001) tracked reading achievement of 604 young children and reported more than 70% of poor readers who had a history of deficits in phonological awareness or oral language in kindergarten. Even typically developing children may have one or two problems in phonological awareness skills when starting to learn to read.

However, they may make sufficient progress to meet the standard criteria after instruction and practice. If the delays in phonological awareness skills are not addressed, the deficits may be life-long. Otherwise, the phonological deficits of the specific population may last through life, which would prevent children from catching up with their peers and increase the discrepancy in reading development between children with and without reading problems (Juel, 1988; MacDonald & Cornwall, 1995; Scarborough, 1998; Stuart & Masterson, 1992).

Early phonological deficits may have long-term negative effects to prevent young children from the typical reading development trajectory and contribute to difficulties in other academic areas because the content is mainly delivered by written words (Hsin, 2007).

Juel (1988) conducted a study on 54 children with low socioeconomic background in track of their reading and writing development from first to fourth grade. The participants' progress in phonological awareness, decoding, word recognition, spelling, comprehension, and writing were monitored by assessments each year. He found that children identified as poor phonological awareness at the end of first grade had the high probability (.88) to be a poor readers at the end of fourth grade. The majority of fourth graders with poor reading performance in this study continued to experience difficulty in decoding monosyllabic nonsense words.

In a longitudinal study, McDonald and Cornwell (1995) assessed word recognition, phonological awareness, and comprehension on 24 teenagers whom the data was collected since they were kindergarteners. The researchers reported that the phonological awareness scores in kindergarten was highly related to the performance in phonological awareness 11 years later (r=.47). They admitted the persistence of phonological deficits over a period of 11 years and also recognized phonological awareness as a long-term predictor to word identification and spelling skills when the participants reached 17 years old.

The influence of phonological deficits could be described as "Matthew effect", in which children with good phonological awareness skills at the beginning get richer (i.e., better) in later reading skill development, while those with poor phonological awareness skills get poorer (Stanovich, 1986).

Research from the National Reading Panel, in conjunction with the National Institute of Child Health and Human Development, suggested that phonemic awareness instruction had a positive influence on reading outcomes. The overall effect size for phonemic awareness outcomes was large, d=0.86; the results were moderate for reading

outcomes and spelling outcomes, 0.53 and 0.59 respectively (NRP, 2000). Immediate post-tests for phonemic awareness instruction outcomes had an effect size of d= 0.86. To determine if students could retain skills in phonemic awareness, follow-up studies were conducted.

Effect size on follow-up reports (d= 0.73) indicated significant gains in children's ability to read words and spell words as well as children's reading comprehension, and showed that phonemic awareness instruction was highly effective within all literacy areas and results (NRP, 2000).

2.5 Teaching Phonemic Awareness

Phonemic awareness is believed to be difficult but important. Some attribute the difficulty to the fact that although there are only 26 letters in the English language, sounds represented by letters and letter strings could be shown in 250 different spellings (Hsin, 2007). However, phonemic awareness is important because it gives readers a way to approach sounding out and reading new words, lending readers a hand to understanding the alphabetic principle (that the letters in words are systematically represented by sounds) (Hsin, 2007).

Phonemic awareness is learned through language experiences, but for some children it requires systematic explicit instruction. Being a critical component of reading instruction, though not an entire reading program, phonemic awareness has to be taught or instructed. It needs to be taught explicitly to help children acquire the skills.

More importantly, teachers must model skills they expect children to perform before they are asked to demonstrate the skill (Manning, 2005). Research has found that better results are achieved when children are taught phonemic awareness skills in small

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groups rather than in an entire class (NRP 2000; Foorman & Torgensen, 2001; Ehri *et al*., 2001). In a study conducted by NRP (2000), phonemic awareness instruction was separated and studied in four categories: Segmentation, Blending, Deletion, and Other. Segmentation, or identifying separate sounds in words, was shown to have a mean effect size of 0.87. Blending, the combination of sounds together, was shown to have a mean effect size of 0.61. Deletion, identifying what a word would be without a letter, was shown to have a mean effect size of 0.82.

The NRP (2000) gave this example of deletion: "What is the word smile without the /s/?" Lastly, all other instruction that did not include segmentation, blending, or deletion had an effect size of 0.72 (NRP, 2000). While all instructional settings were effective, the NRP (2000) concluded that small group instruction yielded the highest effect sizes for phonemic awareness instruction outcomes (d= 1.38). One-on-one instruction was shown to have a mean effect size of 0.60 and whole-classroom instruction resulted in a mean effect size of 0.67.

Foorman & Torgensen (2001) and Ehri *et al*. (2001) also found that phonemic instruction was most effective when children were taught in small groups (three to five children) than individually or in classrooms, as well as when instruction lasted between 5 and 8 hours rather than longer. However, Centre et al. (2001) found the importance of quality whole class instruction in the early school years as well as specific intervention strategies for at-risk students.

In phonemic instruction, another important factor for effectiveness is the effect size of the trainer. Another study conducted by the NRP (2000) examined the effect size of the trainer. The trainer is defined as either the classroom teacher, researchers in the field of phonemic awareness, or the computer. The highest mean effect sizes were gained from

researchers and others (e.g., non-teachers) conducting instruction (d= 0.94); however, classroom teachers (d= 0.78) and computers (d=0.66) were also effective in phonemic awareness instruction.

The NRP (2000) study supports Troia (1999) who found that classroom teachers were effective in teaching phonemic awareness to their students, and that effects sizes were larger for studies using more rigorous experimental designs.

Teaching one or two phonemic awareness skills than multiple phonemic awareness skills has also been found as an effective strategy in phonemic awareness instruction. Ehri et al. (2001) found that phonemic awareness instruction was also more effective when it was taught with letters than without letters, when one or two phonemic awareness skills were taught than multiple phonemic awareness skills. This help children to understand and learn the sound taught for the day easily.

Whitaker et al. (2006) also found that a teaching strategy called FISH was effective in phonemic awareness instruction. The FISH strategy isolates the phonemic awareness skills of onsets and rime. Whitaker et al. (2006) found that by drawing attention to these attributes in words, which are considered to be among the earliest skills to be developed, it helped students recognized similar patterns in familiar and unfamiliar words.

The FISH strategy provides a framework for students to decode new words that are difficult for them. First, students are instructed to *Find* the rime in the word (the first vowel and the rest of the word). Next, students *identify* the rime or a word they know that ends like it. Then *Say* the rime. Lastly, students *Hook* the new onset (beginning sound) to the rime. Whitaker et al. (2006) argue that the use of the FISH strategy

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equipped students with a systematic approach to decoding unknown words through relating prior knowledge to and using onsets and rimes.

2.6 Teaching Letter Sound Identification with Audio-Visual Aids

This study focuses on teaching letter sound identification with audio-visual aids with the view that this is more effective than not. Singh (2005) defines audio-visual aid as "Any device which by sight and sound increase the individual's practice outside that attained through reading." Examples of audio-visual aids are projectors, television, radio, laptop or computers.

Dike (1993) grouped audio-visual materials into: 1) audio resources such as records, tapes and cassettes, and radio broadcasts; and 2) visual resources including models, real objects, three-dimensional displays, the chalkboard, bulletin board, adhesives, graphs, diagrams, charts, maps, cartons, posters and pictures and projected forms like transparencies, slides, filmstrips and films, and audio visual combinations such as filmstrips, slides-tape decks, television programs, video tapes and dramatization. From Dike's explanation, audio visuals are grouped into audio visual and a combination of audio and visual resources and others which are classified with audio-visual resources which can either be in a projected or non-projected forms.

Audio-visual aids are part of instructional materials or devices which are used in the classroom to aid teaching and learning or to make learning easier and motivating. It is widely acknowledged that audio-visual aids arouse the interest of learners and help the teacher to explain abstract concepts easily. Audio-visual aids can be the best aids for teaching and learning and complete tools to deliver a lesson for children to understand the information (Richardson, 2006).

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Currently, early reading training programs make wide use of advanced computer technology with sophisticated features that are potentially relevant to the instruction of reading skills (e.g. high-quality sound and visual capabilities, interactive mechanisms, speech synthesis and recognition). Of particular interest are features that could offer specific support to the learning needs of children with reading difficulties, such as:

i. digitized speech which enables immediate association between graphemes (letter forms) and phonemes (sounds) (Foster et al., 1994);

ii. touch-screens allowing the learner to trigger the uttering of a letter or word by touching it (CET, 1996);

iii. individualization of instructional sequence and feedback according to the child's pace of learning, motivation and developing self-confidence (Speziale & La-France, 1992).

2.7 Effectiveness of Audio-Visuals Aids in Teaching Letter Sound Identification

The importance of audio-visual aids letter sound identification cannot be overemphasized. Bartram (1994) observed that the use of computer- aided learning was increasing in the fields of cognitive, psychology and education. Early studies evaluating the efficacy of instructional television suggested that television was just as successful as teaching via traditional face-to-face instruction (Hezel, 1980).

LePore & Wilson (1958) offered research showing the learning by television compared favorably with conventional instruction based upon each learner's unique needs. Extending experience as one importance of the use of audio visual aids in the classroom, Gopal (2010) stressed that audio-visual materials help the teacher to overcome physical difficulties of presenting subject matter. That is to say, with audio visual materials, the barrier of communication and distance is broken.

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This is important because, according to Dike (1993, p. 214) "once the phenomenon is visualized, the picture and knowledge becomes very clear and permanent". Natoli (2011) added that "audio visual materials are rich for students to develop communication skill while actively engaged in solving meaningful problems". For example, involving children in listening and watching songs on letters of the alphabet and their sounds display will enhance their recognition and identification of the letters and their sounds and aid their understanding of the concept in question. When they join the teacher in dramatization of an event or a process. Eze (2013) also states that the human being learns more easily and faster by audio-visual processes than by verbal explanations alone.

According to Katherine (2009, p. 67) "learning takes place effectively when the teacher sets out to provide learning situation in which a child will learn because of his natural reactions of the provided materials". During the process of learning, the teacher has to provide the learning situation to satisfy the natural reaction of the learner and this is through the use of instructional aids. The attention of the learner is caught and his interest is also won and he is ready to learn.

Fawcett (1994, p. 73) also contributing on the role of audio visual materials in stimulating interest stated that, "A friendly, accepting group climate is important in any learning situations, especially those materials that require students to reveal their ignorance and confront their fellow students". When there is a climate of acceptance for learning, then learning is stimulated. Audio-visuals help reduce verbalism and provide clarity and sense.

Individualize instruction is another importance of audiovisual aids in teaching. Lestage (1995) stressed that audio visual materials provide a means of individualizing

instruction. This he said is possible through programmed learning and tapes which enable the learner to learn at his pace and also to work on his own.

McNaughton (2007) also observed that audio-visual materials are very useful teaching and instructional as well as promotional aids. He further stressed that where consistency of presentation is desirable, audio-visual materials are useful, and that they provide experiences not easily secured in other ways, and hence contribute to the depth and variety of learning.

A study by Dahl & Freppon, (1995) found that audio-visual aids both skill-based and whole language classroom children increase their awareness of an experiment with letter-sound relations. It is in the whole classroom that children are found to apply their understanding of letter sounds.

Computer-assisted learning (CAL) is growing across the world having proven its effectiveness in educational programs designed for young children (MacArthur, Ferretti, Okolo, & Cavalier, 2001; Torgesen & Barker, 1995; Troia & Whitney, 2003). Many researchers have suggested that computer-assisted reading support can be effective in helping children at risk of reading failure (Magnan & Ecalle, 2006; Nicolson, Fawcett, & Nicolson, 2000).

Blok, Oostdam, Otter, & Overmaat (2002) conducted a meta-analysis of 42 studies published between 1990 and 2000 that examined the effectiveness of CAL on the acquisition of beginning reading skills in pupils aged 5–12. They found a positive effect of computer-assisted beginning reading instruction compared to instruction without CAL.

Mioduser, Tur-Kaspa, & Leitner, 2001 examined the unique contribution of computer-based instruction when compared with more conventional modes of instruction (i.e. teacher instruction with textbooks) to early reading skills acquisition, as well as the effects of specific features of computer technology on early reading skills performance. Results of the study indicated that children at high risk who received the reading intervention program with computer materials significantly improved their phonological awareness, word recognition, and letter naming skills relative to their peers who received a reading intervention program with only printed materials and those who received no formal reading intervention program.

Magnan & Ecalle (2006) tested the effectiveness of audio-visual training in the discrimination of the phonetic feature of voicing on the recognition of written words by young children deemed to be at risk of dyslexia (experiment 1) as well as on dyslexic children's phonological skills (experiment 2). In addition, the third experiment studied the effectiveness of word recognition training in dyslexic children who regularly used a computer at home.

 A traditional pre-test, training, post-test design including comparison groups (experimental vs. control) provided a base-line for assessing the training effects. In the three experiments the intervention group showed higher increases performances in phonological skills and phonological recoding than the control group did.

Ecalle, Magnan, & Calmus (2009) examined the effects of a computer-assisted learning (CAL) program in which syllabic units were highlighted inside words in comparison with a CAL program in which the words were not segmented, i.e. one requiring whole word recognition. In a randomized control trial design, two separate groups of French speaking poor readers (2-14) in first grade were constituted. The experimental group

trained with the CAL using syllabic units outperformed the control group using CAL with whole word recognition in all the three tasks and there were important lasting effects.

2.8 Summary of the Review

The literature review attempted bringing out views of previous researchers and experts on the use and effectiveness of audio-visual aids letter sound identification and reading skills instruction. First, it looked at the concept of phonemic awareness and its relationship with reading. The review has shown, based on the findings and practices of researchers and experts, that phonemic awareness is the best predictor of success in learning to read.

Also, the review has shown that using audio-visual aids such as television, videos, and computers to teach letter sound identification is more effective than using the traditional methods of teaching with only textbooks and printed letters. Computer-assisted learning (CAL) is growing across the world having proven its effectiveness in educational programs designed for young children.

Many researchers have suggested that computer-assisted reading support is effective in helping children at risk of reading failure. Several studies published between 1990 and 2000 on the effectiveness of CAL on the acquisition of beginning reading skills in pupils found a positive effect of computer-assisted beginning reading instruction compared to instruction without CAL.

However, not all primary and pre-schools, especially public schools, in Ghana acknowledge the effectiveness of the use of audio-visual aids to instruct and help children to learn and acquire needed skills in reading and arithmetic. The effectiveness

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of using audio-visual aids in letter sound identification in pre-schools and primary schools has not been adequately tested in Ghana

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter highlights the methodology of the study – that is the various research methods used to achieve the objectives of the study. These include; the study area, research design, population, procedures and instruments of data collection, data analysis, and ethical considerations.

3.1 The Study Area

The study area, Jema, is the capital of the Kintampo South District in the Bono East Region of Ghana. The Kintampo South District was split from the former Kintampo District (which is now called Kintampo North Municipal District) on November 12, 2003 and was duly inaugurated on 24th August, 2004. It lies within longitudes 10- 20' West and 20- 10' East and latitude 80- 15' North and 70- 45' South. Jema has an estimated population of about 7,868 while the total District population stands at 93,600 according to data obtained from the Kintampo South District Assembly Statistics Department.

3.2 Research Design

The study is a case study which employed the descriptive research design. The descriptive research design, as explained by Burns and Grove (2003), is designed to present the current picture of the situation being studied in its natural form. The descriptive design is normally used to study a phenomenon at a specific time when time or resources for more extended research is limited (Creswell, 2003). Burns and Grove (2003) agree that descriptive studies are undertaken to understand the characteristics of organizations that follow certain common practices and that the design enables gathering of sufficient data that answer research questions. To achieve all the objectives of the study, integrative methods of data collection and analysis (quantitative and qualitative methods) were used to investigate and assessed the effectiveness of audio-visual aids in letter sound identification at the selected schools for the study.

The reason for selecting this research design is to assist the researcher to understand the performance of the kindergarten children and to know the characteristics of the children performance in letter sound identification.

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3.3 Population

Researchers refer to population as any group of individuals that have one or more features in common and that are of interest to the researcher. In other words, it is the group to which the results of the study will ideally be generalized (Black, 1999; Creswell and Clark, 2007). The population of this study was the kindergarten pupils and their teachers of the Jema D/A Primary School and the Jema Islamic Primary School in the Jema District of the Bono East Region of Ghana.

3.4 Sampling Procedure

Simple random Sampling procedure was adopted to select two schools out of the four schools in the study area. The simple random sampling was adopted because it is cost effective and easy in selecting the right respondents for the study.

The kindergarten classes of the selected schools were targeted and selected since the researcher could not involve all the pupils of the schools in the study area. However all pupils in the K.G classes of the selected schools were involved in the study. Thus, all the 59 pupils of the kindergarten 2 classes of the Jema D/A Primary School and the Jema Islamic Primary School were involved in the study as participants in the teaching and tests conducted by the researcher.

3.5 Data Collection Instruments

To achieve the purpose and specific objectives of the study, quantitative and qualitative data collection instrument which is the questionnaire, observational guide and interview guide were the main instruments used in collecting the data. The interview guide was used to conduct the interview with the teachers in assessing the effectiveness and use of audio visual. However, materials such as Laptop and speakers with audio visuals, assessment sheets, and the chalkboard were used.

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3.6 Data Collection Procedure

Permission was obtained from the heads of the schools to involve the kindergarten classes and their teachers in the study. A letter was written to the authorities and teachers of the schools describing the researcher and the study – the objectives and methods of the study. The data collection was done by the researcher personally within a period of five weeks during which the pre-intervention and post intervention tests were conducted to test the pupils' ability in letter sound identification with and without audio-visual aids.

3.7 Intervention Process

The researcher conducted two main tests; pre-intervention and post intervention tests so that researcher will be able to assess the effectiveness of the use of the audio-visuals in teaching. The researcher conducted pre-test to assess the performance of the pupils before implementing the use of the audio-visuals in teaching the pupils. After teaching with the audio-visual aids, the researcher conducted the post intervention Test to assess the performance of the students after the intervention.

3.7.1 *Pre-Intervention Test*

In the pre-intervention tests, each child in the class was given a test paper and five minutes to identify letter sounds in the given tests. The correct letter sounds identified by the child was circled. After that, the number of letter sounds correctly identified by the child was recorded.

3.7.2 *Intervention Procedure*

In the intervention test the researcher used audio-visual aids to teach and test the KG 2 pupils of both schools on letter sound identification. Using a laptop and speakers with audio visuals, the researcher conducted the test as follows:

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- the learners were asked to sing the phonic song

- the researcher played the video which the pupils watched for five times

- the researcher wrote the letters on a cardboard and showed it to the pupils

- the researcher wrote some letter sounds on the chalkboard for learners to identify them

- the researcher repeated it until they identified all the letter sounds watched

The teachers were made to use the audio-visual aids to teach the children letter sound identification. They were afterwards asked to narrate their experiences in using the audio-visuals aids to teach in comparison with teaching letter sound identification without audio-visual aids.

3.7.3 *Post Intervention Procedure*

In the post intervention tests, each child in the class was given a test paper and five minutes to identify letter sounds in the given tests. The correct letter sounds identified by the child was circled. After that, the number of letter sounds correctly identified by the child was recorded. Teachers on the other hand, were interviewed on their observations on using the audio-visual aids in teaching-letter sound identification.

3.8 Data Processing and Analysis

The data collected on the pre-intervention and the intervention tests were inputted, processed and analyzed using the excel 2013 software. The results were presented in simple tables and explained in detailed. The analysis was done by computing the percentage scores in both tests. The results were then compared using the percentage scores to identify and measure the differences in the ability of the children to identify letter sounds with and without audio-visual aids. The findings are discussed in light of

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the literature reviewed on phonemic awareness instruction with and without audio-visual aids.

3.9 Ethical Consideration

The consent of the school heads, teachers, and pupils were sought before data collection. All the participants were assured of their anonymity and confidentiality, and of the fact that the purpose of the information gathered was purely academic and will certainly be used as such. All necessary procedures and guidelines regarding the collection and use of the data collected will be strictly followed.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF DATA
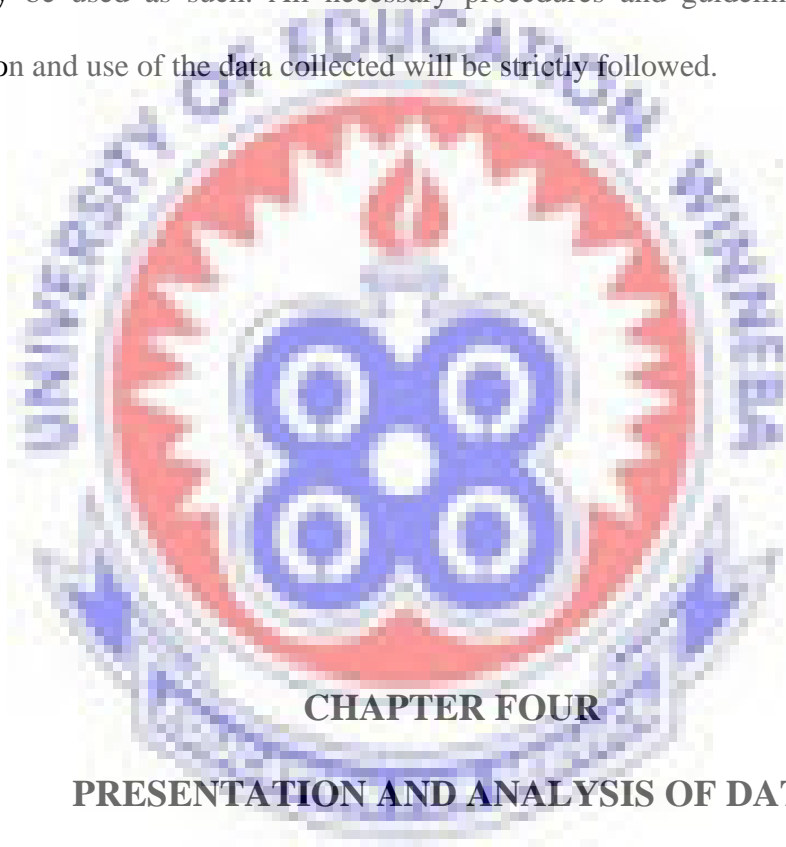
4.0 Introduction

The data collected regarding the use of audio-visual aids in teaching letter sound identification is presented and analyzed in this chapter. The study examined the effectiveness of using audio-visual aids in teaching KG 2 pupils at the Jema D/A Primary School and the Jema Islamic Primary School. Pre-intervention and intervention tests were conducted to test the effectiveness. The results of the tests are presented here

in line with the objectives of the study. The presentation begins with the demographic distribution of the participants of the study and ends with a discussion of the results.

4.1 Demographics Distribution of Participants

A total of 59 pupils and 4 teachers from the 2 selected schools – the Jema D/A Primary School and the Jema Islamic Primary School – participated in the study. Data relating to the pupils' class or gender distribution and age distribution are summarized in Table 4.1 below:

Table 4.1: Demographic Distribution of Participants

Age/gender distribution:	Jema D/A Primary School		Jema Islamic Primary School	
	Frequency	Percentage	Frequency	Percentage
Number of boys	13	41.99	12	42.84
Number of girls	18	58.14	16	57.12
Age distribution				
4 years old	8	25.84	6	21.42
5 years old	12	38.76	10	35.70
6 years old	11	35.53	12	42.84
Total	**31**	**100**	**28**	**100**

From Table 4.1, it can be seen that a total of 31 pupils at the Jema D/A Primary School participated in the study. Of this number, 18 being the majority were girls, while the remaining 13 were boys; 8 were 4 years old, 12 were 5 years old while the remaining 11 were 6 years old. On the other hand, a total of 28 pupils participated in the study at the Jema Islamic Primary School. Of this number, the majority (16) were girls while the remaining 12 were boys. Also, the majority (12) were 6 years of age. Overall, girls were the majority in both schools. Of the total of 59 pupils who participated in the study, 34 (57.63%) were girls while boys were 25 (42.37%). With regard to age, pupils

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aged 6 years were the majority, they made up 38.98% of the population while those age 5 and 4 made up 37.29% and 23.73% respectively.

4.2 Assessment of the Letter Sound Identification Ability of the Pupils

The first objective of the study was to assess the letter sound identification ability of the pupils of the Jema D/A Primary School and the Jema Islamic Primary School. To achieve this objective, a pre-intervention test was conducted by the researcher in both schools to test the pupils' ability to identify letter sounds. Each child in the class was given a test paper and five minutes to identify letter sounds in the given tests. The correct letter sounds identified by the child was circled. After that, the number of letter sounds correctly identified by the child were recorded. The results of the pupils for each of the schools are presented in Tables 4.2 and 4.3 below:

4.2.1 *Jema D/A Primary School Pre-Intervention Test Results*

Table 4.2 below presents the pre-intervention test results of the KG 2 pupils of the Jema D/A Primary School who participated in the study. The total number of pupils who took the test in that school was 31.

Table 4.2 Pre-Intervention Test Results of Jema D/A Primary School

No.	Pupils' initials	Test 1 (5)	Test 2 (5)	Test 3 (5)	Test 4 (5)	Test 5 (5)	Total score (25)	%
1	AA	2	1	1	2	2	8	32
2	AB	1	3	4	1	1	10	40
3	AAE	0	1	2	4	3	10	40
4	AD	0	0	3	0	2	5	20
5	BAE	0	5	4	2	1	12	48
6	BBD	4	4	3	4	4	19	76
7	BE	1	1	3	5	3	13	52
8	BM	2	2	2	1	2	7	28
9	BN	1	4	0	4	3	11	44
10	BFS	0	1	3	2	1	7	28
11	BYA	2	3	5	1	1	12	48

12	BYK	0	3	0	2	3	8	32
13	DA	2	0	4	0	3	9	36
14	DAE	2	0	3	3	0	8	32
15	DAJ	3	0	4	1	1	9	36
16	DAK	1	3	2	4	2	11	44
17	DE	4	4	3	2	2	15	60
18	DF	1	2	0	4	1	8	32
19	EA	2	3	1	3	3	12	48
20	EB	2	1	1	1	2	7	28
21	ECK	3	1	1	1	4	10	40
22	EF	2	3	4	1	2	12	48
23	FA	4	2	1	2	1	10	40
24	FKM	3	2	2	2	2	11	44
25	FR	2	1	3	2	1	9	36
26	HK	3	3	3	1	1	11	44
27	KA	1	1	2	3	3	10	40
28	KB	2	3	2	3	3	13	52
29	KSY	1	1	1	2	3	8	32
30	MA	4	5	4	3	3	19	76
31	NK	4	4	2	2	2	14	56

(Source: Field Test, 2019)

Table 4.2 shows the pre-intervention test results indicating the ability of the KG 2 pupils of the Jema D/A Primary School to identify letter sounds in given words. The score ranges from 0 to a maximum of 25 marks. It can be seen that 11 (35.53%) out of the 31 pupils scored zero (0) in some of the tests. Also, it can be seen that the highest score out of the total score of 25 was 19 (76%) and only 2 (6.45%) out of the 31 pupils were able to score this mark. Moreover, as high as 25 (80.65%) out of the 31 pupils scored marks below 50%. The results clearly confirm that letter sound identification was a difficult task for the KG 2 pupils of the Jema D/A Primary School without audio-visual aids.

4.2.2 *Jema Islamic Primary School Pre-Intervention Test Results*

Table 4.3 below presents the pre-intervention test results of the KG 2 pupils of the Jema Islamic Primary School. The total number of pupils who took part in the test in that school was 28.

Table 4.3 Pre-intervention Test Results of Jema Islamic Primary School

No.	Pupils' initials	Test 1 (5)	Test 2 (5)	Test 3 (5)	Test 4 (5)	Test 5 (5)	Total score (25)	%
1	AAB	3	1	2	1	2	9	36
2	AB	1	2	1	2	3	9	36
3	AE	0	2	3	1	4	10	40
4	AF	1	0	2	3	1	7	28
5	AKB	4	4	1	2	1	12	48
6	BA	1	1	4	2	1	9	36
7	BDF	4	2	1	4	3	16	64
8	BOM	1	3	2	4	2	13	52
9	DA	3	2	0	4	3	12	48
10	DES	1	2	3	2	1	8	32
11	DF	3	3	1	1	4	12	48
12	EK	4	4	0	1	3	12	48
13	FM	2	0	4	0	3	9	36
14	FMO	2	0	3	3	0	8	32
15	FY	3	0	4	1	1	9	36
16	GA	1	3	2	4	2	11	44
17	GR	4	4	3	2	2	15	60
18	GF	1	2	0	4	1	8	32
19	GYA	2	3	1	3	3	12	48
20	HM	2	1	1	1	2	7	28
21	HO	3	1	1	1	4	10	40
22	JA	0	0	2	1	2	5	20
23	JYE	4	4	2	1	1	12	48
24	KA	1	4	3	4	2	14	56
25	KAB	4	2	3	3	1	13	52
26	KKA	2	2	2	3	1	10	40
27	KW	2	1	1	4	3	11	44
28	YM	3	1	1	4	3	12	48

(Source: Field Test, 2019)

It can be seen from Table 4.3 that the scores indicating the ability of the KG 2 pupils of the Jema Islamic Primary School to identify letter sounds range from a minimum of 5 (20%) to a maximum of 16 (64%). It can be seen that the highest score out of 25 was 16 (64%) and only one pupil out of the 28 pupils scored this mark. Also, 6 (21.43%) out of the 28 pupils scored zeros in some of the tests, which indicate their inability to identify letter sounds in the given words. Moreover, the results show that as high as 24 (85.71%) out of the 28 pupils scored marks below 50%. The results indicate that the

majority of the pupils' of the Jema Islamic Primary School were weak in their ability to identify letter sounds without audio-visual aids.

4.3 The Effectiveness of Using Audio-Visual Aids to Teach Letter Sound Identification

The second objective of the study was to examine the effectiveness of using audio-visual aids to teach letter sound identification at the Jema D/A Primary and the Jema Islamic Primary School. To achieve this objective, the researcher used audio-visual aids to teach and test the KG 2 pupils of both schools on letter sound identification. Using a laptop and speakers with sound audio visuals, the researcher conducted the test as follows:

- the learners were asked to sing the letter song
- the researcher played the video which the pupils watched five times
- the researcher wrote some letter sounds on the chalkboard for learners to identify them
- the researcher repeated it until they identified all the letter sounds watched

Following this process, five different tests were conducted within the study period. Each test was scored over 5 making the total score 25. The results of each pupil were recorded. The results of the tests from both schools are presented in Table 4.4 and Table 4.5 below.

4.3.1 *Jema D/A Primary School Intervention Test Results*

Table 4.4 below shows the results of the KG 2 pupils of the Jema D/A Primary School when the researcher used audio-visual aids to teach and test them on letter sound identification. A total of 31 pupils took part in the lessons and the tests.

Table 4.4 Intervention Test Results of Jema D/A Primary School

No.	Pupils' initials	Test 1 (5)	Test 2 (5)	Test 3 (5)	Test 4 (5)	Test 5 (5)	Total score (25)	%
1	AA	5	4	4	5	3	21	84
2	AB	4	5	4	5	2	20	80
3	AAE	3	4	5	4	5	21	84
4	AD	3	3	3	4	5	18	72
5	BAE	4	5	4	2	4	19	76
6	BBD	5	5	5	5	5	25	100
7	BE	5	5	3	5	3	21	84
8	BM	5	5	5	4	4	23	92
9	BN	4	4	5	5	5	23	92
10	BFS	3	4	5	5	5	22	88
11	BYA	4	5	5	4	3	21	84
12	BYK	3	5	5	4	5	22	88
13	DA	5	4	4	4	5	22	88
14	DAE	3	3	3	3	4	16	64
15	DAJ	3	4	4	5	5	21	84
16	DAK	4	3	5	4	2	18	72
17	DE	4	4	3	4	4	19	76
18	DF	3	3	4	4	5	19	76
19	EA	2	3	5	5	5	20	80
20	EB	3	3	4	5	2	17	68
21	ECK	5	5	5	5	5	25	100
22	EF	2	3	4	5	5	19	76
23	FA	4	2	5	2	5	18	72
24	FKM	3	4	4	4	4	19	76
25	FR	3	3	4	5	5	20	80
26	HK	4	5	3	5	5	22	88
27	KA	2	3	4	4	5	18	72
28	KB	4	4	5	4	5	22	88
29	KSY	4	4	4	4	4	20	80
30	MA	5	5	5	5	5	25	100
31	NK	4	4	5	5	5	23	92

(Source: Field Test, 2019)

From Table 4.4, it can be seen that the performance of the pupils in letter sound identification significantly increased with the use of audio-visual aids. First of all, it can be seen that none of the pupils scored a zero (0) in any of the test compared with the pre-intervention test results. Moreover, all the pupils scored more than 50% of the total mark of the test; 3 (9.68%) scored 100%; 3 (9.68%) scored 92%; 14 (4516%) scored

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marks between 80 and 89%; while 9 (29.03%) scored marks between 70 and 77%. The

lowest score was 16 (64%) and only 1 (3.23%) out of the 31 pupils had this score. The

intervention-test results clearly indicate that the use of audio-visuals to teach letter

sound identification was highly effective at the Jema D/A Primary School.

4.3.2 *Jema Islamic Primary School Intervention Test Results*

Table 4.5 below shows the results of the KG 2 pupils of the Jema Islamic Primary

School when the researcher used audio-visual aids to teach and test them on letter sound

identification. A total of 28 pupils took part in the lessons and the tests.

Table 4.5 Intervention Test Results of the Jema Islamic Primary School

No.	Pupils' initials	Test 1 (5)	Test 2 (5)	Test 3 (5)	Test 4 (5)	Test 5 (5)	Total score (25)	%
1	AAB	4	4	4	5	4	21	84
2	AB	4	3	4	5	5	21	84
3	AE	4	5	5	5	5	24	96
4	AF	3	4	3	4	3	17	68
5	AKB	3	5	4	2	4	16	64
6	BA	4	5	5	4	5	23	92
7	BDF	4	5	5	5	5	24	96
8	BOM	3	4	4	4	5	20	80
9	DA	3	4	4	4	5	20	80
10	DES	4	3	3	4	5	19	76
11	DF	2	4	5	4	5	20	80
12	EK	3	4	3	4	5	19	76
13	FM	3	3	4	3	5	18	72
14	FMO	3	4	5	5	4	21	84
15	FY	3	4	4	3	3	17	68
16	GA	3	4	2	4	5	18	72
17	GR	4	4	3	2	5	18	72
18	GF	3	4	4	5	5	21	84
19	GYA	3	4	4	4	5	20	80
20	HM	3	4	4	4	5	20	80
21	HO	3	4	4	4	5	20	80
22	JA	2	4	4	3	5	18	72
23	JYE	4	5	5	5	5	24	96
24	KA	3	4	3	5	5	20	80
25	KAB	2	4	4	5	5	20	80
26	KKA	3	4	5	4	5	21	84

| 27 | KW | 3 | 3 | 4 | 5 | 5 | 20 | 80 |
| 28 | YM | 3 | 4 | 4 | 4 | 5 | 20 | 80 |

(Source: Field Test, 2019)

Similarly, from Table 4.5 it can be seen that the performance of the pupils of the Jema Islamic Primary School in letter sound identification significantly increased with the use of audio-visual aids. First of all, it can be seen that none of the pupils scored a zero (0) in any of the test compared with the pre-intervention test results. Moreover, all the pupils scored more than 50% of the total mark of the test; 3(10.71%) scored 96%; 15(53.57%) scored marks between 79 and 85%; while 6(21.43%) scored marks between 71 and 77%. The lowest score was 16(64%) and only 1(3.57%) out of the 28 pupils had this score. The intervention test results clearly indicate that the use of audio-visuals to teach letter sound identification was highly effective at the Jema Islamic Primary School.

4.3.3 *Comparison of Pre-Intervention and Intervention Test Results*

Table 4.6 below shows a comparison of the pre-intervention test with the intervention test results of letter sound identification by the KG 2 pupils of the Jema D/A Primary School and the Jema Islamic Primary School which indicate the effectiveness of using audio-visual aids in teaching letter sound identification.

Table 4.6: Comparison of pre-intervention test and intervention test results

	Jema D/A Primary School				Jema Islamic Primary School			
	Pre-intervention		Intervention			Pre-intervention		Intervention	
	Score	%	Score	%		Score	%	score	%
Highest score	19	**76**	25	**100**	Highest score	16	**64**	24	**96**

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Lowest score	5	**20**	16	**64**	Lowest score	5	**20**	16	**64**
Mean score	14.5	**58**	20.5	**82**	Mean score	10.5	**42**	20	**80**

The summarized results shown in Table 4.6 clearly indicate that the use of audio-visual aids in teaching letter sound identification is more effective than teaching letter sound identification without audio-visual aids. From the Table, it can be seen that at the Jema D/A Primary School, the use of audio-visual aids increased the highest score in the pre-intervention test from 19 (76%) to 25 (100%) and the lowest score from 5 (20%) to 16 (64%).

Similarly, at the Jema Islamic School, the use of audio-visual aids increased the highest score in the pre-intervention test from 16(76%) to 24(96%) and the lowest score from 5 (20%) to 16 (64%). Thus, comparing the pre-intervention test results (i.e. results of letter sound identification without audio-visual aids) and the intervention test results (i.e. results of letter sound identification using audio-visual aids) of the KG 2 pupils of both schools, it can be concluded that the use of audio-visual aids in teaching letter sound identification is highly effective and thus should be highly encouraged and used by teachers in the schools.

4.4 Teachers' Experiences in Using Audio-Visual Aids to Teach Letter Sound Identification

The third objective of the study was to explore of the experiences of teachers at the Jema D/A and Islamic Primary School in using audio-visual aids to teach letter sound identification. To achieve this objective, the researcher made the teachers to use audio-visual aids to teach and test their pupils on letter sound identification. In the process, the researcher observed the teachers and note down her observations. Also, the

researcher let the teachers narrate their experiences using audio-visual aids to teach their pupils letter sound identification in comparison with teaching letter identification without audio-visuals.

4.4.1 *Jema D/A Primary School KG 2 Teachers' Experiences*

The KG 2 teachers of the Jema D/A Primary School after teaching and testing their pupils on letter sound identification with audio-visual aids, reported that the children were able to identify the letter sounds being taught with the audio visual easily. The teachers briefly narrated their experiences as follows;

Teacher A; I wondered how best I could help my children easily identify letter sound. But now, my question has been answered… The best way is to use audio-visuals… From now on, I will use audio-visuals in class very often….

Teacher B: Even though by theory I learned that using audio-visuals to teach letter sound identification made it easier for children, I had no practical experience of my own to support the claim... But now I have my own experience, and I do now know for sure that the best way to help children to be very successful in letter sound identification is to use audio-visual aids… I really enjoyed the lesson with audio-visual aids.

4.4.2 *Jema Islamic Primary School KG 2 Teachers' Experiences*

The KG 2 teachers of the Jema Islamic Primary School after teaching and testing their pupils on letter sound identification with audio-visual aids said the difference in using audio visual aids in teaching letter sounds identification is obvious. And it helps children to learn easily.

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Teacher A: At first, I didn't value using audio-visuals to teach letter sound identification... I thought it really didn't need audio-visual aids. But having used audio visuals these few days, I have seen that the difference is very clear… One needs to use audio-visuals always in teaching letter sound identification if they want the best for their pupils…

Teacher B: Based on my experience, using audio-visual aids in teaching letter sound identification is comparatively the best... On a scale of 1 to 7 with 7 being the highly effective, I will rate the use of audio-visuals in teaching letter sound identification as 7 in comparison with teaching without audio-visuals... I do highly recommend the use of audio-visual aids to all teachers... Now, the decision to start and continue to use audio-visual aids in my lessons is mine…

To sum up, based on their experiences, the KG 2 teachers of both Jema D/A Primary and Jema Islamic Primary School agreed that the best way to teach letter sound identification is to use audio-visual aids. The use of audio-visual aids according to the teachers made lessons practically easy for them and their pupils.

4.5 Discussion

The results of the study have provided evidence to draw a conclusion on the teaching letter sound identification with audio-visual aids. The pre-intervention test results of the pupils of both the Jema D/A Primary School and the Jema Islamic Primary School clearly revealed that the pupils' ability to identify letter sound was low. As high as 25(80.65%) out of the 31 pupils tested at the Jema D/A scored marks below 50% while similarly as high as 24(85.71%) out of the 28 pupils tested at other school scored marks below 50%. In addition, some of the pupils scored zero mark in some of the tests.

The importance of audio-visuals, which help children to both hear and visualize, cannot be overemphasized. As Dike (1993) explains, once a phenomenon is visualized, the picture and knowledge become very clear and permanent. Eze (2013) also explains that the human being learns more easily and faster by audio visual processes than by verbal explanations alone.

The test results after using audio-visual aids to instruct the children in letter sound identification were very amazing. The results indicate that the most effective way to teach instruct and help kindergarten children to easily identify letter sound is through the use of audio-visual aids. With the use of audio-visual aids, the performance of the pupils at both schools significantly increased. None of the pupils scored any zero mark in letter sound identification in any of the tests.
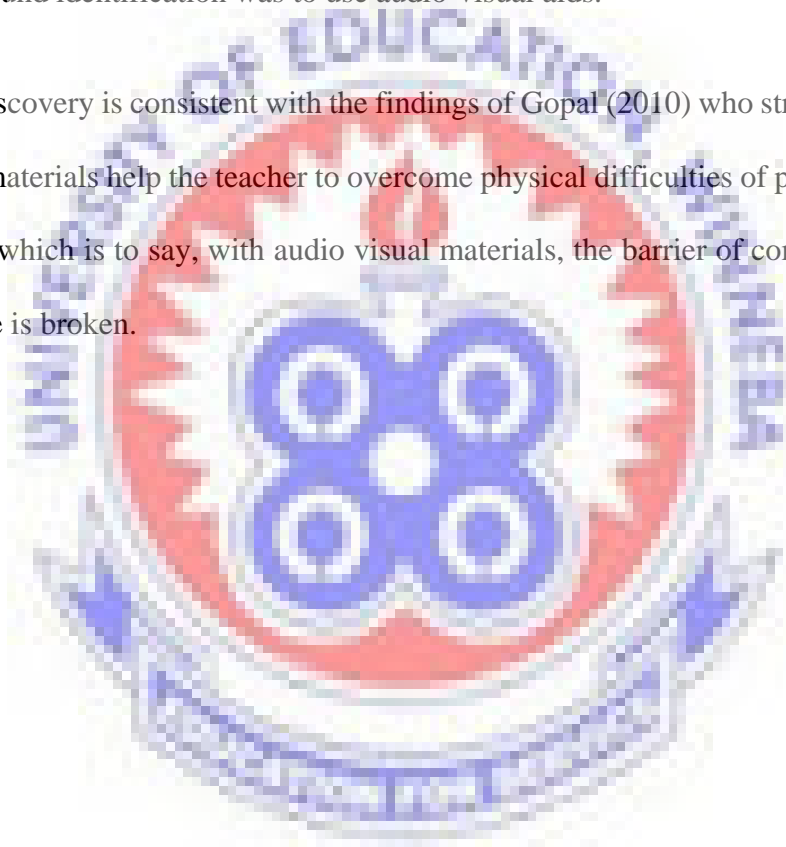
At the Jema D/A Primary School, the use of audio-visual aids increased the highest score in the pre-intervention test from 19(76%) to 25(100%) and the lowest score from 5(20%) to 16(64%). Similarly, at the Jema Islamic School, the use of audio-visual aids increased the highest score in the pre-intervention test from 16(76%) to 24(96%) and the lowest score from 5(20%) to 16(64%).

These results of the study agree with finding of previous related studies which found the use of audio-visual aids in teaching letter sound identification as highly effective (e.g. Magnan & Ecalle, 2006). The results of the study are consistent with previous results on audio-visual based phonemic awareness instruction and acquisition of early reading skills by kindergarten children (e.g. Moxley, 1992; Steg et al., 1994; Magnan & Ecalle, 2006), and by children with learning disabilities (e.g. Margalit & Roth, 1989; Anderson, 1991; Magnan & Ecalle, 2006). These studies provide empirical evidence

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that children benefit a lot from audio-visual based instructions than from the traditional methods of instruction which are based on

On the other hand, the experiences of the teachers of both the Jema D/A Primary and the Jema Islamic Primary School support the claim that using audio-visuals aids to teach letter sound identification is more effective than teaching without such aids. Based on their experiences, the KG 2 teachers of both schools agreed that the best way to teach letter sound identification was to use audio-visual aids.

This discovery is consistent with the findings of Gopal (2010) who stressed that audio-visual materials help the teacher to overcome physical difficulties of presenting subject matter, which is to say, with audio visual materials, the barrier of communication and distance is broken.

CHAPTER FIVE

SUMMARY, CONCLUSION, RECOMMENDATION

5.0 Overview of the study

The purpose of this study is to examine the effectiveness of teaching letter sound identification with audio-visual aids at the Jema D/A Primary School and the Jema

Islamic Primary School in the Jema District of the Bono East Region of Ghana. The ultimate purpose is to find and recommend measures towards increasing the phonemic awareness of struggling readers in these schools in order to help them increase their reading abilities.

To achieve these objectives, series of tests letter sound identification tests with and without audio-visual aids were conducted to: assess the letter sound identification ability of the kindergarten children of the schools; examine the effectiveness of using audio-visual aids to teach letter sound identification at the kindergarten levels of the selected schools; and to explore the experiences of the kindergarten teachers of the schools with using audio-visual aids to teach letter sound identification.

5.1 Summary of Key Findings

5.1.1 Demographics

A total of 59 kindergarten children of the Jema D/A Primary School (31 children) and the Jema Islamic Primary School (28 children) were involved in the study and tested. Overall, girls were the majority in both schools. Of the total of 59 children who participated in the study, 34(57.63%) were girls while boys were 25(42.37%). With regard to age, children aged 6 years were the majority; they made up 38.98% of the population while those aged 5 and 4 made up 37.29% and 23.73% respectively. The mean age was 5.

5.1.2 Letter Sound Identification Ability of the Kindergarten Children without Audio-Visual Aids

The pre-intervention test results clearly revealed that in both schools the kindergarten children's ability to identify letter sound was low without the use of audio-visual aids. As high as 80.65% of the children tested at Jema D/A Primary School scored marks

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below 50% in the pre-tests, while similarly as high as 85.71% the children tested at the

Jema Islamic school also scored marks below 50% in the pre-test.

In addition, some of the children scored zero mark in some of the tests.

5.1.3 The effectiveness of Using Audio-Visual Aids to Teach Letter Sound Identification at the Jema D/A and Islamic Schools

The post-test results of both schools indicate that the use of audio-visual aids for letter sound identification instruction was very effective.

At the Jema D/A Primary School, the use of audio-visual aids increased the highest score in the pre-intervention test from 76% to 100% and the lowest score from 20% to 64%.

Similarly, at the Jema Islamic School, the use of audio-visual aids increased the highest score in the pre-intervention test from 76% to 96% and the lowest score from 20% to 64%.

5.1.4 The Experiences of the Kindergarten Teachers with Using Audio-Visual Aids to Teach Letter Sound Identification

The experiences of the teachers of both selected schools support the claim that using audio-visuals aids to teach letter sound identification is more effective than without it.

Based on their experiences, the KG 2 teachers of both schools agreed that the best way to teach letter sound identification was to use audio-visual aids.

5.2 Suggestions for future research

Further research work is also recommended on teaching letter sound identification with audio visual aids. It could be done by covering all the basic schools in the Kintampo South District and beyond. The research would create room for more discoveries of

challenges faced by students on areas of letter sounds identification and suggest possible remedy to the problem.

5.3 Conclusion

The contribution of the use of audio-visual aids for teaching and learning at basic schools cannot be overemphasized. Overall, the results of the study confirm that teaching letter sound identification with audio-visual aids is comparatively very effective. The intervention with audio-visual aids improved the letter sound identification skills of the kindergarten children of the Jema D/A and Islamic Primary School.

Continuous use of audio-visual aids such as computer-assisted learning will lead to substantial improvement in the letter sound identification or phonemic awareness skills of kindergarten children. The results of the study indicate that it is advisable to the authorities of the Jema D/A and Islamic Primary School and all other schools in the Jema District to make efforts to develop the use of audio-visual aids for instruction

5.4 Recommendations

Based on the findings of the study, the following are recommended to the authorities of the Jema D/A and the Jema Islamic schools:

One, the authorities of the Jema D/A and the Jema Islamic schools should make the use of audio-visual aids in teaching at the kindergarten and lower primary school compulsory and insist that all teachers use audio-visual aids.

Workshops should be organized for primary and KG teachers to help them acquire knowledge on letter sound identification and audio visuals in teaching.

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Two, audio-visual aids should be provided to the schools for the teaching of letter sound identification to help children to blind sounds and read.

Three, the teachers should be given training on the use of audio visual aids so that they can be confident about using them to teach and help the children to acquire and build their phonemic awareness and other early reading skills.

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APPENDIX A

PRE-TEST

JEMA ISLAMIC PRIMARY SCHOOL

Name:...Abu....Issah.....Class K.G 2.

Identify the following letter sound of the English alphabet

k   g   v   l

h   m   o   i

e   r   n   z

a   d   y   f

t   u   w   b

x   c   j   p

s

$\frac{1}{25}$

61

JEMA D/A PRIMARY SCHOOL

Name:...Muhada....Tahiru....Class K.G 2.

Identify the following letter sound of the English alphabet

(k)   g   v   l

h   m   o   i

e   r   n   z

a   d   y   (f)

t   u   w   b

x   c   j   p

s

$\frac{2}{25}$

62

JEMA D/A PRIMARY SCHOOL

Name:..Faiza...Tahiru.....Class **K.G 2.**

Identify the following letter sound of the
English alphabet

k   g   v   l

h   m   o   i

e   r   n   z

a   d   y   f

t   u   w   b

x   c   j   p

s

$\frac{3}{25}$

JEMA ISLAMIC PRIMARY SCHOOL

APPENDIX B

POST-TEST

JEMA ISLAMIC PRIMARY SCHOOL

Name:..Abdul Issah....Class K.G 2.

Identify the following letter sound of the English alphabet

k g v l

h m o i

e r o n z

a d y f

t u w b

x c j p

s

$$\frac{22}{25}$$

JEMA D/A PRIMARY SCHOOL

Name:......Muhada....Tahiru....Class K.G 2.

Identify the following letter sound of the English alphabet

k h e a t x s

g m r d u c

v o n y w j

l i z f b p

22/25

JEMA D/A PRIMARY SCHOOL

Name:...Faiza...Tahiru...Class K.G 2.

Identify the following letter sound of the English alphabet

k   g   v   l

h   m   o   i

e   r   n   z

a   d   y   f

t   u   w   b

x   c   j   p

s

18/25

67

JEMA D/A PRIMARY SCHOOL

Name: Sule   Malik   Class **K.G 2**

Identify the following letter sound **of the** English alphabet

k   g   v   l

h   m   o   i

e   r   n   z

a   d   y   f

t   u   w   b

x   c   j   p

s

$$\frac{24}{25}$$