# PHONEMIC AWARENESS INSTRUCTION IN ONE DISTRICT'S KINDERGARTEN CLASSROOMS: AN ANALYSIS OF HOW CLOSELY CLASSROOM PRACTICES REFLECT RESEARCH-BASED BEST PRACTICES

by

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A dissertation submitted to the faculty of
The University of North Carolina at Charlotte
in partial fulfillment of the requirements
for the degree of Doctor of Philosophy in
Curriculum and Instruction

Charlotte

2018

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ABSTRACT

JOYCE A. FARROW. Phonemic awareness instruction in one district's kindergarten classrooms: An analysis of how closely classroom practices reflect research-based best practices. (Under the direction of DR. MARYANN MARZ)

The purpose of this qualitative case study was to explore how closely kindergarten teachers in a high performing school district in North Carolina instruct students towards mastery of phonemic awareness skills. This study explored to what degree teachers are implementing the findings of Shanahan (2005) and Ehri, Nunes, Willows, Schuster, Yaghoub-Zadeh, and Shanahan (2001) regarding best practices in phonemic awareness instruction such as the amount of instructional time devoted to phonemic awareness skill development, whether instruction is facilitated in whole group or small group settings, what skills are addressed and how many are addressed at once. The study took place at three elementary school sites in a suburban school district in the Southeastern United States. Fifteen participants replied to a survey at the start of the study and six of these participants volunteered to be interviewed and observed in their classrooms. I interviewed each participant once and observed each participant three times over the course of twelve weeks during the 2nd and 3rd quarters of the 2017-2018 school year. In addition to surveys, interviews and observations, documents such as report cards, unpacking documents, curriculum guides and calendars, and teacher manuals were collected and analyzed. Data were coded, and the following four major themes surfaced: balance, let the curriculum be your guide, data-driven, and all in a day's work.

# DEDICATION

This study is dedicated to my husband Dan. Dan has been my rock and head cheerleader throughout my doctoral work. He has encouraged me through the rough spots as well as applauded my accomplishments. I cannot fathom what this journey would have been like without his unwavering support. Thank you for believing in me.

# ACKNOWLEDGEMENTS

I would like first to acknowledge my committee chair, Dr. Maryann Mraz. Dr. Mraz, you have provided counseling services when it seemed my dissertation would never be written. You have held my hand through the inevitable hiccups that occurred in this ever-evolving doctoral program. You have provided both invaluable advice and generous feedback enabling me to give the very best of myself in the process of writing this dissertation. Thank you. I couldn't have picked a better person to usher me through this stage of the doctorate. I am forever grateful.

I would also like to thank you for steering me toward an amazing committee. Dr. Paola Pilonieta, Dr. Jean Vintinner, and Dr. JaneDiane Smith. You amazing ladies have offered me fantastic advice and guidance throughout the dissertation process allowing me to fine tune my research questions, streamline my target population, and catch grammatical errors, typos, and APA formatting issues. Thank you for your guidance and willingness to serve.

I would like to acknowledge Dr. Karen Wood who has been an amazing mentor and friend. Karen, I am so grateful for all you have taught me beginning with required coursework, to providing opportunities to present at conferences, to an amazing co-teaching experience. Thank you for helping me see the scholar within. I am truly blessed to have worked so closely with you. Working with you has been a highpoint of my doctoral journey.

I would be remiss if I did not acknowledge my Title I team and South Elementary School family. Though you have evolved since my journey began, you have collectively put up with me through dark moods, nervousness before

presentations, and anxiety over comps. Thank you for keeping me accountable and urging me forward along this path. I couldn't ask for a better group to spend my days with.

Finally, I would like to acknowledge my parents, Tom and Jean Klipsch. Mom and Dad, you have always been behind the scenes rooting me on. Thank you for always being there for me. It is hard to believe that the twists and turns on my life's path would lead me to this place where I will finally earn the title doctor. This is your accomplishment too.

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# CHAPTER 1: INTRODUCTION

According to Yopp and Yopp (2009), phonemic awareness is the ability to think about and manipulate phonemes: the individual sounds that make up spoken language. Children who cannot "grab hold and manipulate" (Yopp & Yopp, 2009, p. 15) phonemes, who do not possess this awareness, are more likely to experience difficulties learning to read. In fact, successful attainment of phonemic awareness has been linked to later success in reading and spelling (Adams 1990; Ehri, Nunes, Willows, Schuster, Yaghoub-Zadeh, & Shanahan, 2001). Likewise, Shankweiler and Fowler (2004) found that children who have developed strong skills in phonemic awareness generally have an easier time learning to read and decode unfamiliar words than those whose skills are less developed. In contrast, Shaywitz et al. (2002) have found that deficient skills in phonemic awareness are often characteristic of a reading disability.

Hoover (2002), maintains that most children at the onset of kindergarten do not come with phonemic awareness skills intact. Furthermore, Hoover suggests that without explicit instruction in phonemic awareness, many children will not acquire it. Yet, when learning to read and write an alphabetic language, such as English, where writing maps letters to sounds, phonemic awareness is critical (Griffith & Olson, 1992). Phonemic awareness allows children to benefit from instruction in phonics (Juel, Griffith & Gough, 1986); which, in turn, leads to greater ease in decoding unfamiliar words than for those children who lack these skills. Moreover, those who

develop fluency and accuracy in decoding are more likely to become better readers (Shankweiler & Fowler, 2004).

## Statement of the Problem

According to the report, *Reading Literacy in the United States: Findings from the IEA Reading Literacy Study*, Americans have long seen literacy as a necessary component of a democratic society and have shown a continuing concern for the improvement of literacy for all (U. S. Department of Education, National Center for Education Statistics, 1996). Additionally, in the last two decades, The National Reading Panel (NRP, 2000), the RAND Reading Study Group (2001), and the Partnership for Reading (2003) have reported on the reading achievement of students in the United States as a major concern. As a result of this concern, the government of the United States, both nationally and at the state level, regularly measure the reading achievement of students in elementary, middle, and high school.

The U.S. Department of Education maintains that more than eight million students in grades four through twelve in the United States cannot read grade level material with fluency (National Assessment of Educational Progress, 2011). This is born out through analysis of assessment scores in which it is apparent that the reading achievement scores across the nation have been relatively stable for years with minimal growth in National Assessment of Educational Progress (NAEP) scores at all three age groups measured (NAEP, 2017). In 2017, for example, 35% of the nation's fourth graders and eighth graders scored at or above proficient on the NAEP assessment in reading (NAEP, 2017). In North Carolina, the state in which this study

was conducted, 39% of fourth graders performed at or above proficient on the NAEP reading assessment in 2017 (The Nations Report Card, 2017). Similarly, North Carolina's Department of Public Instruction (NCDPI) data indicate that students in grades three through eight have scored consistently on the North Carolina End of Grade (EOG) assessment in English Language Arts (ELA) which encompasses reading achievement over the last four school years with 56.3% scoring at or above proficient in the years 2013-14 and 2014-15, 56.9% scoring at or above proficient in 2015-16, and 57.5% scoring at or above proficiency in 2016-17 (NCDPI, 2017).

The consequences of reading below grade level are potentially grave. For example, the Annie E. Casey Foundation released a report entitled *Early Warning! Why Reading by the End of Third Grade Matters*, in which it details the link between failure to read proficiently by the end of third grade, increased rates of later high school dropout, and the resultant economic cost both for the student and the nation (Early Warning, 2010). The Partnership for Reading (2003), similarly maintains that approximately three thousand students in the United States drop out of high school daily due in part to inadequate skills in reading and writing. With reading scores seemingly stagnant and the consequences of poor reading ostensibly dire, it has become increasingly necessary to analyze the ways in which we are currently instructing the nation's children in reading, as well as potentially ascertaining better ways of facilitating the same.

Towards this effort, the United States Congress commissioned a national panel in 1997 to study and recommend best practices for reading instruction within the United States (Ehri, et al., 2001). The National Reading Panel (NRP), consequently released a report identifying five pillars of reading which they deemed as necessary components of quality reading instruction to include: phonemic awareness, phonics, fluency, vocabulary, and comprehension (NRP, 2000).

Armbruster, Lehr, Osborn, and Adler (2009) as representatives of the National Institute for Literacy (NIFL) in *Put Reading First: Kindergarten through Grade 3* note the importance of phonemic awareness in learning to read. Slavin, Madden, Dolan, and Wasik, (1996) suggests that fifty percent of reading difficulties are preventable when students are provided with effective language development experiences in preschool and kindergarten followed by effective reading instruction in the early grades. Moreover, the report, *Factors Affecting Reading Ability in School Age Children* (2012), purports that the problems children encounter learning to read have more to do with their phonological awareness; specifically, "their ability to 'hear' the English language and their exposure to the alphabet," (p. 6).

Shanahan (2005) and Ehri et al. (2001) examined the NRP's (2000) report and deduced best practices for the instruction of phonemic awareness. They suggested that phonemic awareness instruction was best suited to kindergarten and first grades students and determined that the optimal amount of time needed for such instruction was between five and 18 hours, or roughly 15 minutes per day for one semester. Additionally, they recommend that phonemic awareness is best delivered in small

group instruction when possible and encourage the use of diagnostics so as to meet the differing needs of students in a classroom setting. Finally, they suggest pairing phonemic awareness instruction with manipulatives such as letter cards or counters. Shanahan (2005) further explains that children learned more quickly with a combination of phonemic awareness and phonics activities.

Over the last 25 years, a plethora of studies dealing with phonemic awareness have been conducted resulting in the best practices noted previously. Most of these studies; however, are dated resulting in a gap in the research. Specifically, there is little evidence to indicate whether teachers today are more or less knowledgeable in phonological and phonemic awareness than they were in previous years. Nor are there recent studies that examine the ways in which phonemic awareness instruction is delivered, how the curriculum supports instruction in phonemic awareness, the extent to which teachers focus on phonemic awareness during the instructional day, or how teachers are ensuring that students' gain adequate skills in phonemic awareness in the early years of schooling. In sum, the emphasis on understanding the role phonemic awareness plays in learning to read has greatly exceeded efforts to relate the findings of that research to classroom practice (Chard & Dickson, 2015).

## Subjectivity Statement

As an educator for the past 20 years in the public schools of Missouri, South Carolina, and North Carolina, I am invested in the learning and development of young people. For 12 years, I have worked as a reading specialist assisting children both learning to read for the first time in kindergarten as well as those struggling to read in

later grades. In an effort to increase my own knowledge, to further the capacity of others either entering the profession or looking to advance their own learning, and to find a venue for teacher advocacy, I have pursued a doctorate in Curriculum and Instruction with an emphasis on Literacy. I am also an avid reader myself.

For these reasons, I am especially interested and devoted to the reading process, particularly during its development in the foundational years of schooling. Throughout my career, I have witnessed the move away from an emphasis on authentic learning and developmentally appropriate play in favor of a focus on assessments and teaching to the test. I have learned through my own education of stagnant test scores over decades and read the various opinions of researchers and school reform advocates as to why reading achievement is immobile. Furthermore, as I work with children struggling to read, or developing more slowly than others, I wonder what is different for these learners. As someone who firmly believes that all children can learn, I am more likely to look at my own teaching, the curriculum, and the standards versus blaming the learner. As a scholar and researcher, I am also beginning to look at what the research says and analyze how it is put into practice. It is my hope to find answers that lead to improved practice that boosts reading achievement for all students.

## Purpose of the Study

Learning to read is a complex and multi-faceted task. As noted by the NRP (2000) effective reading instruction entails phonemic awareness, phonics, fluency, vocabulary, and comprehension. Of these, research indicates that phonological

processing, which includes phonemic awareness, is the most common area of difficulty for children identified as struggling readers in the early stages of learning to read (Snow, Burns, & Griffin, 1998). In addition, a great deal of research exists regarding the role phonemic awareness plays in helping children learn to read and its relation to later reading success (Blackman et al., 2004; Ding, Richardson, & Schnell, 2013; Nunes, Schuster, Yaghoub-Zadeh, and Shanahan, 2001; Snow et al., 1998; Stahl & Murray, 1994; Yopp & Yopp, 2009). It is evident that phonemic awareness is a crucial component in learning to read. Thus, it is imperative to examine the ways in which instruction in phonemic awareness is carried out in classrooms today. In doing so, this study will both add to the research base on phonemic awareness and address the gap that exists between research and practice.

High performing school districts capture a unique population for study. First, high performing school districts consistently perform well on standardized assessments across its schools. High performing schools also share common characteristics (Center for Public Education, 2005; Shannon & Bylsma, 2007) that contribute to their success. Shannon and Bylsma (2007) caution, however, that no school has attained perfection across all nine characteristics and acknowledge that all schools should strive for continued improvement. As an example, Shannon and Bylsma (2007) note that though high performing schools may know what research says about best practices, there is often a gap between their knowledge of best practices and actually using them in the classroom.

There are benefits and limitations to using high performing schools in research. Much can be learned from studying a high-performing school especially if the school is high performing in comparison to schools of similar size and student population that are not as academically successful. There are limitations to studying high performing schools as well. First, it is possible that students perform well due to factors outside of the school's influence. For example, a district's socioeconomic status is highly correlated to students' academic performance (Reardon, 2016). Disparities in academic performance are also found among different racial/ethnic groups (Reardon, 2016). Still, studying high-performing schools can provide beneficial.

The purpose of this qualitative study is to analyze how closely kindergarten teachers in a high performing school district in North Carolina instruct students towards mastery of phonemic awareness skills. More specifically, the study seeks to determine to what degree kindergarten teachers are implementing the findings of Shanahan (2005) and Ehri et al. (2001) in regard to best practices in phonemic awareness instruction such as: the amount of instructional time, group size, use of manipulatives, etc.

**Research Questions**

The three research questions that will guide this study are:

1. How closely does instruction in phonemic awareness in kindergarten align with what research has deemed best practice?
2. How do kindergarten teachers embed instruction in phonemic awareness within their instruction across the school day?

3. How do kindergarten teachers use DIBELS Next assessments to assess phonemic awareness in their students, and how are the results of these assessments used to drive their instruction?

## Significance of the Study

This study has the potential of adding to the existing research on teacher knowledge of phonological and phonemic awareness. It could provide much needed direction to teacher preparation programs, school administrators, and teachers themselves regarding potential professional development in phonemic awareness that could close existing gaps in knowledge leading to increased early reading gains for young students. Moreover, this study has the potential to uncover whether or not instruction in phonemic awareness aligns with what research deems best practice. Whether or not instruction in phonemic awareness aligns with the research, additional questions become pertinent. For example, if instructional practices do not align with the research, a reasonable question would be: what precludes teachers from following research-based best practices in the instruction of phonemic awareness? If instruction does align, a reasonable line of inquiry would examine the remaining pillars of reading to determine if instruction in those areas followed research-based practices.

This study also has the potential to influence policy at state and local levels regarding reading instruction in the early grades. For example, the study may indicate a need for more or less instructional time; a need for more, fewer, or different resources to address instructional needs of learners, or a need for more or less assessment in phonemic awareness.

## Theoretical Framework

The theoretical framework undergirding this study draws from the body of research on Social Constructivism (Vygotsky, 1978; 1986) and Emergent Literacy Theory (Johnson, 1999; Sulzby & Teale, 1991; Tracey & Morrow, 2012. The tenets of Social Constructivism and Emergent literacy theory support the teaching of phonemic awareness.

### Social Constructivism

Vygotsky (1978) described children as active constructors of their language and literacy, and viewed learning and development as interrelated from a child's very first day of life. He theorized that knowledge is constructed through social interaction and the use of language to mediate understanding. According to Vygotsky's (1978) social learning theory, learning cannot be separated from the social, cultural, and historical context that frames it. In other words, learning is dependent on the individual learner and is situated within the social setting in which it occurs. Meaning; therefore, is negotiated through social interactions and is reliant on social constructs. Thus, the acquisition of language and literacy are not isolated skills (Vygotsky, 1978).

Vygotsky's (1978) sociocultural theory incorporates two concepts that promote social interaction: the zone of proximal development (ZPD) and social scaffolding. According to Vygotsky (1978), children develop cognitively when they interact with knowledgeable peers or adults when working on tasks that are within their zone of proximal development. Cognitive development only occurs when a task is within a learner's ZPD (Vygotsky, 1978). Likewise, when a learner completes a task alone,

no new cognitive development takes place. Instead, the learner simply builds fluency and accuracy through task repetition (Louis, 2009; Vygotsky, 1978). Finally, if a task is too hard, cognitive development will not occur even with assistance (Vygotsky, 1986).

Vygotsky (1978; 1986) argued that that there is a close relationship between intermental and intramental cognitive capabilities, with children's involvement in joint activities generating new ways of thinking. In other words, children acquire their greatest learning during their experiences within the ZPD as a result of others' scaffolding. Scaffolding instruction bridges the gap between current abilities and instructional goals using systematic and explicit instructional approaches such as chunking, sequencing skills so that they build on each other, using examples that progress in complexity, providing demonstrations, modeling, prompting, and providing sufficient time for students to practice the skill both with guidance and independently with the appropriate feedback (Archer & Hughes, 2011).

A social constructivist approach is compatible with the teaching of phonemic awareness. For children to understand concepts such as phonemic awareness, the alphabetic principle and phonics, they need exposure to language and text. Moreover, they require adequate time to explore and experiment with their use of language. Social constructivism and best practices for teaching phonemic awareness agree that children should use "curiosity, inquisitiveness and spontaneity to help themselves learn," (Morrow, 2009).

**Emergent Literacy Theory**

Emergent Literacy Theory is accredited to Marie Clay (Johnson, 1999; Tracey & Morrow, 2012) a researcher from New Zealand who first used the term *emergent literacy* in 1966 to describe young children's behaviors centered on reading and writing. Since Clay's introduction, Teale and Sulzby (1986) and Cooper (1997) have expounded upon the understanding of emergent literacy such that it now encompasses reading, writing, listening, speaking, thinking, and viewing. Moreover, proponents of Emergent Literacy Theory believe that children learn to read and write by actually reading and writing (Goodman, 1985; Strickland, 1989). Additional research into emergent literacy has created what is now known as Emergent Literacy Theory, which "both explains early literacy development and provides instructional guidance to promote early literacy growth," (Tracey & Morrow, 2012, p. 99).

According to Tracey and Morrow (2012), emergent literacy reflects a "functional level of performance," (p.99) that spans the time in a child's life beginning at birth and continuing to such a time as the child can read and write at a conventional level, which is typically as well as the average third grader. This level of attainment, they note, can be reached early or late, and is highly dependent upon the individual child's development (Tracey & Morrow, 2012).

Emergent Literacy Theory is grounded in two basic tenets. First, is the belief that there is interrelatedness in the development of children's listening, speaking, reading, and writing skills (Morrow, 2012; Sulzby & Teale, 1991). Due to this interrelatedness, Gambrell and Morrow (2011) contend, that children who excel in

listening and speaking are likely to excel in reading and writing. Conversely, those who are delayed in their development of listening and speaking skills are more likely to experience delays in reading and writing.

A second belief Emergent Literacy Theorists hold is that children's literacy development begins at birth, and is continuous (Morrow, 2012). Teale and Sulzby (1986; 1989) contend that children are continuously constructing their understanding of how language works as the actively engage with their world. Zygouris-Coe (2001) further asserts that this "development occurs in the everyday contexts of the home, community, and school through meaningful and functional experiences that require the use of literacy in settings that are part of the child's everyday life," (p. 6).

According to Morrow (2009), all children become increasingly aware of the relationship between spoken and written language within the emergent literacy phase. This awareness, in turn, assists children with their early reading and writing. The Florida Literacy and Reading Excellence Center (FLaRE) broadens Morrow's assertion viewing emergent literacy "as a developing range of understanding about print and nonconventional literacy behaviors that begin before schooling and lead into conventional reading and writing, speaking, listening, viewing, and thinking," (Zygouris-Coe, 2001, p. 6).

Phonological awareness, which includes phonemic awareness, is an important component of emergent literacy. Acquiring phonological awareness, particularly phonemic awareness, paves the way for later reading and writing development (Adams, Foorman, Lundberg, & Beeler, 1998; Chard, Simmons, & Kameenui, 1998).

According to Torgesen and Mathes (1999), learning to read is dependent upon phonological awareness as it provides an important link between written and oral language. Zygouris-Coe (2001) expounds on this notion noting that phonological awareness assists children in their understanding of the alphabetic principal, notice the ways in which letters represent sounds in words, and enhances a child's ability to decode unfamiliar words.

## Definition of Terms

**Alphabetic Principle**: the understanding that letters in words represent the phonemes in spoken words and that spoken words are represented by text (Blevins, 2001).

**Emergent Literacy**: theory that explains early literacy development and provides instructional guidance to promote early literacy growth. (Tracey & Morrow, 2012).

**Phoneme**: the smallest unit of sound in a word, e.g. the word if has two phonemes /i/ and /f/ (State of New South Wales, 2009).

**Phonemic Awareness**: the ability to blend, segment, and manipulate phonemes in spoken words (Hong, Diamond, & Gutlohn, 2000).

**Phonics**: refers to the relationships between sounds and the spelling patterns that are used to represent them in print (Blevins, 2001).

**Phonological Awareness**: an awareness of all levels of the speech sound system, including word boundaries, stress patterns, syllables, onset-rime units, and phonemes (Blevins, 2001).

**Scaffolding**: refers to the assistance that adults and more competent peers provide during learning (Temple et al., 2011)

**Social Constructivism**: a theory of learning attributed to the Russian scholar Leo Vygotsky premised on the belief that children learn as a result of their social interactions with others (Tracey & Morrow, 2012; Vygotsky 1978; 1986).

**Zone of Proximal Development**: refers to the ideal level of task difficulty to facilitate learning; the level at which a child can be successful with appropriate support (Vygotsky, 1978; 1986)

## Summary

Chapter one establishes the foundation for this qualitative research study. The researcher introduced the importance of phonemic awareness as it relates to reading development. Despite the copious research examining the role phonemic awareness plays in learning to read, little has been done in analyzing how the research influences educational practice. This study addresses how closely practice mirrors what research has found to be best practice in the teaching of phonemic awareness. This chapter includes the research questions that guide the study, establishes a theoretical framework, and provides a description of the nature and significance of this study. Chapter two provides a synthesis and review of the literature related to this study.

# CHAPTER 2: LITERATURE REVIEW

## Introduction

Since the National Reading Panel (NRP, 2000) released its report identifying phonemic awareness as one of its five pillars of reading, there has been a plethora of studies conducted to determine its relationship to reading achievement. Children who are more adept at hearing and manipulating phonemes in words are generally stronger readers than those whose phonemic awareness skills are less developed (Shankweiler & Fowler, 2004). In order to have a better understanding of how teachers develop phonemic awareness skills in young children first learning to read this section reviews recent literature related to the role and significance of phonemic awareness in reading development as well as its relationship to related elements of a foundational reading program. For this study, research conducted within the last 20 years was thoroughly examined, with particular consideration given to those studies carried out in the United States within the last 10 years. It was necessary to consider research with earlier publication dates due to policy initiatives at that time (e.g., Teaching Children to Read, NRP, 2000) which drove many studies and influenced later study developments.

Chapter two begins with a brief introduction stating the purpose of the review and providing a rationale. It specifically examines research related to learning to read, kindergarten, North Carolina's Read to Achieve law, phonological awareness, phonemic awareness, and best practices to include length of time, group size, instruction, and computer assisted instruction. The chapter concludes with a summary wherein gaps in the research are identified.

## Learning to Read

Learning to read is an extremely important academic skill whose development in the early years of schooling are known to predict performance in reading as well as in other areas (e.g. spelling, vocabulary, general knowledge) in later years (Cunningham & Stanovich, 1997; Entwisle, Alexander, & Olson, 2005). In 1998, the International Reading Association (IRA) and the National Association for the Education of Young Children (NAEYC) created a position statement stipulating a set of guiding principles and recommendations regarding the development of early literacy from birth through age eight (IRA & NAEYC, 1998), and the National Reading Panel (NRP, 2000) recommended that children's reading instruction begin as early as possible. This is essential, in large part, because for the majority of children, "the ability to read and write does not develop naturally," (IRA & NAEYC, 1998, p. 6). However, both the IRA and NAEYC strongly believe that most children will learn to read by age six or seven, though some will learn earlier and a few with more intensive support will learn to read by age eight or nine (IRA & NAEYC, 1998). Good teachers must base their instructional decisions on their knowledge of the continuum of reading and writing development, developmentally appropriate instructional strategies, and the individual strengths and needs of the students before them in order to attain these milestones (IRA & NAEYC, 1998).

## Kindergarten

Friedrich Froebel founded the first kindergarten in 1837, and it was introduced in the United States by Margaretha Scharz in 1849 (Walmsley, Camp, & Walmsley,

1992). In the 1920s and 30s, William Gray argued that preparation for reading through the development of those skills necessary for later success in reading should begin in kindergarten (Gray, 1927). Today, the development of literacy is seen as one of the primary functions of schooling, and kindergarten its launching ground (Rog, 2001).

Rog (2001) contends that "children enter kindergarten with a wide range of experiences with literacy and print," (p. 14). In fact, the range of developmental levels in any one kindergarten class can span up to five years (IRA/NAEYC, 1998). Thus, it is imperative that teachers build on children's existing knowledge and abilities to continue the process of developing their knowledge, skills, and attitudes necessary for continued success and learning (Rog, 2001). Gallant (2009) points out; however, that today's public kindergartens have become more academically focused with an increase in teacher provided direct instruction in both reading and writing. This, in turn, has led to a dichotomy of thought in which kindergarten is both a "critical year for preparing children to be successful learners," (Kagan & Kauerz, 2006) and one in which the curriculum is both narrow and academically limited due to the pressure of high-stakes testing beginning in third grade (Kagan & Kaurez, 2006).

## Read to Achieve

North Carolina's Excellent Public Schools Act (2012) was passed by the General Assembly in April of 2012 in response to a growing trend in low and stagnant reading scores for the state's school children. The Excellent Public Schools Act, known commonly as Read to Achieve, took effect in the 2013-14 school year, and focuses on Kindergarten through third grade literacy (Excellent Public Schools Act,

2012; North Carolina Read to Achieve Legislative Summary, n. d.; Sims, 2013). The law requires thrice yearly benchmark assessments as well as ongoing progress monitoring of reading skills in Kindergarten through grade three using mCLASS (an Amplify owned technology-based data management tool using DIBELS Next assessments) as well as Reading 3D (an Amplify owned technology-based data management tool using Text Reading and Comprehension assessments; Amplify Insight, 2014).

The assessments used throughout North Carolina, known as mCLASS, are essentially DIBELS Next (Dynamic Indicators of Basic Early Literacy Skills-Next) assessments. The DIBELS assessments were created by the University of Oregon and are a set of tests that focus on the skills necessary for learning to read (Dessoff, 2007; Kaminski & Cummings, 2007; Pearson, 2006; University of Oregon, Center on Teaching and Learning, 2012). The DIBELS Next assessments are one-minute measures that progress in difficulty across the grade levels as they evaluate the developmentally appropriate skills children are meant to master on their way to becoming proficient readers (University of Oregon, Center on Teaching and Learning, 2012). Of these, mCLASS classifies two assessments given in kindergarten as measures of phonemic awareness skills to include: first sound fluency and phoneme segmentation fluency (Amplify Insight, 2014). Kindergarten students are expected to reach mastery on first sound fluency by mid-year, and on phoneme segmentation fluency by the end of the kindergarten/beginning of first grade (DIBELS Next, 2016). Nonsense word fluency, an assessment which requires children to provide the sounds

of given letters then blend those letters into words (Amplify Insight, 2014), is initially given at mid-year in kindergarten; however, mastery is not expected until the end of first grade/beginning of second grade (DIBELS Next, 2016).

## Phonological Awareness

### Phonological Awareness Defined

Phonological awareness is an umbrella term referring to various types of awareness. It includes phonemic awareness, but also awareness of larger spoken units such as syllables, and rhyming words. Research has revealed that early training in phonological awareness positively affects early word reading skills (Hulme, Bowyer-Crane, Carroll, Duff, & Snowling, 2012; Melby-Lervag, Halass Lyster & Hulme, 2012), which, in turn plays an important part in developing skill in reading comprehension (Kjeldsen, Karna, Niemi, Olofsson, & Witting, 2014; Perfetti & Stafura, 2014).

Yopp and Yopp (2009) contend that though phonological awareness can be taught, its development is not lockstep and; therefore, children "need not master one level before being exposed to other levels of phonological awareness," (Yopp & Yopp, 2009, p.13) For beginners, it is generally easier to manipulate larger spoken units such as those at the word or syllable level than tasks requiring phoneme manipulation (Liberman, Shankweiler, Fisher, & Carter, 1974). In fact, understanding the relationship between sounds and letters is thought to be one of the fundamental tasks facing the beginning reader and writer (Adams, 1990). Of the various tasks contained within the realm of phonological awareness, phonemic awareness is often

considered the most important in the development of reading and writing (Scanlon, Anderson, & Sweeney, 2017).

**Instructional Standards**

The North Carolina Standard Course of Study for English Language Arts lists numerous standards for phonological awareness, including phonemic awareness, in kindergarten that require students to "Demonstrate understanding of spoken words, syllables, and sounds (phonemes)," (Public Schools of North Carolina, State Board of Education: Department of Public Instruction (2010), 2010, p. 14) and specify that the instruction of these standards require differentiation as the amount of practice good readers will need is likely to be less than what struggling readers will require. These standards, adopted in North Carolina in 2010, are depicted in Table 1 below.

Table 1

*Phonological Awareness: Kindergarten Standards*

| Standards |
| --- |
| Recognize and produce rhyming words. |
| Count, pronounce, blend, and segment syllables in spoken words. |
| Blend and segment onsets and rimes of single-syllable spoken words. |
| Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words *(This does not include CVCs ending with /l/, /r/, or /x/.) |
| Add or substitute sounds (phonemes) in simple, one-syllable words to make new words. |

Public Schools of North Carolina, State Board of Education: Department of Public Instruction (2010).

## Phonemic Awareness

### Phonemic Awareness Defined

According to the National Reading Panel (NRP, 2000), phonemes are the smallest units of sound or speech. In English, there are approximately 44 phonemes, which, when combined, form syllables and words (Eide, 2012). Phonograms, a letter or combination of letters, represent one or more sounds and are the building blocks of words (Eide, 2012). Eide (2012) argues that knowing the 74 basic phonograms, which make up the English language, enables students to decode virtually any word encountered in text.

The National Reading Panel (NRP, 2000) describes phonemic awareness (PA) as the "ability to focus on and manipulate phonemes in spoken words," (p. 2-10). Zygouris-Coe (2001), maintains PA "is the link between spoken and written language," (p. 4). Phonemic awareness develops gradually and increases in difficulty. It includes the following skills: phoneme isolation –the ability to recognize individual sounds in a given word (first sound, final sound, medial sound); phoneme identity –the ability to recognize a shared sound occurring in several words; phoneme categorization –the ability to recognize a word with a series of three or four words with a different sound; phoneme blending – the ability to combine separately spoken sounds when heard aloud to form a word; phoneme segmentation –the ability to break a word into its sounds; and phoneme deletion –the ability to identify how a word changes when a sound is omitted within that word (NRP, 2000).

**The Phonemic Awareness – Reading Connection**

Correlational studies have shown a strong predictive relationship between phonemic awareness and success in reading (Liberman, Shankweiler, Fisher, & Carter, 1974; Mann, 1984). The two most powerful predictors of later reading success are how well a preschooler knows the letters of the alphabet, and their awareness of phonemes (Adams, 1990). This has been corroborated across numerous alphabetic languages including French (Alegria, Pignot & Morais, 1982), Italian (Cossu, Shankweiler, Liberaman, Tola, & Katz, 1988), Norwegian (Høien, Lundberg, Stanovich & Bjaalid, 1995), Portugese (Cardoso-Martins, 1995), Russian (Elkonin, 1973), and Swedish (Lundberg, Olofsson & Wall, 1980). In addition, the predictive

power of a preschoolers' awareness of phonemes is such that it is said to account for up to 50% of the variance in a child's reading proficiency by the end of first grade (Adams et al., 1991). As such, "successful readers invariably have phonemic awareness while those who lack phonemic awareness are invariably unsuccessful," (Adams et al., 1991, p. 392.)

For some children, understanding the relationship between sounds and letters seems to be intuitive and develops naturally. For others, it takes a good deal of time and explicit instruction to develop (Scarborough & Dobrich, 1994; Torgesen, Wagner, & Rashotte, 1994). In part, this is due to the fact that phonemes are often difficult to distinguish from one another. Often, "there is no clear point of demarcation between one sound and the next. The sounds are literally blended together. This blending is referred to as *coarticulation*," (Scanlon, Anderson, & Sweeney, 2017, p. 96). Children also have difficulty because our mouths produce some sounds in English in the same fashion. Since the mouth moves similarly, and the sound varies only in its voicing, children become confused especially when encoding --spelling (Scanlon, Anderson, & Sweeney, 2017). Furthermore, phonemic awareness is difficult because it is not really "possible to explicitly state to a child what she must become aware of, rather we can only lead her to try to induce for herself what must be acquired," (Hoover, 2002, p. 2).

**The Phonemic Awareness Continuum**

When becoming phonemically aware, there tends to be a continuum along which children progress. For example, research has shown that children first attend to and learn to manipulate *onsets* and *rimes* in one-syllable words. Next, they are able to

grapple with the ending sound. The most challenging word part for a child to recognize is its middle sound, usually a vowel sound, as well as sounds that represent consonant blends (Fox & Routh, 1975; Treiman & Zukowski, 1996). Likewise, blending phonemes to make a word is generally easier than segmenting the sounds in a word (Scanlon, Anderson, & Sweeney, 2017). In fact, Scanlon, Anderson, and Sweeney (2017) argue that phoneme segmentation is the most difficult of the phonemic awareness tasks for most children. This is likely true for the simple fact that learning to read requires children to realize phonemes exist, manipulate those phonemes, and "hold and contrast in memory both the phonemes and the letter strings that represent them," (Hoover, 2002, p. 1). The more phonemically aware children are, the better they are able to phonetically decode words in text, which is a critical first step towards successful reading (Torgesen & Mathes, 1998).

**Why Phonemic Awareness Matters**

In an early study, Juel (1988) found that first graders who struggled to blend and segment words into sounds, and to manipulate initial and final consonant sounds in words continued to struggle four years later. Adams (1990) further contends that a child's ability or inability to manipulate phonemes correlates with reading success or failure through the twelfth grade. In fact, poor phonemic awareness has also been found to be characteristic of adults with reading difficulties as has been noted in several studies across numerous countries including: America (Liberman, Rubin, Duques, & Carlisle, 1985), Portugal (Morais, Cary, Algeria, & Bertelson, 1979), England (Marcel, 1980), and Australia (Byrne & Ledez, 1983).

Phonemic awareness itself is less important than the role it plays in helping students acquire the alphabetic principle (Keesey, Konrad, & Joseph, 2015). The alphabetic principle is an understanding of letter sound correspondence in relation to spoken words (Moats, 2010). It is the "basis for learning how to read," (Keesey, Konrad, & Joseph, 2015, p. 168) and can be developed through explicit instruction of letter sound correspondences (Keesey, Konrad, & Joseph, 2015) often referred to as phonics instruction. According to Shanahan (2005), although "phonemic awareness is not about how letters and sounds match or how to sound out letters to form words," (p. 6) having this awareness makes learning to do these tasks easier. Thus, Shanahan (2005) contends that phonemic awareness should be taught prior to phonics, "or at least early in the phonics sequence," (p. 6). Likewise, some aspects of phonological awareness such as awareness of syllables and the ability to rhyme can aide children in their reading development and should be a part of instruction for children in kindergarten (Shanahan, 2005).

## Best practices

Research has shown that phonemic awareness can be expanded through instruction, and that doing so significantly increases children's reading and writing achievement over time (Armbruster, Lehr, Osborn, & Adler, 2009; Ball & Blachman, 1991; Ehri et al., 2001). In a more recent study, Carson, Gillon, and Boustead (2013) compared the literacy scores of children who received a short bout of intensive classroom instruction in phonemic awareness against the literacy scores of children who followed the typical literacy curriculum only. They found that those children

receiving the intensive phonemic awareness instruction outperformed those receiving the traditional instruction immediately, and up to 6 months after instruction (Carson, Gillon, & Boustead, 2013). Likewise, instruction in phonemic awareness is more effective than no instruction, as well as alternative forms of instruction, in helping children to both acquire skill in phonemic awareness and transfer that skill to reading and spelling (Armbruster, Lehr, Osborn, & Adler, 2009; Ehri et al., 2001).

Effective instruction in phonemic awareness, especially for children who are slower to develop the foundations of reading, "requires a teacher who thoroughly understand its implications for reading achievement, has competent skills, and has a complete understanding of the content, scope, and sequence of instruction to provide instruction that is more explicit, comprehensive, intensive, and supportive than is necessary for normally progressing students," (Cheesman, McGuire, Shankweiler, & Coyne, 2009, p. 272). Unfortunately, many teachers have been found to struggle with knowledge of phonemes such that they are unable to accurately count the phonemes in words with more than two sounds or demonstrate a graphic representation of speech sounds in print. (Bos, Mather, Dickson, Podhajski, & Chard, 2001; Joshi, Binks, Hougen, Dahlgren, Ocker-Dean, & Smith, 2009; Moats & Foorman, 2003; Scarborough, Ehri, Olson, & Fowler 1998; Spear- Swerling & Brucker, 2003). In addition, a discrepancy has been shown to exist between teacher's perceived and actual knowledge of phonemic awareness (Alghazo & Al-Hilawani, 2010; Cunningham, Perry, Stanovich, & Stanovich, 2004; MacLachlan & Arrow, 2014). In fact, both general and special education teachers have demonstrated a "limited

knowledge of PA, confuse PA with phonics, are generally unable to select task-appropriate materials or activities, and lack skill in analyzing written words into phonemes," (Cheesman, McGuire, Shankweiler, & Coyne, 2009, p. 270). Thus, schools and districts must not assume teachers have the knowledge base necessary to effectively instruct children in phonemic awareness. Instead, they should assume they do not and provide adequate on-going professional development to ensure students receive the best instruction possible.

**Length of time.**

The National Reading Panel's (Armbruster, Lehr, Osborn, & Adler, 2009; Ehri et al., 2001; National Reading Panel, 2000) findings suggest that instruction in phonemic awareness does not need to be lengthy. In fact, studies have shown that in kindergarten, 15 to 20 minutes of explicit instruction in phonemic awareness skills per day is enough time to prevent reading difficulties for most children (Adams, Foorman, Liundberg, & Beeler, 1998; Ehri et al., 2001; Shanahan, 2005). It should be cautioned, though, that the National Reading Panel did not give a specific time recommendation cautioning that the amount of time will vary based on the individual needs of each child (Shanahan, 2005). Consequently, it is imperative to use diagnostics to assess the needs of each child and making adjustments to instruction as needed (Armbruster, Lehr, Osborn, & Adler, 2009; Shanahan, 2005). However, it may be best to keep instruction at no more than 30 minutes in length as studies as Ehri et al., (2001) found that instruction in phonemic awareness need not be lengthy to be effective. In fact, their analysis found that between 5 and 18 hours of instruction in phonemic awareness

produced larger effect sizes than both shorter and longer instructional durations (Ehri et al., 2001).

**Group size.**

In the National Reading Panel's analysis (NRP, 2000), small group instruction was more effective than either one-to-one tutoring or large group instruction (Armbruster, Lehr, Osborn, & Adler, 2009; Ehri et al., 2001; Shanahan, 2005). In fact, "small group instruction was associated with much larger effect sizes than individual or classroom instruction," (Ehri et al., 2001, p. 280). In addition, small group instruction is thought to be of greater benefit because it allows children to listen to their classmates as they respond and receive feedback from the teacher (Armbruster, Lehr, Osborn, & Adler, 2009). However, small group instruction takes time. Shanahan (2005) acknowledges the time constraint of providing small group instruction and; therefore, recommends using a combination of both whole group and small group instruction.

**Instruction.**

Simple instruction, focusing on one or two skills in phonemic awareness is more effective than more complex instruction (Armbruster, Lehr, Osborn, & Adler, 2009; Ehri et al., 2001; Shanahan, 2005). Moreover, "the studies reviewed by the National Reading Panel found that when letter cards were used as counters –giving children a type of combined phonemic awareness and phonics activity—the children progressed faster," (Shanahan, 2005, p. 10). Likewise, phonemic awareness is also powerfully affected when paired with explicit instruction in spelling (Byrne &

Fielding-Barnsley,1993). Of the various skills comprising phonemic awareness the last to develop, segmenting and blending, also provide the greatest advantages in reading (Ehri et al., 2001; Shanahan, 2005). In fact, once children can segment and blend, there is "little need for additional phonemic awareness instruction" (Shanahan, 2005, p. 9).

As a matter of practice, phonemic awareness instruction likely should be coupled with systematic, direct, explicit instruction in phonics, alongside rich experiences with literature and word play (Torgesen & Mathes, 1998). Ball and Blachman (1991) suggest beginning by pairing letter name with letter sound instruction so as to make explicit the relationship between the two. Additionally, just as we immerse children in print rich environments, it is equally important to create phonologically rich environments (Torgesen & Mathes, 1998). Instruction should be playful incorporating songs, games, and movement (Adams, Foorman, Lundberg, & Beeler, 1998; Yopp & Yopp, 2009). Over time, as children come to understand how spoken language maps onto written language through the development of their skill in phonemic awareness, they will be able to use letter sound correspondence to read and spell both known and unknown words (Griffith & Olson, 1992).

**Computer assisted instruction.**

The National Reading Panel (NRP, 2000) analysis included a few studies that examined whether computers could deliver PA instruction effectively, and although the findings held promise, the effects were smaller than those produced by teachers or researchers. These results may have occurred for reasons other than those attributable

to the computer program or the teacher. In addition, the number of studies available at the time of the analysis were extremely limited. For these reasons, the National Reading Panel (NRP, 2000) concluded that computer assisted instruction on phonemic awareness was inconclusive and recommended additional research prior to determining whether phonemic awareness might be taught more effectively using computers. Since that time, a number of studies have examined the effects of specific computer assisted instructional programs on kindergarten and/or first grade children's achievement in phonemic awareness as well as other early reading skills. The majority, however, were conducted outside the United States, (Abrami, Borohkovski, & Lysenko, 2015; Kyle, Kujala, Richardson, Lyytinen, & Goswami, 2013; Segers & Verhoeven, 2005; Watson & Hempenstall, 2008), or on subsets of children such as those with or at risk of specific disabilities such as dyslexia (Torgesen, Rashotte, & Lindamood, 2010) or autism (Hill & Flores, 2015). All of these studies showed favorable gains for children who received computer-assisted instruction compared to control groups who did not; however, they were also limited in either the number of participants, the length of time between treatment and the final assessment for retention. For these reasons, as well as the limitation of very specific computer assisted programs it remains difficult to ascertain whether computer assisted phonemic awareness instruction is more effective than that provided by a classroom teacher.

## Summary

The literature review presented in Chapter Two acknowledges the significance of phonemic awareness in the development of overall reading. Research suggests that

providing instruction in phonemic awareness fosters higher reading achievement over time for all students (Liberman, Shankweiler, Fisher, & Carter, 1974; Mann, 1984). Several topics that relate to the reading–phonemic awareness connection have been focused upon throughout this chapter including: the relationship between phonemic awareness and phonological awareness; the role phonemic awareness plays in reading attainment and later reading achievement; and best practices in phonemic awareness instruction.

Two gaps in the literature have become apparent through this literature review. First, much of the literature on phonemic awareness instruction is dated. Studies within the last 10 years tend to be conducted in countries outside the United States and/or with students with or at risk for disabilities such as dyslexia and autism. Second, though there is abundant research in phonemic awareness and its connection to reading success in later years as well as what constitutes best practice, there is a lack of research regarding whether or not practice mirrors what research has found. This study explores the instructional practices that teachers are using, examines teacher familiarity and knowledge of research based best practices, explores district provided curricular materials and resources used in instruction, and investigates how this translates into effective instruction of phonemic awareness skills in kindergarten. Moreover, though teachers can access numerous materials to aid them in actually teaching phonemic awareness skills, information is lacking in research associated with the actual instruction occurring by kindergarten teachers in the classroom context. The focus of this study assesses how well kindergarten teachers are using research based

best practices in their classrooms.

The methodology for this study is discussed in Chapter Three. The chapter presents a description and rationale for the chosen methodology. As the chapter unfolds, the process for participant selection, the data collection and analysis procedures, and the methods for establishing trustworthiness are outlined. Chapter Three concludes with a summary of the methodology for the research study.

# CHAPTER 3: METHODOLOGY

## Introduction

This chapter explores the design of this qualitative case study research and addresses the intended methodology. First, it describes the rationale for a case study design. Then it describes the research site and participant selection for the study. Next, it explores the process for data collection and explains content and thematic analysis as tools of interpretation. This chapter then examines ethical issues, risks, and benefits and concludes with possible limitations to the study.

The purpose of this qualitative study was to analyze how closely kindergarten teachers in a high performing school district in North Carolina instruct students towards mastery of phonemic awareness skills. More specifically, the study sought to determine to what degree teachers are implementing the findings of Shanahan (2005) and Ehri et al. (2001) regarding best practices in phonemic awareness instruction such as the amount of instructional time devoted to phonemic awareness skill development, whether instruction is facilitated in whole group or small group settings, what skills are addressed and how many are addressed at once, etc. The existing research regarding the role phonemic awareness plays in helping children learn to read and its relation to later reading success is rich. Many studies have explored effective instructional practices regarding phonemic awareness, teachers' knowledge about phonological awareness and phonemic awareness, and the effect teacher knowledge has on student attainment. Yet, there is a void in the literature denoting specific ways in which teachers mirror the best practices discovered via research regarding

phonemic awareness instruction. This study explored the instructional practices that teachers are using, examined teacher familiarity and knowledge of research based best practices, explored district provided curricular materials and resources used in instruction, and investigated how this translated into effective instruction of phonemic awareness skills in kindergarten. Research reveals a strong link between phonemic awareness and reading achievement; therefore, the aim of this study sought to determine how well kindergarten teachers use research based best practices in their classrooms. The study focused on the following questions:

1. How closely does instruction in phonemic awareness in kindergarten align with what research has deemed best practice?
2. How do kindergarten teachers embed instruction in phonemic awareness within their instruction across the school day?
3. How do kindergarten teachers use DIBELS Next assessments to assess phonemic awareness in their students, and how are the results of these assessments used to drive their instruction?

## Research Design

Qualitative research has been described as a method by which researchers attempt to "make sense of or interpret phenomena in terms of the meanings people bring to them" (Denzin & Lincoln, 2013, p. 7). Basic interpretive qualitative studies have been described by Merriam (2009) as one of the most common types of qualitative research. The premise that individuals interacting with their social worlds construct their own reality is a key assumption in qualitative research (Merriam, 1998;

Strauss & Corbin 1994). Essentially, the purpose of qualitative studies is to understand how people make sense of their lived experiences through an analysis of how people interpret their experiences and the meanings they, then, attribute to them (Patton, 1990; Denzin & Lincoln, 2005). It is paramount, in this process, to understand the phenomenon of interest from the participant's perspectives, not the researchers (Merriam, 1998).

A case study design, according to Yin (2003) should be considered when the research focus is directed toward answering a "how" or "why" question. It is particularly adept when used to investigate events that occur in contemporary contexts so that "the findings generate insight into how the phenomenon actually occurs within a given situation," (Farquhar, 2012, p.6). Moreover, a case study design is often used to describe, explain or explore a particular situation in real-life contexts such that it provides an in-depth description of a case, setting, or topic in order to gain a clear understanding (Yin, 2003). Case study research is often bounded which Creswell (2012) defines as a way of describing the parameters such as place or time that define the case to be studied.

This study explored the ways in which instruction in phonemic awareness is carried out in classrooms today. This design was relevant for this study because the research was clearly focused on answering "how" questions: how closely does instruction in phonemic awareness in kindergarten align with what research has deemed best practice? How do kindergarten teachers embed instruction in phonemic awareness within their instruction across the school day? How do kindergarten

teachers use DIBELS Next assessments to assess phonemic awareness in their students, and how are the results of these assessments used to drive their instruction?

Moreover, this study investigated an event (i.e., classroom instruction in phonemic awareness) used in real-life contexts (i.e., kindergarten classrooms at the present time) and was bounded by participant selection criteria, the curricular materials and resources used, the grade levels of the teachers, and the school district in which the participants teach. Finally, the qualitative case study method was an approach to research that facilitates the exploration of a phenomenon within its context using a variety of data source collections (Baxter & Jack, 2008; Merriam, 2009; Yin 2003). In this case, surveys, semi-structured interviews, observations, and document analysis were used.

## Research Context

The research study took place at three elementary school sites in a high performing school district in North Carolina (Piedmont Platte; To ensure confidentiality and anonymity pseudonyms were used in place of all participant's, school site's, and school district names used within the study). The study focused on six kindergarten teachers (two from each of the three school sites for a total of six teachers). The district the schools were located in reported an enrollment of 6016 students in grades pre-kindergarten through grade twelve and was comprised of 8 school buildings (North Carolina School Report Cards, 2016-17). The three elementary buildings served 1874 students (Oak Forest 678 students, Sand Hills 637 students, and Pine Valley 559 students). The racial composition of the elementary

schools varied slightly as demonstrated in the following table.

Table 2

*Racial Demographics in Percentages*

| | Oak Forest | Sand Hills | Pine Valley |
|---|---|---|---|
| White | 57.82 | 74.89 | 51.34 |
| African American | 21.83 | 7.06 | 19.50 |
| Hispanic | 11.95 | 10.05 | 16.82 |
| Asian | 1.18 | 2.20 | 6.44 |
| American Indian/Alaska Native | 0.59 | 0.16 | 0.00 |
| 2 or more races | 6.64 | 5.65 | 5.90 |

National Center for Education Statistics, (n.d.)

In addition, two of the elementary buildings selected for this study are Title I schools (Oak Forest and Pine Valley). Finally, all three boasted End of Grade (EOG) scores much higher than the state average of 57% (Oak Forest 70%, Sand Hills 67%, and Pine Valley 74%,), (North Carolina School Report Cards, 2015-16).

This site was chosen for the study because access to teachers and curricular materials was critical to answer the research questions guiding the study. In addition, there has been a multi-year focus on reading achievement at the K-3 level within the district, particularly with the onset of North Carolina's Read to Achieve law passed in 2012 which required third graders to pass an end of grade (EOG) assessment or be retained in grade (Excellent Public Schools Act, 2012). Because the district has

achieved and maintained EOG scores well above state averages over the years the aforementioned law has been in effect despite having two of its three elementary schools carrying Title I status, this site seemed fitting as it appeared to do well in terms of early literacy instruction. Moreover, as a small district it was manageable to include all elementary buildings and teachers within the bounds of this study. Finally, as a district employee and current lead Title I reading teacher at one of the school sites I was familiar with the teachers, the schools' and district's penchant for excellence, and the curriculum provided.

Conducting "backyard research", or "research at one's own institution or agency," (Glesne, 2011, p. 41) where I have an already established role and relationships with potential participants was not entered into without careful consideration. Kim (2016) suggests that backyard research is a "legitimate and valid" (p. 246) means for "understanding multiple voices, multiple subjectivities, and particularities of the local community where we live, and is paramount in generating new knowledge," (Kim, 2016, p.246). I acknowledge that using this site afforded me with all the advantages attributed to backyard research such as easy access, commonalities for rapport building already established, the opportunity for results that are likely to be useful in my professional life, fewer time constraints, and relatively low cost (Glesne, 2011). I believed the limitations of backyard research as outlined by Glesne (2011) were low in this particular case. For example, though I worked at one of the three elementary sites, I did not have an administrative role or otherwise supervised any potential participants of this study thus minimizing the risk that role

confusion would arise. Likewise, I had limited contact with potential participants in two of the school sites. This coupled with the use of survey, interview, and observation protocols minimized the risk that data collection efforts would be tainted. Moreover, the nature of the research study was such that it was unlikely to reveal "dangerous knowledge" that would prove risky for me to hold (Glesne, 2011, p. 42).

## Participant Selection

Participants for this study were current kindergarten teachers employed in a high performing public school setting in North Carolina. Participant selection was purposeful, initially asking all currently employed kindergarten teachers within the district to participate in a survey (see Appendix A for survey protocol) regarding their instructional practices related to phonemic awareness and their own demographic data. The survey was designed to take no more than 15 minutes to complete. After the survey, six volunteers were asked to participate in semi-structured interviews of approximately 20 minutes in length (see Appendix B for interview protocol) and classroom observations (see Appendix C for observation protocol). Teachers volunteers were observed three times during the study for a length of approximately 20 minutes per observation (one hour in total). After each interview, the occasional question arose requiring a short follow-up with the teacher for the purpose of clarification.

## Data Collection Methods

This research study used surveys, interviews, observations, and document analysis as a means of data collection. Using multiple sources of data allowed for

validation and cross checking of findings. Additionally, according to Merriam (2009), multiple sources of data are needed to provide a measure of trustworthiness in a study, as well as to provide sufficient information comprehensive that a single source may not.

**Surveys**

Surveys are a frequently used tool for gathering data (Simon, 2011). Surveys are often used as a means of measuring a number of constructs such as demographics, attitude, cognition, perception, needs, behavior, and/or efficacy (Simon, 2011). In qualitative research, surveys are "tools for gathering rich feedback," (Farrell, 2016, p. 5). Surveys in qualitative research often use open-ended questions that tend to "elicit the feelings, beliefs, knowledge, experiences, or activities of the respondents," (Simon, 2011, p. 146). In this study, surveys were used to collect initial demographic data as well as to elicit a general understanding of teachers' feelings, beliefs, knowledge and experiences related to phonemic awareness. The survey was sent to all 22 of the kindergarten teachers within the targeted district. Through the survey, volunteers were solicited for continued participation in the form of interviews and observation.

**Interviews**

Research interviews provide a rich source of data gathering from which to garner participant's stories. Kvale and Brinkmann (2008) suggest that the research interview's purpose is to produce knowledge through the subjects' understanding of the phenomena in question from their own perspectives. Furthermore, Kvale and

Brinkmann (2008) put forth the notion of this process as an "inter-view" wherein knowledge is co-constructed between the interviewer and the interviewee. Moreover, Crotty (1998) asserts that all meaning stems from interactions between individuals and their worlds. There may be no better way to get at the experiences and perspectives of individuals than to ask them outright. The interview as a structured conversation has the specific purpose of eliciting rich description in the subjects' own words about the research topic. According to Angrosino (2007) the interview process that through open-ended conversation, allows for deviations from the script, can open up meaning as it explores nuances and novel pathways that may have been missed or over-looked in other venues. In the interview process, moreover, the researcher can ask for clarification or further explanation, and can check on apparent contradictions in the moment thus filling in gaps that might exist in the developing narrative.

In this study, participants indicated their willingness to be interviewed through the initial survey. At least two participants from each school site volunteered to participate in semi-structured interviews. An interview protocol (see Appendix B) was used as a guide to provide structure and gather reliable and comparable data that allows the participants to tell their stories in their own terms. Likewise, the interviews were semi-structured to allow the interviewer to follow tangents and trajectories introduced by the participants as appropriate. Interviews lasted approximately 15-25 minutes and occurred at each school site. Each interview was audio taped, and then transcribed. The occasional follow up question was needed after observations. In these instances, the follow up questions were able to be answered after completion of the

observation and took no more than 5 to 10 minutes. These were also audio recorded and transcribed.

**Observations**

Participant observation is widely used in qualitative research. According to Angrosino (2007), participant observation is "a way of conducting research that places the researcher in the midst of the community he or she is studying," (p.2). It provides a glimpse into the life-world of another that is only visible to those who are actually there because it emphasizes everyday interactions via observation as opposed to direct inquiries into specific behaviors. Data collected include both explicit and tacit aspects of life as it is lived by the participants. Maxwell (2013) indicates the need for purposeful selection in choosing sites for research. He specifies that particular sites must be deliberately chosen because they are likely to provide relevant information that speak to the research purpose and questions and are not easily obtained from other sources. In addition, Guest, Namey, and Mitchell (2013) suggest, "one of the reasons for doing participant observation is that many aspects of some social milieus are only visible to insiders, and only certain people can get inside" (p. 97). The overall advantage to participant observation is that it offers extended long-term engagement with the phenomena under investigation.

The questions in this study: how closely does instruction in phonemic awareness in kindergarten align with what research has deemed best practice, how do kindergarten teachers embed instruction in phonemic awareness within their instruction across the school day and, how do kindergarten teachers use DIBELS Next

assessments to assess phonemic awareness in their students, and how are the results of these assessments used to drive their instruction were suitable to the purpose of participant observation because of its potential to reveal the many ways in which teachers interact with and support their students during instruction. In interviews alone, the teacher's descriptions of what he or she believes takes place with students can be substantiated or disproved by the actions of students in response to their teachers in real time. For example, a teacher might indicate in interviews that all students are actively engaged in multi-sensory literacy centers during the language arts block; however, observations over time indicate that 6 out of 17 students are talking about topics unrelated to the centers' tasks, another 3 students have physically moved away from their center to another part of the room and are not participating in their center's tasks, and 2 more students are completing work from a previous center or activity instead of the one currently tasked to them.

In this study, each observation was approximately 15 to 20 minutes in duration (the typical length of time established as best practice for phonemic awareness instruction (Ehri et al., 2001; Shanahan, 2005)). Each participant who agreed to be observed was seen three times over the course of eight weeks for a total of 18 observations (3 for each of the 6 participants). Field notes were recorded using an observation protocol (see Appendix C) and then transformed into expanded field notes immediately after each observation. Field notes are transcripts the researcher creates to better remember, and record behaviors, activities, and other features of the setting being observed (Webb, 1991). Subsequently, the researcher reads field notes in an

effort to produce meaning and an understanding of the culture, phenomenon, or social setting being studied.

**Document Analysis**

Document analysis included locating, choosing, evaluating, and synthesizing data contained within the documents (Bowen, 2009). Often, document analysis is associated with triangulation of data in qualitative research studies. Documents, in this sense, are often seen as a supplement to other forms of data. Love (2003) has said that, "documents are part of the fabric of our world" (p. 83). As such, they are a rich source of data that can be procured for the purposes of research. Moreover, similar to other analytical methods in qualitative research document analysis requires the examination and interpretation of data in order to produce meaning, gain understanding, and cultivate empirical knowledge (Corbin and Strauss, 2008). Bowen (2009) has laid out five functions of documentary material. These include: (1) documents provide context for the ways in which research participants operate; (2) documents provide information that might lead to additional questions being asked or additional situations that might need to be observed; (3) documents provide a source for additional information and insights; (4) documents might track change and development over time, and (5) documentary analysis can verify or lend significance evidence from other sources. Bowen (2009) further asserts that documents can be of great importance when either a phenomena can no longer be observed or because informants have forgotten details over time.

In this study, the researcher examined all curricular materials provided by the district for phonemic awareness instruction in kindergarten. This included curriculum guides, live binders, pacing guides, and teacher manuals. In addition, materials mentioned by participants in surveys and interviews, or used during observations were also included in document analysis.

## Triangulation

According to Flick, von Kardorff, and Steinke (2004), triangulation, as used in social research, refers to observing the phenomena under investigation from at least two different points typically through means of different methodological approaches. Denizen (1978) viewed triangulation as occurring in four ways: triangulation of data, investigator triangulation, triangulation of theories, and methodological triangulation. Of these, data triangulation is most common (Turner, 2016). It is also common for qualitative research to cull data in a variety of ways in order to see all facets of the phenomena studies (Turner, 2016). For Maxwell (2013), triangulation involves using different methods as a check on one another. By examining information collected through different methods, the researcher gains insight into different aspects of the phenomena studied and can verify findings across data sets reducing the impact of potential biases that can exist in a single study.

Triangulation was instrumental in this study, ensuring that data analysis was comprehensive and well developed. Data from interviews, observations, and documents allowed for rich interpretation and analysis. Member checks were used to ensure that participants stories and the meaning derived from them was consistent with

the participants intent as well as to correct any errors and give feedback regarding the resulting interpretations. Finally, the researcher attempted to leave a transparent audit trail in which both the process and product of the research study were articulated in such a way that others might evaluate the accuracy of the findings as well as how well the findings, interpretations and conclusions were supported by the data.

## Trustworthiness

Trustworthiness in research is concerned with producing valid and reliable information through ethical means (Merriam, 1998). Validation suggests that researchers engage in accepted strategies to document the accuracy of their studies (Creswell, 2013). Through actionable steps to ensure trustworthiness, researchers can claim that their work is plausible or credible (Glesne, 2011). Glesne (2011) identified eight processes typically used in qualitative research to contribute to the trustworthiness of a study. These include: prolonged engagement and persistent observation, triangulation, peer review and debriefing, negative case analysis, clarification of researcher bias, member checking, rich descriptions, and an external audit (Glesne, 2011). Glesne (2011) argued that it may not be necessary to include all of the aforementioned processes within one study, but they should be considered to minimize validity issues. In the proposed study, trustworthiness will be addressed through prolonged engagement and persistent observation, triangulation, clarification of researcher bias, member checking, and rich descriptions.

## Data Analysis

Qualitative data analysis has been described as "working with data, organizing it, breaking it into manageable units, synthesizing it, searching it for patterns, discovering what is important and what is to be learned, and deciding what you will tell others," (Bogdan & Biklen, 1982, p. 145). In the proposed study, thematic analysis using a constant-comparative method (Glaser & Strauss, 1967) will be used for data analysis.

Constant-comparison is based on grounded theory and allows for the identification of important themes (i.e., those that help answer the research question). It is done systematically, providing an audit trail of the process from start to finish (Hancock, Ockleford, & Windridge, 2009). Prior to analysis, the data from interviews were transcribed verbatim, field notes from observations were expanded, and all documents procured were skimmed with selected passages that spoke to phonemic awareness highlighted. Coding of data began immediately after the first interview and continued throughout the course of the study. Initial coding entailed a process of looking closely at the data and attempting to note what was "going on" in the data. This was done word by word and line by line using the constant-comparative method as defined by Thornberg and Charmaz (2012), which included an iterative process of going back and forth between each piece of data and the codes, as they emerged, to determine whether the data fit the codes. Initially data and codes were compared within single interviews, then between interviews. Likewise, all observations were

looked at initially as separate entities, then between observations. Finally, all documents were examined separately, and then across documents.

As codes emerged across all forms of data, they were compared to other codes. Similar codes were examined closely to determine if they fit broader categories. Categories, as they emerged, were also compared in terms of the original data, and their initial codes. This continued until no new codes or categories were found. Likewise, themes were considered based on the categories that emerged and compared in a similar manner. The researcher made conscious effort to use the participants' own language to describe each theme and highlighted 'quotable quotes' within the analysis.

## Risks, Benefits, and Ethical Considerations

Though the study presented no more than minimal risks, all efforts were made to mitigate even these small chances. For example, all interview questions were framed in an effort to encourage natural conversational responses from participants. There may have been some uncomfortable feelings on the part of teachers because some questions asked participants to showcase their instructional practices, which may, in turn, have lead them to voice concerns or misgivings regarding district policies and procedures. In addition, the use of observations may have caused some teachers trepidation as they may have felt uncomfortable being watched. Other than this minimal discomfort related to interview questions and observations, no other risks be they psychological, academic, economic, or legal were likely for those particpating in this study. Likewise, there was no foreseeable risk associated with data collection or

analysis and appropriate storage methods were in place. In addition, all identifiable information was removed and disposed of to maximize confidentiality and mask the identify of all particpants. To this end, several strategies were utilized in undertaking this research to safeguard participants and insure that no harm came to them because of their involvement in the study. First, participants were asked to sign a consent form prior to participation in this study (see Appendix D). Consent forms outlined the nature of the study, how information gathered would be kept and maintained, and how they might withdraw from the study should they choose to do so. Next, no participants were identified either by name or institution at any time during and after the research process, and all such information was protected through the use of pseudonyms. Moreover, demographic information was kept separate from interview and other data so that no one could discern which data was gathered from which participants.

On the other hand, there were potential benefits of this study. For example, this study provided valuable information about how phonemic awareness is being taught in kindergarten classrooms. By analyzing the ways in which teachers were mirroring best practices regarding insturction in phomeic awarenss, teachers, distircts, and state departments of education can now evaluate potential changes to classroom practice. For example, the results of this study warrant changes in how data are used to facilitate instruction. In addition, participants involved in the study may have found opportunties to reflect on their classroom practices and may have made changes that improved student learning. Finally, participants may have found the opportunity to

voice their views cathartic providing them with a means to be heard in a profession that does not often ask their opinion.

## Limitations of the Study

The study had limitations that were inherent at the outset. First, the researcher's own bias was a limitation and was likely to impact the findings. No researcher is ever completely objective or neutral, but in this case having a close working relationship with, and therefore a story of my own regarding how I understand, use, and think about phonemic awareness was bound to influence my analysis, interpretations and findings regardless of how open I was about making this known through a subjectivity statement. Next, this study was limited by its size. Even given unlimited time, it would have been nearly impossible to interview and observe all, or even a representative sample of all the kindergarten teachers in public school's systems across North Carolina.

## Summary

Chapter three described the rationale for the research methodology, the selection process for participants, the data collection process, the data analysis procedures, and the methods for establishing trustworthiness. In the next chapter, survey responses, observation data, and interview narratives will be presented and discussed. The study results and findings will be analyzed and discussed in chapter five.

# CHAPTER 4: ANALYSIS

## Overview

The purpose of this qualitative case study was to explore how closely kindergarten teachers in a high performing school district in North Carolina instruct students towards mastery of phonemic awareness skills. This study explored instructional practices that the teachers used, examined the teachers' familiarity and knowledge of phonemic awareness specifically regarding best practices in phonemic awareness instruction such as the amount of instructional time devoted to phonemic awareness skill development, whether instruction was facilitated in whole group or small group settings, what skills were addressed and how many were addressed at once, and how district provided curricular materials and assessments supported instruction in phonemic awareness. The study took place in a high performing school district within North Carolina and included three elementary school sites.

The following research questions framed this study:

1. How closely does instruction in phonemic awareness in kindergarten align with what research has deemed best practice?
2. How do kindergarten teachers embed instruction in phonemic awareness within their instruction across the school day?
3. How do kindergarten teachers use DIBELS Next assessments to assess phonemic awareness in their students, and how are the results of these assessments used to drive their instruction?

This study explored the ways in which instruction in phonemic awareness are

carried out in classrooms today via a qualitative case study design. Surveys, semi-structured interviews, observations, and document analysis were used to gather data.

Chapter 1 defined the purpose of the study, provided background, presented the significance of this research, introduced the theoretical framework, and established the premise for the study. Chapter 2 provided a context for the research by means of a review of relevant literature. Chapter 3 described the rationale for the research methodology and outlined the selection process for participants, data collection and procedures for analysis, and the methods for establishing trustworthiness. Chapter 4 describes the setting of this study and the background of the selected teacher participants. Detailed descriptions of each are presented including a summary of the survey, interviews, observations, and the documents collected for analysis. Also included are the research questions that were used to guide the interviews. The chapter concludes with a final summary that addresses how closely the teachers' instruction reflects the research-based best practices as documented by Shanahan (2005) and Ehri et al. (2001).

## Study Description

Four data sources were used for this study. Those sources included a survey, a semi-structured interview with each participant, field notes from three classroom observations per teacher, and supporting documents such as the district's curriculum guide and calendars and teacher manuals for various foundational reading programs accessible within the district and mentioned by one or more of the observed teachers as a resource used when planning phonemic awareness lessons as well as by survey

respondents. The use of multiple data sources allowed for triangulation, which was employed to ensure the analysis was comprehensive and well-developed as well as to reduce the risk of chance associations and biases (Maxwell, 2013). Data retrieved from surveys, interviews, observations and documents allowed for rich interpretation of data.

This study was conducted during the second and third quarter of the 2017-18 school year in a high performing school district (Piedmont Platte) in North Carolina's three elementary school sites (Pine Valley Elementary, Oak Forest Elementary, and Sand Hills Elementary). The initial survey was emailed to all 22 of the district's kindergarten teachers in December 2017. Interviews and classroom observations began in January 2018 and concluded in mid-March 2018. Scheduling was conducive for bi-weekly classroom observations with each teacher participant. Interviews were scheduled either before or after school hours, or during teacher planning periods prior to the first observation. The combined data collection occurred over twelve weeks and consisted of a survey, six interviews, and eighteen classroom observations. Documents such as kindergarten report cards, ELA unpacking documents, curriculum calendars and curriculum guides all available on the Piedmont Platte's district digital resource page, as well as teacher manuals for Letterland, Fundations and HilRAP were also collected and analyzed during this time period. These documents provided context for how teachers planned their instruction as well as for why certain classroom practices were noted across all observational settings.

The study began with a survey emailed to all 22 of the district's kindergarten teachers. Fifteen teachers responded to the survey with nine expressing an interest in further participation via interviews and observations. Of those who responded as willing to participate further, five were from Pine Valley Elementary, and two each were from Oak Forest Elementary and Sand Hills Elementary. The two participant volunteers from Oak Forest Elementary and Sand Hills Elementary were automatically selected for further participation. The five potential participants from Pine Valley Elementary were drawn randomly to choose the two who would be called upon to participate in interviews and observations. Survey questions (see Appendix A) sought to collect demographic data such as race, gender, number of years of teaching experience, and educational attainment, as well as to ascertain teacher preparation for phonemic awareness instruction, determine teachers' basic knowledge of phonemic awareness and instructional practices, and to gather a list of instructional resources teachers used in their planning and instructional practices.

Interview protocols (see Appendix B) were used to guide the semi-structured interviews. During the interviews, rapport-building questions inquiring of the teachers' background, teaching experiences were employed. Next, questions addressed teachers' knowledge of and instructional practices in phonological and phonemic awareness. Finally, questions in the later part of the interview addressed assessment practices as well as knowledge of the assessments used.

After each initial interview was conducted, classroom observation dates were scheduled. The purpose of the classroom observations was to capture how the teachers

delivered phonemic awareness instruction and how, or if, research-based best practices were used. Careful attention was placed on the dissemination of instructions and the resources used during the lessons. Observations were planned during literacy instruction, which occurred during the English Language Arts (ELA) block at these schools. An observation protocol (Appendix C) was valuable for diligent note taking of the lessons observed. Specific criteria were sought for each observation including how students were grouped (whole group instruction, small guided groups, partner-work, or independently), how instruction was delivered (direct instruction, modeling, computer assisted), student behavior during instruction (actively engaged, answering questions, moving manipulatives, watching a video), the number of students engaged at any one time during instruction, how long instruction lasted, the skills taught during instruction, and the materials that were used.

**Summary of Surveys**

Initially, a survey was emailed to the district's 22 kindergarten teachers. The first section of the survey sought demographic data. Of the 15 teachers who responded, 100% were female. The majority of respondents (93.3%) identified as Caucasian whereas 6.7% identified as African American. Respondents were nearly even in terms of educational attainment with 53.3% having earned a Master's degree and 46.7% earning a Bachelor's degree. In addition, 33.3% had attained National Board Certification.

Table 3
*Survey Respondents by Gender, Race, and Educational Attainment*

| | Number of Participants | Percentage |
|---|---|---|
| Male | 0 | 0 |
| Female | 15 | 100 |
| Caucasian | 14 | 93.3 |
| African American | 1 | 6.7 |
| Bachelor's Degree | 7 | 46.7 |
| Master's Degree | 8 | 53.3 |
| National Board Certification | 5 | 33.3 |

The age range of respondents varied from 25-34 (20%), to 35-44 (53.3%), to 45-54 (20%), and 55-64 (6.7%). Years of experience also varied considerably ranging from 4-7 years (6.7%), to 8-12 years (26.7%), to 13-20 years (33.3%), and more than 20 years (33.3%). Not all respondent's experience was in kindergarten with 6.7% with less than one year, 13.3% with 1-3 years, 13.3 % with 4-7 years, 26.7% with 8-12 years, 26.7% with 13-20 years, and 13.3% with more than 20 years.

Table 4
*Survey Respondents by Age, Experience, and Years Teaching Kindergarten*

| Age | Number of Participants | Percentage |
|---|---|---|
| 25-34 | 3 | 20 |
| 35-44 | 8 | 53.3 |
| 45-54 | 3 | 20 |
| 55-64 | 1 | 6.7 |
| Experience in Years | | |
| 4-7 | 1 | 6.7 |
| 8-12 | 4 | 26.7 |
| 13-20 | 5 | 33.3 |
| 20 plus | 5 | 33.3 |
| Years Teaching Kindergarten | | |
| Less than 1 | 1 | 6.7 |
| 1-3 | 2 | 13.3 |
| 4-7 | 2 | 13.3 |
| 8-12 | 4 | 26.7 |
| 13-20 | 4 | 26.7 |
| 20 plus | 2 | 13.3 |

The next section of the survey required teachers to respond using a Likert scale where 1 was indicative of "strongly disagree" and 5 of "strongly agree." The questions in this section sought information regarding teacher preparedness in the area of phonemic awareness.

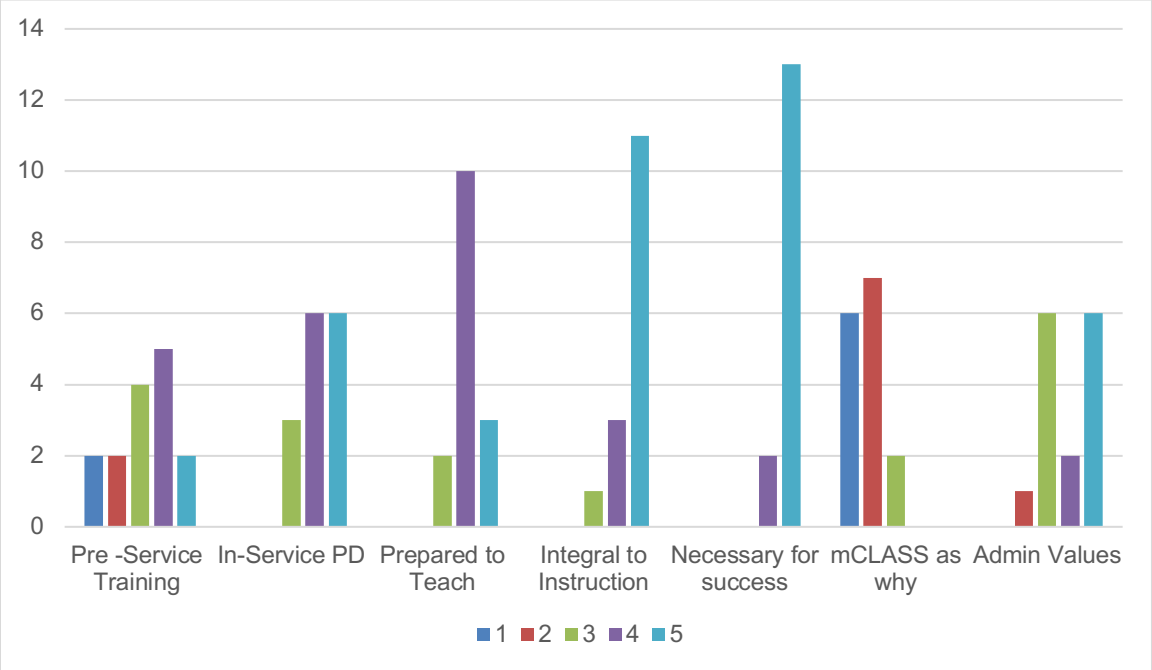



*Figure 1*: Likert Scale Responses to Survey Questions. This figure illustrates participant responses to the 7 survey questions that use a Likert scale wherein 1 is strongly disagree and 5 strongly agree.

Respondents were fairly split regarding whether their pre-service training included education in phonemic awareness with 26.6% responding either strongly disagree or disagree, 26.6% responding neither agree nor disagree, and 46.6% responding agree or strongly agree. On the other hand, 80% of respondents felt their district had provided professional development in phonemic awareness instructional skills and teaching strategies. Moreover, they overwhelmingly felt prepared to teach phonemic awareness with 86.7% responding they were prepared/competent to extremely prepared/competent to do so. Moreover, they felt sure that phonemic awareness was an integral part of their classroom instruction (93.3% agree to strongly agree). Furthermore, 100% agreed or strongly agreed that instruction in phonemic

awareness is necessary for early learners to achieve reading success. Respondents also overwhelmingly either disagreed (46.7%) or strongly disagreed (40%) that phonemic awareness was taught primarily because it was regularly assessed via state assessments. Finally, 53.3% of respondents felt that phonemic awareness instruction was highly valued by their administration, whereas 40% neither agreed nor disagreed, and 6.7% disagreed.

The final portion of the survey sought to determine teacher knowledge of phonemic awareness through two open-ended questions. The first of these asked respondents to define phonemic awareness. Ten of the respondents specifically mentioned the ability to hear and manipulate sounds in words defining phonemic awareness as: "an auditory skill that means a person is able to hear sounds, identify sounds and manipulate them to create words and blend to read. All phonemic awareness could be done in the dark;" and "phonemic awareness is the ability to identify, understand and use phonemes correctly It has to do with how well you can manipulate and understand the sounds in words." Other respondents alluded to manipulation of sounds as they defined phonemic awareness as: "Being able to sound and tap out words; putting sounds to words, beginning and ending sounds." One respondent provided a definition more in line with phonological awareness stating: "knowing that language is made up of individual segments such as words, syllables and phonemes." Regarding instructional practices and resources used, 100 percent of all respondents listed Letterland (the district adopted phonics program for grades K-2). In addition, 40 percent of respondents also mentioned Fundations (the district's

previous phonics program in grades K-2). Other resources mentioned by respondents included: HillRAP strategies, Orton-Gillingham, and Phonemic Awareness for All. Finally, respondents noted instructional practices to include: word work; songs, rhymes and games; using word families; and utilizing both whole and small group settings.

## Individual Case Studies

### Participant 1: Beth.

Beth is a 36-year-old Caucasian female teacher with a Bachelor's degree. She has taught for 15 years in the same school; Pine Valley Elementary. For the first 13 years, Beth taught first grade, and for the last two years she has taught kindergarten. When asked about what guides her instructional approach to reading, Beth shared that she believes "a balanced approach to literacy is best for most students. Not every child needs the same amount of support for phonemic awareness or phonics or comprehension skills like retelling. But it's all important."

Beth stated that "phonological awareness are all the skills sort of considered pre-reading skills including knowledge of syllables and being able to rhyme and things like that." She continued that "phonemic awareness can be done in the dark. It's hearing sounds in words and manipulating them." She expounded on what she meant by manipulating sounds stating, "segmenting and blending the sounds to make words." Beth admitted she struggles to define phonemic awareness when talking about it stating, "it's really hard for me to explain to parents and I usually have to demonstrate what I mean."

Beth claimed she spends approximately 20 to 30 minutes daily on phonemic awareness instruction. According to Beth, this instruction isn't necessarily consecutive. She stated, "I probably spend 10 to 15 minutes teaching phonemic awareness to the whole group, and maybe another 10 to 15 minutes total within my small guided reading groups." Beth said her whole group instruction is differentiated stating, "I use anecdotal record-keeping to help me know where my students are with their skills so that I can ask students to respond based on what they are able to do. For example, I might ask one student to give me the middle sound but ask another for a beginning sound. Another student might be asked to segment the whole word. It really depends on what I know they are ready for."

When planning her daily lessons in phonemic awareness, Beth claimed, "I use Letterland mostly with some Fundations for phonemic awareness. I also have a book I use sometimes called Phonemic Awareness for All. Sometimes I might get something off of teacher pay teacher. But mostly I use Letterland." In addition, Beth used her mCLASS assessment data to help her group her students for instruction. Furthermore, she said "I use mCLASS more for choosing appropriate text levels for my guided reading groups and rely more on my day to day note taking for phonemic awareness instruction." Beth continued, "mCLASS assessments like FSF (first sound fluency), PSF (phoneme segmentation fluency) and NWF (nonsense word fluency) all get at phonemic awareness. We use the results of mCLASS in our data walls for intervention groups and some of those have a focus on phonemic awareness or even letter sounds depending on where students are at. In my classroom, I rely more on day to day what

my kids can do and use the mCLASS assessments at the benchmark times or to progress monitor growth for those students who didn't meet the benchmark." Moreover, Beth said she assesses for student growth using mCLASS at each benchmark period: beginning of year, mid-year, and end of year for all students and more often "either every 10 or 20 days for students who didn't meet the benchmark."

I observed Beth three times in the classroom setting. Each observation occurred during the same time of day before lunch from 12:20 to 12:40pm. On each occasion, students were seated on the classroom carpet. On the first two occasions, students faced the smartboard and on the third occasion they faced away from the smartboard focusing instead on a small portable dry erase easel. The teacher provided whole group instruction during each observation.

During the first observation, 17 children were present. The children stood on the carpet in front of the smartboard. For the first 7 minutes, the teacher asked the children to "rollercoaster" words she provided by showing them on the smartboard. The first word was cap. Students stood up and touched their shoulder as they said the first sound /k/. They then tapped their arm around the elbow area as they said the middle sound /a/. Finally, they tapped near their wrists as they said the final sound /p/. Students then put their hand back at their shoulder and swiped down their arm as they said the whole word /cap/. This activity was repeated with 5 more words that followed a consonant-vowel-consonant (CVC) pattern. Most of the children seemed to be actively engaged in this activity.

The students transitioned to the next activity which took several minutes as they needed to get magnetic boards with letters on them and then return to sit on the carpet. For the next 10 minutes, the teacher asked the students to make words she provided orally using magnetic letters. Each child had a magnetic white board with all the letters of the alphabet on the bottom half of the board. As the teacher called a word out, the children were to seek the correct letters from the bottom of the board and place them in the correct sequence at the top of the board. Again, the teacher used words that followed a CVC pattern. Many times, the word provided only changed by one letter. For example, the first word given was hat. The next word was mat followed by map. The teacher would give time for each child to make the word then have the children show their work by holding up their boards facing the teacher. It appeared most children were participating in this activity, though some were much slower at finding letters, and in making the needed changes from one word to the next. Others clearly were looking on their neighbors' boards and copying their work. One student struggled to stay seated and moved about repeatedly during this activity.

During the second observation, 15 students were present. Again, the students stood on the carpet and faced the smartboard and worked at segmenting and blending words. When the teacher gave a word, the students would touch their shoulders and say the first sound, then touch their knees as they said the middle sound, touch their toes as they said the final sound, then jump up in the air as the said the whole word. All of the words provided were CVC words. This activity took approximately 10 minutes as the teacher often had to redirect behavior after the children jumped. It was

hard to hear whether all the children were making the sounds with all the movement. A few children didn't do all the movements either.

Students were next directed to get their whiteboards, markers and erasers and return to the carpet. The teacher provided CVC words, and the children attempted to spell them on their whiteboards. Most of the children attempted to spell the words provided by the teacher. A few children copied from their neighbors. Two children did not engage in this activity; instead they appeared to draw on their whiteboards. The teacher did address this with the children, and they did briefly attempt to participate. However, they quickly reverted to drawing when the teacher's attention was no longer on them. This activity took the remainder of the time before lunch.

The final observation was a little different. The 16 students present were sitting on the carpet but facing away from the smartboard. Their attention was focused on a movable dry erase easel. Written on the easel was -ap. Students took turns suggesting words that might belong in the -ap family. When a student suggested a word, the teacher would have the whole group segment the sounds in the word. The class would decide together if the suggested word fit in the -ap family. For those that did, the student who suggested the word got to come up and write the word on the easel. Sometimes the student needed help to write the word correctly, and the class, directed by the teacher, would provide a hint by making the sound of the needed letter. At times the teacher would ask another student to provide a sound (first, last, or middle) after the word had been written on the easel. Only real words were allowed, so when a child's suggestion either didn't make a real word or did not fit in the -ap family, the

teacher would ask or hint at a way for the child to come up with a word that would fit the -ap family. In this manner almost, every child was able to contribute to the final list of -ap family words. Once the list was made, the teacher led the children in chorally reading the list of words they'd created. It appeared that the children were engaged in this lesson, and the teacher attempted to keep them engaged by asking questions of the group or of individual children throughout the activity. This activity took the entire 20 minutes of the observation, and though it seemed a pretty passive lesson, it appeared that the children were engaged as very little off-task behavior was noted during the lesson.

**Participant 2: Holly.**

Holly also teaches at Pine Valley Elementary. She is a 52-year-old Caucasian female teacher with a Master's degree and National Board Certification. She has taught kindergarten for 25 years at the same school. Holly proclaimed that "a lot has changed in kindergarten since I began teaching. In some ways it's changed for the better, and in some ways it hasn't. When I think about reading instruction, we are a lot better at it now than we were. Phonemic awareness, I think, has always been a part of our day. It's so important to developing young readers -helping them transition from oral language to written."

Holly plans her phonemic awareness lessons using "a combination of Letterland and Fundations with lots of work with CVC words." A typical lesson lasts approximately 15 minutes and is delivered in a whole group setting. Most days, Holly says, "I also incorporate some phonemic awareness practice in my small guided

reading groups." Holly said, "I use my mCLASS assessment data to group students for guided reading. Typically, the kids who are reading lower level texts need more practice in phonemic awareness. I do some of this in my guided reading groups and the kids also get additional practice during our E/I time (Enrichment and Intervention time)." Holly continued, "some of my kids are still struggling with first sounds. Others can tell me the first sounds but not the middle and last sounds. A few are really good at giving me all the sounds. I even have a few students who really don't need phonemic awareness instruction. They have it."

Holly noted, "the district requires us to progress monitor our students who don't meet the benchmark for mCLASS every 10 to 20 days. I progress monitor my students in FSF, PSF, or NWF depending on which area is lowest for them. If they passed the benchmark, I don't need to do the assessments but once a quarter." Holly stipulated, "the grade level uses the data we get from mCLASS to make groups for E/I time after BOY (beginning of year) and MOY (middle of year) benchmarks. Then we use the progress monitoring data to help us revise the groups after about 6 weeks. This way, kids who don't need the same intervention can move into a different group. Also, the kids who aren't making progress, we can look at why and make changes to what they get for intervention too."

I observed Holly three times in the classroom setting. Each observation occurred during the same time of day in the morning from 9:15-9:45am. The teacher provided whole group instruction during each observation. Twice students were on the

carpet facing the smartboard for instruction. Once, students were seated at table groupings with the teacher walking the room.

During the first observation, 18 students were present. Students were directed to sit on the carpet facing the smartboard. They were given slinky toys to hold in their hands. Before beginning, Holly told the students "remember, these are tools right now, not toys. I expect that you won't play with them." She then demonstrated how she wanted the children to use the slinky in conjunction with saying the first sound (onset) and rime (remainder of the word from the vowel to the end of the word). Next, Holly proceeded to provide a word out loud to the students. The students gave the first sound, then pulled the slinky as they said the rest of the word. Finally, they would let the slinky collapse as they said the whole word. For example, Holly gave the word "cut" and the children said /c/ then pulled the slinky as they said /ut/, then as the children said /cut/ they let the slinky collapse. All words given by the teacher were CVC words. It appeared that most students were engaged. All seemed to be moving their slinky in the correct manner. It was hard to hear whether all the children were giving the correct sounds. This activity lasted approximately 15 minutes. At the conclusion of the activity, the students were called by the color of their carpet squares to put their slinky in a bin. Once all children were seated again on the carpet, the teacher began a whole group phonics lesson on the diagraph /th/.

On the second observation, 17 children were seated at tables within the classroom. Three to four children were at each of five tables. Each child had a paper in front of them with Elkonin boxes drawn on them. Students also had three chips in

front of them, one green, one yellow, and one red. Holly had the children move the chips into the boxes, one for each sound, as they segmented words she provided orally to them. It appeared that the children had been instructed to use the green chip for the first sound, the yellow chip for the middle sound, and the red chip for the final sound as most children followed this pattern. Moreover, when one child did not follow this pattern, his table mates attempted to correct him.

During this activity Holly gave approximately 10 CVC words for the children to practice with. After she presented each word, the children would repeat the word and then segment each sound. The teacher walked the room monitoring student work throughout the lesson. Periodically she would stand behind or bend down next to a child and watch them move their chips as they segmented a word. She could be heard praising children as she did so. Twice she stopped to help a child who seemed to struggle correctly giving the middle sound. The first time she prompted saying, "what do you hear after /f/ in /f/o/g/?" as she drew out the middle /o/ sound. The second time, she prompted saying "what do you hear in the middle?"

During the final observation, 17 students were present and standing on the carpet facing the smartboard. Students were watching and singing along to a video called *The CVC Word Song* by Harry Kindergarten. The song provides practice in reading CVC words. It first presents the sounds in order, then blends them to make a word. Most of the children in Holly's class were moving to the music and at least attempting to sing along. When the song ended, the children were directed to sit on the carpet. Holly then began a similar activity using the smartboard. Holly had a CVC

word programmed to come up on the smartboard screen one letter at a time. As each letter appeared, the children gave the correct sound. After the third letter appeared and the sound was given, the children blended the sounds into a word. Twice the children gave the sound incorrectly, for example saying "puh" for /p/ and Holly would stop and have the children give the sound correctly. When this happened, Holly would remind the children that the sound was not voiced, then model the sound for them, before having them try the sound again. Again, it appeared that most of the children were engaged during this activity. A few children seemed to always be a beat behind the others in giving the sounds or blending the whole word, but they still participated.

**Participant 3: Karen.**

Karen, a female Caucasian, is 37-years-old, holds a Bachelor's degree, and has taught kindergarten at Oak Forest Elementary for fifteen years. Karen believes "phonemic awareness is the core of reading instruction in kindergarten. Everything we do, really, stems from it. We begin the year teaching letters and sounds, move on to identifying the first sound in words, then start to segment and blend words, and by the end of the year we are decoding. This is so important because we basically have to get children who may not even have basic print concepts down and get them to read by the end of the year."

Karen stated, "I use mCLASS data all the time. So many of my students begin the year with no real school experience. They don't know their letters or sounds. They don't recognize their name in print. There's a huge amount of learning that has to happen. We have a staggered start to the year, and I began my assessments right away.

The data really let me know where my kids began the year. Then, with progress monitoring, I got to see how quickly, and in some cases how slowly, my kids were learning. I also use the data to help me plan. Not so much my whole group lessons. That comes more from the pacing guides, but for my small groups where I am doing more of a guided reading group. This is where the data really helps me. I can target more precisely what each student or group of students' needs." Karen continued, "our school is really looking at the data more to give targeted interventions to our kids too. I think this is helping a lot because my kids are not just getting help from me, they are getting it from a reading specialist too."

I observed Karen three times in the classroom setting. Each observation occurred at the same time of day; 9:00 am until 9:30 am. The first time I observed in Karen's classroom, 18 students were participating in a lesson much like I had seen in Beth's room where the children stood on the carpet in front of the smartboard and "rollercoastered" words that Karen provided by showing them on the smartboard. Each word followed a CVC or CCVC pattern. As the word was given, the students touched their shoulder while producing the first sound. They then tapped their arm around the elbow area as they said the middle sound, and they tapped near their wrists as they said the final sound. Students then put their hand back at their shoulder and swiped down their arm as they said the whole word. This activity was repeated approximately 10 times and took the entire half hour of instructional time. Most of the children seemed to be actively engaged in this activity. A notable exception was one little boy who was positioned to the back and side of the carpet. He alternately stood,

squatted, and spun in his place but did not seem engaged in the activity at all. Karen periodically redirected the student, and he would turn back to face the smartboard, but he never did make the same motions as the other children, nor did he seem to produce the letter sounds.

During the second observation, Karen had 16 children seated on the carpet. She projected an image on the smartboard and pronounced a word that matched the picture such as book, doll, or jump. The children repeated the word and then held up fingers indicating how many sounds were heard in each word. Most of the children held up fingers, though there were often an array of two, three, or four fingers held up at any one time. The children tended to have greater variation in the number of fingers held up when the provided words had four sounds than those with a more typical CVC pattern. Regardless of the number of children holding up the correct number of sounds in a word, Karen sounded each word holding up a finger for each sound, then holding her own fingers up for all to see, asking the children how many sounds. At this point, the children would chorally call out the correct number. As noted previously, most children participated in this activity, by holding up fingers. Many children mouthed the sounds before holding up their fingers, and it appeared they all called out the correct number of sounds once Karen modeled the sound production and held aloft her fingers for the students to see. I noticed that the child who in the previous observation was inattentive and required redirection was not present during this activity. When asked, Karen replied that he had been out with the flu all week.

The final observation, in which 17 students were present, began with Karen singing a song with the children. The song, called "I'm thinking of a word," required the children to listen to the sounds in a given word, and try to determine the correct word. For example, Karen sang, "I'm thinking of a word named /b/ /i/ /g/, /b/ /i/ /g/, /b/ /i/ /g/. I'm thinking of a word named /b/ /i/ /g/, what is my word?" To which the children sang back, "Is the word that you're thinking named big, big, big, big, big, big, big, big, big. Is the word that you're thinking big, big, big?" Then, Karen sang back, "yes, big is my word." Karen repeated the song, three times in total, using a different CVC word each time. Each time, the children correctly figured out each word. All of the children seemed engaged in this activity except for one. The same child who appeared inattentive during the first observation, did not appear engaged during this activity. He did not sing along, and although he sat on the carpet, he reached out and touched the children around him, played with his fingers, and pulled on the laces of his shoes throughout the activity.

When this activity ended, Karen asked the children to sit on the carpet. She called four children to come to the side of the carpet where she had four large boxes outlined with washi tape on the floor. Karen had each child stand behind a box. Karen then said a word with four sounds in it such as "stop." She then had the children jump into the boxes as they produced the sounds in the word so that the first child jumped into the first box as he said /s/, the second child jumped into the next box as she said /t/, the third child jumped into the next box as she said /o/, and the fourth child jumped into the last box as he called out /t/. Karen repeated this 4 more times, changing the

children who got to jump each time. Each word Karen provided had four distinct sounds (clap, clock, junk, and trap). When the children got a turn to jump, they were attentive and seemed engaged. A few children struggled to give the correct sound. This happened primarily with the second or third sound in a word. Karen helped the children who struggled by drawing out the sound as she repeated the given word such as "j-u-nnnnnnnn-k." With this assistance, all of the children were able to produce the correct sound for their word. It appeared difficult for all of the children to sit and attend to the jumpers when it wasn't their turn. Many struggled to keep their hands to themselves, and to stay in their designated areas on the carpet. During this activity, the boy who struggled to attend previously did not seem any more or less engaged than his peers.

**Participant 4: April.**

April is a 36-year-old Caucasian teacher at Oak Forest Elementary. She has a Master's degree, and has been teaching for 11 years, the last 3 in kindergarten at Oak Forest. April did not feel her pre-service training provided her much of an education in phonemic awareness. She stated, "I am lucky the district, my team at Oak Forest, and my instructional coach have shared so much with me about phonemic awareness and how to teach it to my kinders. I really would have been lost without all their help." April continued, "I'm a kind of by-the-book teacher when it comes to some of this. I still feel somewhat new to kindergarten, so I do what the teaching guides tell me to do. Of course, I do listen to my teammates, and incorporate some of their ideas, but… You know, I'm still learning too."

Letterland is April's main resource for teaching phonemic awareness in her classroom. She said, "I use Letterland primarily. It is a fundamental component of our reading time. It's phonics, but it's also phonemic awareness too. So, my reading instruction is 90 minutes total, but not all at once. Part of that time is Letterland. In the beginning of the year, you know, the focus is on letters and sounds. Now, we are really spending a lot of time segmenting and blending, and also learning some digraphs like /sh/ or /th/. That usually takes about 30 minutes. The other 60 minutes, is split into two rotations at a different time of day. Then, we do maybe 20 minutes or so for the first rotation. Then, we do a quick 5 to 10 minute whole group activity before we do round two. The whole group activity is short, but it helps me check in with my kinders on how round one went, and also gets them ready for round two. Each day the daily 5 activities change. Through the week, I will see my kinders at least two times in a guided reading group during one of the rotations. Then the other time they are either working with words, writing, reading to their selves, or using the ipad to do raz-kids or istation or something like that."

April described mCLASS assessments as "a necessary evil. We have to do them. The data we get is useful to a degree, but it is so time consuming. I mean, I have overall gotten a lot of good data from it, but I really struggle with the amount of time, and with the windows of time to complete it. It's just overwhelming really. I spend a lot of time progress monitoring because, well, I'm supposed to progress monitor the reds every other week and the yellows every 4$^{th}$ week and it just, it is very time consuming keeping up with that on top of just day to day learning." April further

mused, “I think I probably could tell you the same information, maybe a bit differently, but essentially the same information, just telling you about my kids and what I observe in our day to day lessons. Seriously, there are no surprises when I see my mCLASS data. I pretty much know which skills my kids have down, and which ones they are still struggling with. But you know, you do it because you have to, not because it tells you anything you don’t already know.”

I observed April three times in the classroom setting. Each observation occurred between 11:15 am and 11:45 am. During the first observation, April had 15 students. The students were sitting on the carpet and April sat in a rocking chair to the front and side of the carpet. The children were facing April. There was a rhyme on a piece of chart paper that April and the children were using. April had different children come up use a red marker to code all the short a words in the rhyme. Once the rhyme was coded, April asked the children to give other short a words. Each child she called on was able to do this, though some offered words were either previously given or were in the rhyme. Finally, the children chorally read the rhyme along with April. Next, April provided four pictures (cat, bat, rat, pig) displayed on the smartboard to the children. She named each picture and had the children repeat the picture names. Then, April asked the children which word doesn’t rhyme. One child was chosen to move that picture to the trashcan. Finally, the children all said the names of the remaining rhyming pictures. This was done two more times with different sets of pictures. Finally, April told the children they were going to “rubber-band stretch” the rhyming words. Starting with the word cat, the students held their hands out and

slowly moved them apart as they said each letter's sound. Then, after they'd said the last sound, the children moved their hands back to touching and said the whole word. The children did this to each word previously used in the rhyming activity for a total of 9 words.

This lesson seemed fast-paced. A lot happened in 30 minutes, but it flowed in a very natural way. Nothing felt like it went on too long, nor did it seem like anything wasn't repeated enough for overall learning. In this observation, all of the children seemed to participate when asked to chorally read, and to move their hands to rubber-band-stretch a word. A few times, it seemed a child or two was a beat behind the others, but all 15 did seem engaged. The children seemed to enjoy throwing the non-rhyming words into the trashcan (a noise was made when this happened that sounded like a tin garbage can lid crashing down), even if they themselves didn't get chosen to actually do it, as all laughed or smiled when this happened.

The second observation also included 15 students. Like the previous observation, this lesson seemed fast paced. Moreover, even when individual children were asked to respond in some way, all of the children seemed engaged and were ready to respond chorally when asked. Today, April began the lesson by asking the children to stretch (segment) given words and think about "what do we do with all of these things?". April would say a word, the children would repeat the word, and she would then choose one child to segment each sound. Finally, all of the children would repeat the segmented sounds. After all the words were segmented (cup, knife, plate, spoon, and fork), April asked the children again, "what do we do with all of these

things?". The children chorally respond, "eat," to which April responded, "yes, we use a cup, knife, spoon, fork, and plate to eat a meal."

April moved immediately moved the children on to the next portion of the lesson. The children were tasked with sorting words according to their rime. April had put three picture cars in a row in a pocket chart (wig, in, and sip). Then, eight children were given a picture card and asked to place it in the pocket chart under a rhyming word. Each child, in turn, placed their card, and April asked the class to raise their hands if they agreed that the words did, indeed, rhyme. Once all the cards were placed, April led the class in naming all of the pictures in a column (e.g., wig, dig, pig) and asked, "why do these go together?". The children responded chorally, "they rhyme."

Next, April passed letter cards out to all of the children. She told the children, "Listen carefully. We are going to slow-speak these words. When you hear your sound, come up front and stand in the place you heard your sound." (There are boxes outlined on the floor in the front of the carpet. The first box is outlined in green, the second in yellow, and the last in red.) April held up the first word "wig," and says its name. The class echoed her. Then, together, they said "wwwwww" and a child stood up and went to the box outlined in green. The class continues saying, "iiiiiii" and two children stood up. One had the letter "i" and one the letter "e". April asked the children, "look at your letters. Think about the sound it makes. Abby, does your letter say /e/ or /i/?" Abby responded, "/e/." April then inquired, "Class, what sound are we listening for?" And the class responded, "iiiiiiiii." Abby smiled, said "oops" and went back to her seat. The other child went to stand in the yellow box. April directed the

class to finish the word asking, “what is the last sound?” The class responded by saying, “gggggg,” and the child with the correct card went and stood in the red box. April asked the class, “what word?” and the class responded, “wig.” April continued with the next word, pig, and as the children worked to segment and spell the word, the observation ended.

Thirteen children were present for the third observation in April’s room. April began the lesson much like the last one by passing out letter cards to all the children. This time, though, she called up three children (Lucy Lamplighter, Annie Apple, and Peter Puppy) and had them stand in the boxes in front of the class in the order she specified. She asked the children to sound out the word to themselves and be ready to say the word when she gave the signal. April waited a short time and said, “what word?” and the children responded “lap.” April then said, “Now I need Annie Apple to sit down and Impy Ink to take her place.” The child holding the “a” card sat down and a child holding an “i” took her place. April waited a beat, and asked, “what word?” and the children answered “lip.” April continued working with the children switching out one letter at a time to build different words. About half way through the lesson, April changed tactics. She said, “Class, now I am going to say a word and I want you to slow-speak it and see if you can spell it correctly. We’ve done this before. Listen for your sound. When you hear it, come up and stand in the box that matches where your sound comes in the word.” By the end of the lesson, all of the children got to come up front at least once spelling and reading: ship, chip, sip, sap, tap, tan, than, pan, pat, fat, fan, fin, thin, win, and wig. As in the previous observations, the children

seemed engaged and actively participated in the lesson. Moreover, though there was a lot of movement, the children did not appear to be phased by it and the flow of the lesson was not disrupted.

**Participant 5: Leslie.**

Leslie is a 42-year-old Caucasian teacher at Sand Hills Elementary School where she has taught kindergarten for the past six years. Leslie has been a teacher for twenty years, though not all in kindergarten nor at Sand Hills. Leslie also has a Master's degree. Leslie views phonemic awareness as an integral component of her reading instruction. She said, "to reach every learner, I use a variety of resources. Some are provided by the district, but some I have found on my own. I use many paper and pencil resources, play creative games, and even use art activities and songs to incorporate the strategies taught. I also use a combination of whole group and small group instruction. During my guided reading time I tend to pull small groups and focus part of the time on phonemic awareness using the HillRAP program."

When asked to explain the HillRAP program, Leslie said, "HillRAP is a program that was developed by the Hill Center in Durham, North Carolina. I think we've had it in the district maybe four or five years. It was first used only as a Tier 3 reading intervention. But, last summer a lot of us got trained so we could use it for Tier 2. Even though it's not really meant for Core instruction, it has pieces that can be used to support Core. Like, there are several parts to the program: phonological awareness, word attack, fluency, comprehension, and vocabulary. I've found that for my Kinders it is really useful for phonological awareness. The program breaks down

the skills, so you can work wherever the children most need help. What I really like about it is, I can give my kids the help they need and build on earlier skills. For example, it moves from how many words are in a sentence, to how many syllables in a word, to how many sounds in a word. There's also rhyming words and isolating beginning or ending sounds, deleting sounds, and even changing from one sound to a different sound at all positions: first, medial, and final. And, it doesn't matter if the kids in a group need the same skill work. Each student gets asked the type of question he or she needs, and also hears different levels of questions and their answers for the other kids in the group. The questions and answers are quick, with each student getting three to five questions in a short span of time. Oh, and wrong answers are corrected immediately, then repeated on the student's next turn so that correct responses are always reinforced."

In terms of assessments Leslie said, "I'm glad we have the mCLASS assessments. I know not everyone is, but I like it. Maybe I've been teaching long enough that I remember what it was like without the assessments. It was really a lot harder. You had to figure everything out on your own. It was a struggle for me trying to figure out what the kids needed help in. With mCLASS, there's no wondering. You don't doubt yourself. Here's the test, the data, and I'm not questioning myself over which area they need the most help in. It's right there in black and white. And even the progress monitoring, though it can be time consuming, it tells you whether there's progress being made or not. Again, no doubts."

I observed Leslie on three occasions, each occurring during her guided reading time between 1:00pm and 1:50pm. Each observation lasted approximately 20-30 minutes. On the first observation, Leslie was in the midst of a guided reading lesson. Four children sat with her at a table in the front corner of the classroom. The remaining 12 children were working elsewhere in the room either in pairs or by themselves. There was no other adult in the room. The group working with Leslie were taking turns answering questions she posed to them. Leslie turned to the first child and said, "I'll say a sound and the rest of the word, then blend the parts to make a word. /S/-/ad/. /Sad/. Now, I'll say the parts and you say the word. /S/ /at/." Then child one responded, "sat." Leslie continued to the next child, "/M/ /an/," and the child responded "man." Leslie continued with the third child saying, "/m/ /ap/," and the child answered, "map." Leslie moved on to the last child in the group and said, "/f/ /it/," and the child replied, "fit." Leslie continued in a like manner supplying each child with an onset and rime until each child had 5 turns. At no time throughout this approximately eight minute activity did any child in the group make an error. Leslie made notes on a list of words she was working from which words were completed correctly by each child by giving a check mark next to the word under the child's name. When this activity came to a close, Leslie distributed to each child a small black and white copy of a book called *I Can Be*. She instructed the children to "do a picture walk," then engaged them in a discussion of what was in the pictures. Next, Leslie drew the student's attention to the sight words like and can within the text. Then, she

read the story to the children and they echoed her after each page. Finally, Leslie asked the children to recall something they remembered from the story.

While Leslie worked with her small group, I noted the other children were busy with activities of their own. Four children were using their ipads to read and talk about their reading using an app called *Seesaw*. Another group of four children were working on sorting words into the -in, -ip, and -it word families. This group had an assortment of words in front of them and three papers each with a different word ending at the top, that they glued the words to as they determined which word went where. Periodically, I could hear the children in this group sounding out the words they were working with. They appeared to work well together. Another group of four students were writing and/or drawing in journals. At times, the children in this group asked how to spell a word, sounded out words they were trying to spell, or read their work aloud to themselves. Each group of children, including those working with Leslie, appeared actively engaged in their learning. Furthermore, though there may have been some off-task behavior at times, learning did not seem to be interrupted throughout the 25 minutes I was present.

The second observation was very similar to the first. On this occasion, Leslie was working with a different group of four students at her table. The other children, 11 today, were working elsewhere in the room. Again, no other adult was present. In Leslie's group, like in the previous observation, the children were taking turns responding to Leslie's queries. Instead of providing the onset and rime, though, Leslie gave each child a word, and they provided the onset and rime. To illustrate, Leslie said

to a child, “your word is mice,” and the child responded, “mmm -ice”. Leslie gave each child four turns, and like before, the children made no errors. After they’d practiced this skill, Leslie again passed out a set of books to the children in her group called *Take a Bite* and directed the children to “whisper read” the story to themselves while she listened to each of them. As the children read, Leslie moved near each one in turn. After the students read the book, Leslie directed the children’s attention to some of the words in the story and asked them to show with their fingers how many syllables each word had. Leslie provided a word from the story, such as dessert, and the children put their hands under their chins and repeated the word in a whisper, then held up one, two or three fingers to indicate the number of syllables present. Leslie had the children do this with four more words (salad, parents, bite, and family). The children were not always accurate. For example, the children struggled with the word family. They all held up two fingers. Leslie said to the children, “I think we might have said that one too quickly. Let’s try again. Say it with me. Fam-i-ly. How many syllables? Show me.” This time, all of the children held up three fingers.

Again, as in the last observation, the other children worked in small groups while Leslie worked with her guided reading group. This time, three children were reading to self. Each child in this group had a selection of books and read quietly to themselves. A group of four children were working with words. Each had a clipboard with a piece of paper on it and numbered one through ten. They walked about the room writing down words that were placed in various spots about the room. The words were on cards and each had a red number in the upper right-hand corner. As the

children located the word, they wrote it in the corresponding number's place on their paper. The remaining group of four students were writing and/or drawing in journals. Just as the previous group had done, the children in this group asked how to spell a word, sounded out words they were trying to spell, or read their work aloud to themselves. As before, all of the children, despite the myriad activities happening about the room, appeared to be actively engaged in their learning.

The third observation in Leslie's room followed the same structure as the past two observations. Leslie was again at the table with a small group of two for a guided reading lesson. This group was working on first sounds in words. Leslie had picture cards in front of her. She would hold up a picture and ask, "what's this?" The children would respond, and Leslie would ask "what sound do you hear first?" To illustrate, Leslie held up a picture of a fish and asked, "what's this?" The children answered, "a fish." Leslie then asked, "what sound do you hear first in fffffish?" The children replied, "fffff." Leslie continued showing pictures and asking for first sounds with approximately ten cards. At times the children would respond with the letter's name instead of a sound. When this occurred, Leslie would say, "that's the right letter, now what sound does it make?" Leslie then gave these children a book called *A Cold Day*. She then proceeded to guide them through a lesson with this book.

The remaining twelve children, as in the past, were working elsewhere in the room. This time, four children were at a table working on a computer program called istation. According to Leslie, "istation is required in our district. The kids spend about 15 minutes a day on istation working on reading skills at their level. Once a month,

they take an assessment. That's what the children were doing today." Another group of four students were reading to self. Like the last time, these students had a selection of books nearby that they could choose from during this time. The last group of four, were engaged using an app on their ipads called tinytap to play reading related games. As in each of the past observations, all students appeared actively engaged in their learning. Additionally, they appeared respectful of the learning happening around them.

**Participant 6: Kay.**

Kay also works at Sand Hills Elementary School. She is a 53-year-old, Caucasian, with a Bachelors' degree and 27 years of teaching experience, the last 18 in kindergarten. When it comes to teaching phonemic awareness, Kay said, "I use mostly Letterland, and I teach the rules I learned in school like silent e, two vowels go walking, diagraphs, blends, and even some basic suffixes and prefixes." Kay continued, "I don't really separate phonemic awareness from phonics when I'm teaching, or from spelling and writing for that matter. What I mean is, these different parts of reading and writing, they flow in and out of each other. I'm purposeful about that because I see how they are connected, and I think the kids should see them as connected. One of my goals is for my lessons to flow along all day long kind of in a seamless way. I think this will help them make connections between the different aspects of their day, of their learning throughout the day. You see our schedule breaks up our day somewhat unnaturally. Our reading block is 90 minutes, but it isn't consecutive because of the schedule. To build some cohesiveness, I try to pull a thread

so-to-speak through it all to help the children build connections to what we've already done and what we're doing next." Finally, Kay described her teaching style saying, "My class, my instruction rather, is maybe not as hip or up to date as you might see in other rooms. I guess I'm more old-school. We do a lot of whole group learning. A lot of whole class responding. I use technology, but not all the time. That's just my way."

Kay isn't overly fond of mCLASS. She stated, "personally, I don't really like mCLASS. I don't you know, but we're told to do it, so… If we didn't have mCLASS though, I do believe our teachers would teach our children to read and I do believe our children would grow as readers even without mCLASS. I know this because it's exactly how we used to teach." Kay continued, "I think the tests, they can be frustrating. It's really sad how our littlest learners pick up on how poorly they test compared to their peers. It isn't directly talked about or made to be a big deal, but they all notice who has the beginning books still in May and who has moved on to much tougher books. It seems kindergarteners should be joyous about learning, and since these tests have been around, I've seen a lot of sad faces in kindergarten." Though Kay bemoaned the mCLASS assessments she did capitulate that, "we are teaching our children differently now. Through the assessments we find out what the children need extra help in and then we work with them on that skill where before we really didn't do that. Don't misunderstand. we helped them in ways they needed help before, but now the help we provide is more targeted and more specific to students' actual needs and we're doing that differently because of mCLASS. Well, because of the data that we receive form mCLASS."

I observed Kay on three occasions. The first observation occurred from 12:15pm until 12:45pm. The second observation from10:45am until 11:15am, and the third from 11:00am until 11:35am. The observations were schedule purposefully at different times of the day to coincide with different aspects of Kay's schedule for literacy instruction. Observation one, included a Letterland based lesson, observation two a whole group based phonemic awareness lesson, and observation three included a small group guided reading group led by Kay while the teacher assistant worked with the other children in center-like activities.

The first observation was a whole class lesson using the Letterland curriculum. Fifteen children were present as was Kay and a teacher assistant. The teacher assistant, though in the room, was not actively engaged in the lesson or with any of the children. She sat at a desk in the back of the room and came and went several times during the 30 minutes I was observing. Her movement did not seem to be a distraction to the children or to Kay. Kay began the lesson by displaying a sentence for the children. Kay pointed to each word and read, "The cat is fat." Kay then called upon a child to come up and read the sentence. He stood up, and using Kay's pointer, read the sentence. Kay then changed the sentence by replacing the word cat with the word bat. She showed the children the new word, and said, "this new word is like cat. It ends the same way. It's first sound is /b/. The new word is…" The children finished, Kay's sentence saying, "bat." Kay then asked a different child to come up and read the new sentence. Kay substituted another word, "rat" next, and the lesson proceeded in the same manner. Next, Kay changed the sentence from a statement to a question by

rearranging the words and read, “is the rat fat?” She continued the lesson in the same fashion as before substituting bat and cat for rat and choosing different children to come up and read the sentence.

After this activity, Kay showed the children two pictures; a cat and a map and placed them in a pocket chart. Kay then held up another picture, and said, “here is another picture. It shows a boy taking a nap. Nap. Does nap rhyme with cat? No, nap and cat do not rhyme. Their ending sounds are different. Let me try map. Nap, map. Yes, I hear a rhyme. Nap and map have the same ending sound. I will put nap under map. Now you try. Here is hat. Does hat rhyme with cat or map?” The children replied, “cat.” Kay continued, “yes, hat rhymes with cat. Good job. Let’s try some more.” Kay then showed the children several more pictures and the process continued. As this activity ended, Kay displayed the word family ending -ap on a big piece of chart paper and asked the children to get their whiteboards. She said, “we are going to work with the ap family now. Remember, ap is the ending. Take out your white boards and write ap like this (Kay demonstrated on her own whiteboard writing __ ap). Now, we are going to write some ap words. Are you ready? Write tap, t, ap.” Kay waited while the children wrote and as when all the children were finished writing, Kay said, “one, two, three, show me,” and the children turned their boards to show Kay. Kay then said, “what word did you write?” The children responded, “tap.” Kay then asked the children to erase the t and write a c. She asked the children, “what word do we have now?” The children read, “cap.” Kay continued like this replacing the first sound several more times and asking the children what the new word was. Time after time,

the children correctly read the new word. Throughout the entire lesson, the children appeared engaged. A few times, Kay called on a child to sit up or put their hand down. However, these minor redirections did not seem to interrupt the lesson or cause others to be distracted.

During the second observation, Kay worked with the whole group of children, 17 in all. They sat at four tables spread out across the room in with four or five students per table. In front of each child were four Legos of various colors. Kay would say a word such as “bill”, the children repeated the word, then said the individual sounds in the word (b-i-ll) as they linked their Legos together. Kay and her teacher assistant walked about the room watching the children work, and making corrections as needed in hushed tones. At times, many children gave an incorrect sound, or did not use the correct number of Lego blocks. When this happened, Kay would say, “that was a little tricky. Let’s try again.” She would then slowly pronounce the sounds with the children so that they were able to provide the correct sound segmentation. One word, throw, was particularly challenging for many students. While some were inclined to add an extra sound-- /w/ --to the end of the word, others forgot to include the /r/ sound. Kay slowly drew out the sounds for the children three times before moving on to the next word. Kay gave two more words then again asked the children to segment throw. This time, most of the children were able to segment the word correctly (though one did verbalize the /w/ sound at the end, she corrected herself saying, “no, no /w/.” This lesson took approximately 20 minutes. After the last word was segmented, Kay said, “Leave your Legos on the table. Get ready to listen. I’m going to say the sounds in a

word, and you say the word. Ready? Th-a-t." To which the children shouted, "that!" Kay continued with several more words including: this, third, thumb, and think. Some of the children were much better at this than others and called out the words quickly. Others seemed less adept at this skill and either called out the words more softly, less quickly, or not at all. A few played with the Legos that remained on the tables. One child, raised his hand and when Kay called on him, he said, "those words all have /th/." Kay replied, "yes, they do. How very clever of you to notice."

During the third observation, Kay was sitting at a table in the back of the room with three children. The children had a book called *Eat Like a Pig* in front of them and were discussing manners with Kay. Kay led them through a lesson focused primarily on vocabulary and comprehension of the text. This group did not work on phonemic awareness skills during this observation.

The other twelve children in the classroom worked within small groups during this same time. The teacher assistant was in the room during this time and worked with a small group of five children on a writing task. The children in this group were writing thank you notes to the guest readers who came to their class to share a favorite book with them during Read Across America Week. The children composed their notes asking for assistance from the teacher assistant at times to spell a word. She often did not spell the word, but instead offered the sounds and gave hints such as "what two letters say /th/?" or "what other letter says /j/?" She also sometimes prompted children who had reversed a letter saying, "you wrote /d/, turn it around and make it a /b/."

A third group of four students were working on word work. Each child had a worksheet on which there were several activities associated with the -ip family. The first activity required the children to match a picture with a word such as lip, sip, dip, and trip by gluing the word under the correct picture. Next, the students used letter stamps to "write" the words next to a picture of the word. Finally, students were challenged to choose one of the words and write it in a sentence.

The three remaining students were listening to a story on their ipad. Once the story was finished, the children played a reading related game that entailed popping balloons that appeared on the screen containing sight words. All of the children in the room appeared engaged and working. Watching all of the activity, was distracting to this outside observer. However, the movement and sounds made by this level of active learning did not seem to faze the children as all persevered and accomplished the tasks before them.

**Review of Documents**

Documents such as kindergarten report cards, ELA unpacking documents, curriculum calendars and curriculum guides, which are all available on the Piedmont Platte's district digital resource page, as well as teacher manuals for Letterland, Fundations and HilRAP were collected and analyzed for this study. These documents provided context for how teachers planned their instruction as well as for why certain classroom practices were noted across all observational settings. Additionally, the documents reviewed were specifically mentioned by participants in both surveys and interviews as essential resources used for planning and instructional purposes, for

reporting on student progress, and for discussion focal points during grade level professional learning community meetings both at the building and district levels. Thus, these documents appeared to be integral to the day to day instructional processes and practices of Piedmont Platte's kindergarten teachers. Therefore, they were included for review in this study.

**Summary of documents on Piedmont Platte's digital resource page**.

*Kindergarten report card.*

The kindergarten report card for Piedmont Platte specifically monitors student growth in phonemic awareness. First, under English Language Arts: Foundational Skills there is a line that states, "I can identify sounds." In the next column, under the heading Reading: Foundational Skills there is a line that states, "I can know and apply grade level phonemic awareness and phonics."

*ELA unpacking documents.*

Piedmont Platte provides its teachers with unpacking documents that are comprised of the standards to be taught, what students should know, understand, and be able to do related to each standard, and questions and prompts that teachers might incorporate into their lessons for each standard. This is done for every reading standard, including those that are related to phonemic awareness. For example, the standard RF.K.2 states that students will "demonstrate understanding of spoken words, syllables, and sounds (phonemes) to include: a) recognize and produce rhyming words, b) count, pronounce, blend, and segment syllables into spoken words, c) blend and segment onsets and rimes of single-syllable spoken words, d) isolate and

pronounce the initial, medial vowel, and final sounds (phonemes) in three phoneme (consonant-vowel-consonant, or CVC) words not including those that end with /l/, /r/, or /x/, and e) add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words". The questions and prompts suggested for teachers under this standard include: "which words rhymes with this one, clap the syllables in this word, say each sound you hear in this word slowly, what do you hear at the beginning of this word, what do you hear next, and what do you hear at the end?" There are no suggestions for teachers regarding what students should know, understand, and be able to do related to this standard in the unpacking document.

*Curriculum calendars.*

Piedmont Platte provides its teachers with a curriculum calendar, one each corresponding with the four quarters of the school year. Each of these, specifies the standards to be addressed for each week of the quarter for each subject area. Across all four quarterly calendars, Reading, Foundational, and Phonics/Letterland each have their own sections with the standards and skills that address phonemic awareness falling within the Foundational and Phonics/Letterland categories.

The quarter one calendar includes the Foundational standard RF.K.1 A-D. This standard encompasses the phonemic awareness skill wherein children "recognize that spoken words are represented in written language by specific sequences of letters." It also includes a notation under Phonics/Letterland indicating the Letterland lessons that should be covered each week (weeks 1-6 include the Fast-Track Lessons, and weeks 7-9 include lessons 26-40).

The quarter two calendar includes the Foundational standard RF K.3 A-D. This standard includes: “knowing and applying grade-level phonics and word analysis skills in decoding words. This entails 1) demonstrating basic knowledge of letter-sound correspondence by producing the primary or most frequent sound for each consonant, 2) associating the long and short vowel sounds with the common spellings for the 5 major vowels, 3) reading common high frequency words by sight, and 4) distinguishing between similarly spelled words by identifying the sounds of the letters that differ.” The Phonics/Letterland section, once again, simply gives the lessons and assessments to be covered for each of the ten weeks in the quarter (41-74, with assessments in weeks two, six and ten).

The calendar for quarter three includes several standards within the Foundational section. These include: RF.K.2a: “recognize and produce rhyming words orally;” RF.K.2b: “count, produce, blend, segment syllables in spoken words;” RF.K2c: “blend and segment onsets and rimes in spoken words;” RF.K.2d: “orally isolate all sounds in CVC words;” K.2e: “add or substitute sounds in CVC words to make new words;” and RF.K.3d: “distinguish between similarly spelled words by id-ing the sounds of the letters that are different.” Again, the Phonics/Letterland section specifies lessons to be done each week (there are no assessments on this quarter’s calendar).

The calendar for the fourth quarter does not include any standards specific to phonemic awareness. Instead, this quarter’s Foundational standard, RF.K3, requires the use of phonemic awareness skills in order that children “know and apply grade

level phonics and word analysis skills in decoding words." The Phonics/Letterland section continues as it did in quarter three noting which lessons should be done each week. Again, no assessments are specified throughout this nine-week quarter.

*Curriculum guides.*

Piedmont Platte also provides curriculum guides for their teachers. The curriculum guides also follow a quarterly format wherein each quarter, in turn, is broken down by week. Like the calendars, the guides include the standards to be taught each week. In addition, they contain what students will be able to do, essential questions teachers should embed within their lessons, key academic vocabulary that should be taught, and suggestions for data collection and common formative assessments that will show whether students are learning. The guides also provide teachers with suggested whole group mini lessons including possible resources and an estimated time to allot for the lesson, ideas for anchor charts, suggestions for guided reading, and suggestions for differentiated balanced literacy stations. To illustrate, quarter three, week one standards include RF.K.2: "demonstrate understanding of spoken words, syllables, and sounds (phonemes) to include recognizing and producing rhyming words." For this standard, the curriculum guide states that "students will be able to: orally recognize and produce rhyming words, isolate sounds in CVC words, and recognize the digraphs sh, ch, and th". The essential questions suggested for this standard include: "why is learning rhyming words important? And what are digraphs? Why is this important to learn to be a good reader?" Key academic vocabulary to be taught this week include: digraph and rhyme. To determine whether students are

learning the standard, the guide encourages teachers to "use exit tickets, observe students, and take small group anecdotal notes." Aside from Letterland lessons 75-78, the curriculum guide suggests a theme (winter weather) for the week, read aloud stories to go along with the theme (i.e.: *Cloudy with a Chance of Meatballs*, *Tornadoes!,* and *Come On, Rain,* etc…), leveled texts for student guided reading groups (e.g., *Winter Fun* (level B), *Snow Falls* (level C), *Clouds* (level D), *Not Enough Snow* (level E)), and center ideas (e.g., rhyming cut and paste, weather CVC words, etc…).

*Letterland teacher manual.*

Teachers who responded to the survey overwhelmingly referred to Letterland as their go-to resource for phonemic awareness instruction. Likewise, all of the teachers observed were seen at some point delivering Letterland lessons within their classrooms. It is noted, as well, that Piedmont Platte requires the use of the Letterland program in kindergarten through second grade as its primary source for phonics instruction.

The Letterland teacher manual for kindergarten is comprised of two printed volumes and two compact discs. Lessons are scripted and include embedded assessments at regular intervals (Carter & Wendon, 2011). Each lesson, according to the manual, is intended to take approximately 20-25 minutes for whole class instruction, and another 15-20 minutes for small groups (Carter & Wendon, 2011). This does not need to occur consecutively. In fact, the manual asserts, it may be advantageous to split the lessons up doing parts of the lessons at different times

throughout the day claiming that, "children may be able to absorb and process information better in smaller, frequent doses. Also, children differ in the time of day they are most alert," (Carter & Wendon, 2011, p. xiv).

Letterland was created by Lyn Wendon and Stamey Carter over 35 years ago (Carter & Wendon, 2011). Letterland "aligns closely with the National Reading Panel on the most effective ways to teach phonemic awareness and phonics," (Carter & Wendon, 2011, p. viii). According to Wendon, Letterland, "uses well-established learning principles and memory strategies to create a tight link between the abstract letter shapes, their sounds, and varying functions within words," (Carter & Wendon, p. vi). Dr. Rebecca Felton, in her forward to the manuals, claims that students who are taught in Letterland classrooms with its multi-sensory, child-friendly, systematic and sequential instruction easily acquire an understanding of the relationship between letters and sounds and the alphabetic principle (Carter & Wendon, 2011). Letterland uses carefully created characters, each "associated visually with the letter shapes and alliteratively with the phoneme" (Carter & Wendon, 2011, p. 2) to immerse children in the multi-faceted system of the English language, and in so doing, teaching the sounds, symbols and rules that comprise our language system.

Children often enter kindergarten with a "wide range of pre-literacy knowledge and skills," (Carter & Wendon, 2011, p. 2). Thus, the manual suggests beginning the kindergarten year with a "fast-track" approach to phonemic awareness (Carter & Wendon, 2011). The phonemic awareness fast-track's purpose is to close this gap through a quick, multisensory introduction to the Letterland world via its characters

and their corresponding sounds. Comprising the first 18 lessons, the phonemic awareness fast-track is intended to encompass the first 18-25 days of the school year, allowing "children to make an early acquaintance with all the a-z sounds and shapes within the first weeks of school," (Carter & Wendon, 2011, p. xii). Moreover, the fast-track purports to: quickly immerse students in an alphabet experience, connect the sounds in words to various Letterland characters, familiarize children with the alphabet sequence, build an awareness of phonemes, and limit the confusion of letter names with their sounds (Carter & Wendon, 2011, p. 2).

After the fast-track, the lessons circle back and revisit each letter in greater depth. After the first seven letters (c, a, d, h, m, t, s) are reintroduced, the lessons incorporate blending their sounds to make words. All of these lessons include time for work on phonemic awareness skills and language development. Then, after all the letters have been covered in depth, the lessons move on to word families through a section of lessons on onsets and rimes, there are also lessons on vowel teams, blends, and digraphs. These lessons no longer emphasize phonemic awareness development. Instead, they build on these developing skills through a focus on rhyme, word families, word building, spelling, and reading decodable text (Carter & Wendon, 2011). An appendix to the manuals includes strategies that children and teachers will use throughout Letterland lessons. These include strategies seen in observations such as: the rollercoaster trick, the slow-speak trick, live reading, live spelling, pocket chart reading and pocket chart spelling (Carter & Wendon, 2011).

*Fundations teacher manual.*

Fundations was listed by Beth and Holly as a resource they used when planning their lessons. I asked Beth and Holly why they used this particular resource. Beth said, "Fundations was used before Letterland in Piedmont Platte. To be honest, I like Letterland, and I hate it at the same time. It can be rather busy for some children. Fundations seems less busy. More straightforward. And, I like that it teaches the letter names right away. I also like the finger-tapping method Fundations uses for segmenting and blending words. It's not better than Letterland's roller-coastering, but some kids just like the smaller movement. And, it adds variety and choice for kids when we are working on this skill." Holly concurred stating, "Fundations pairs letter names with the sounds. In Fundations, students learn letter names, letter sounds, and how to form the letters from the beginning. We give a letter naming assessment several times a year through mCLASS, and we do a district-based assessment every quarter where children have to write upper and lowercase letters. But, Letterland doesn't teach the names right away, or even letter formation. Some of our kids, before our curriculum director let us combine the two, couldn't get the letter names or form all the letters correctly until well after Christmas. That's just too late, I think."

"Fundations is an adaptation of the Wilson Reading System authored be Barbara A. Wilson and published in 1988," (Fundations Teacher's Manual, 2002). According to the manual (Fundations Teacher's Manual, 2002), it can be used for 1) whole class instruction in the general education setting, as an intervention for students who score in the lowest 30$^{th}$ percentile in reading related tasks, or as a supplemental

reading program for children with diagnosed language disabilities. Whichever method of implementation is chosen, the program recommends all students receive daily 25-30 minutes of Fundations lessons. For intervention purposes, children should also receive 15-30 minutes more of targeted instruction such that they have a total of 40-60 minutes of Fundations training. Finally, students with a language disability should receive 25-30 minutes of Fundations, 25-30 additional minutes of targeted small group or one to one instruction with supplemental Fundations materials, as well as 30-60 minutes of literacy-based instruction in comprehension using decodable text (Fundations Teacher's Manual, 2002).

The program purports to teach kindergartners word awareness, syllable awareness, and phoneme awareness (Fundations Teacher's Manual, 2002). It stresses that, "phoneme awareness involves several sequential skills: isolating sounds identifying sounds, categorizing sounds, blending sounds, segmenting sounds, and manipulating them," (Fundations Teacher's Manual, 2002, p. 3). By the end of kindergarten, Fundations claims that students taught using its program will be able to "blend, segment, and manipulate sounds in words containing up to three sounds," (Fundations Teacher's Manual, 2002, p.3). Moreover, in Fundations kindergartners don't just learn to read and spell CVC words. They study vocabulary through "word of the day," and learn high-frequency sight words called "trick words" in Fundations. Along with building automaticity at the word level, kindergarteners practice fluency skills like prosody and expression through both echo and choral reading. Moreover, they begin to build listening comprehension skills by listening to oral stories, as well

as set a foundation for writing by learning about punctuation, capitalization, and proofreading and apply these skills through short dictated passages (Fundations Teacher's Manual, 2002).

In kindergarten, Fundations offers five units of study covering a total of 31 weeks (unit 1 lasts 12 weeks, unit 2 lasts 3 weeks, unit 3 lasts 4 weeks, and unit 4 and 5 each lasts 6 weeks). In unit one, students learn to form the lower-case letters, the names for the lowercase letters, and the sounds for short vowels as well as all of the consonants. They also develop word and print awareness, begin to re-tell stories, and work on prosody development through echo reading (Fundations Teacher's Manual, 2002). In unit two, students learn to form upper case letters and about alphabetical order. They also work towards mastery of previously learned consonant and short vowel sounds and begin to develop syllable awareness (Fundations Teacher's Manual, 2002). In unit three, students learn rhyming, to manipulate initial and final sounds in CVC words, and to blend three sounds in CVC words that begin with continuous consonant sounds (f, m, n, l, r, and s). In addition, kindergarten students begin to make simple predictions about stories (Fundations Teacher's Manual, 2002). Unit four includes learning to segment and spell CVC words, blend and read CVC words, and manipulate the medial sounds in CVC words. There is a continuation of building prosody through echo reading, and comprehension via the retelling of stories. In addition, students are exposed to narrative story structure as well as beginning composition skills (Fundations Teacher's Manual, 2002). Finally, in unit five, kindergarteners continue to blend and read as well as segment and spell CVC words,

and manipulate sounds in words in the initial, medial, and final positions. They continue working on building skill in prosody, re-telling of stories, and developing beginning composition skills. They also learn about narrative and expository text, learn to proofread sentences, and learn to write dictated sentence with correct use of word spacing, punctuation, and capitalization (Fundations Teacher's Manual, 2002).

*HillRAP reading achievement program teacher manual.*

HillRAP was listed by survey respondents as a resource used when planning lessons in phonemic awareness. In her interview, Leslie specifically discussed using HillRAP and had an appreciation for what it offered her students. Leslie stated, "HillRAP has been a godsend. I was trained last summer, and it's been a re-awakening so-to-speak. I relearned things I'd forgotten about reading instruction. I've been teaching a long time, so getting this training was a much needed refresher course in all things reading. I think the best part about the HillRAP Tier 2 program is I can use the bits and pieces of HillRAP that most benefit my students."

HillRAP was developed at The Hill Center in Durham, North Carolina (HillRAP, 2003). Beginning in 1977, The Hill Center has worked with its certified learning disabilities specialists to refine their instructional methodology to create a systematic multi-sensory instructional approach that forms the basis of all its programs (HillRAP, 2003). The Hill Center Reading Achievement Program (HillRAP) includes the five pillars of reading (phonological awareness, phonics, fluency, vocabulary, and comprehension) set forth by the National Reading Panel's Report in 2000 (HillRAP, 2003). The core HillRAP program spans nine levels from kindergarten through grade

8 and is taught daily in 45-60 minute sessions following a precise methodology (HillRAP, 2003). The methodology, depending upon the level, is comprised of variations of the following: drill (recommended time 5 minutes), phonological awareness (recommended tie 5-10 minutes), word attack/sight words (recommended time 10-15 minutes), fluency (recommended 5-15 minutes), vocabulary (recommended 5-15 minutes), and reading and comprehension (recommended 10-30 minutes; HillRAP, 2003). An assessment is given prior to beginning HillRAP to determine the starting point for each student in each of the areas specified above (HillRAP, 2003).

HillRAP is intended for small groups of four students working with a trained teacher, students use an individualized curriculum providing each with targeted instruction for remediation in those areas where the students have demonstrated skill deficits (HillRAP, 2003). Students receiving HillRAP instruction are offered small doses of information, presented sequentially and practiced daily, until they are mastered (HillRAP, 2003). Mastered skills are, then, revisited weekly to ensure retention of learned skills (HillRAP, 2003). The Tier II program, such as Leslie espoused, allows teachers to pick and choose the parts of HillRAP that best meet the needs of their students, change the number of students receiving small group instruction from four to six, or vary the suggested length of time a particular HillRAP component lasts.

In kindergarten, the HillRAP curriculum covers the following skills: recognizing and producing rhymes, blending and segmenting syllables, blending and

segmenting onsets and rimes, adding and substituting phonemes, isolating and producing phonemes in CVC words, states the names of upper and lowercase manuscript letters, states the sounds of consonants and short vowels, and reads CVC words, and reads Dolch pre-primer and primer words (HillRAP, 2003). Moreover, the suggested methodology at the kindergarten level consists of drill, phonological awareness, work attack/sight words, fluency, and reading/comprehension (HillRAP, 2003).

Drill, in HillRAP, is always done auditorily and is "intended to help students gain automatic recall of letter sounds, word patterns, syllabication rules, and vocabulary," (HillRAP, 2003, p. 1). The questions asked during drill are directly related to the skills students are taught during the other portions of HillRAP for the specific purpose of reinforcing this learning (HillRAP, 2003). Suggested drill questions may include questions referring to: phonics rules, letter sounds, syllable types, etc. (HillRAP, 2003).

Drill is followed by phonological awareness (HillRAP, 2003). In this portion of the lesson, the teacher models the skill students are learning (HillRAP, 2003). The phonological awareness lessons follow a continuum that begins at the word level with skills such as counting the number of words in a sentence, determining whether two spoken words are the same or different, recognizing whether two words rhyme, and producing a rhyming word when a rhyming pair is presented (HillRAP, 2003). It progresses through the syllable level with skills including blending syllables to form words as well as segmenting words into syllables (HillRAP, 2003). Finally, the

phonological awareness continuum ends at the level of phonemes with skills such as blending onsets and rimes to form words, segmenting words into their onsets and rimes, adding an initial phoneme, adding a final phoneme, changing an initial phoneme, changing a final phoneme, isolating and producing phonemes in initial, medial, and final positions in CVC words, blending phonemes to make words, segmenting words into their individual phonemes, deleting syllables, isolating and producing the initial, medial, and final phonemes in spoken CVC words, identifying vowel sounds as long or short, deleting phonemes (initial, final, and medial), adding a phoneme in the second position of a given CVC word to create an initial consonant blend, and adding a phoneme in the third position in a given CVC word to create a final blend (HillRAP, 2003). Regardless of the skill, all phonological awareness skills are present orally though picture cues and use of counters are recommended when first learning some skills along the continuum (HillRAP, 2003). In order to prevent student confusion, new skills are taught one at a time with the teacher first modeling the skill using multiple examples. Then, students engage in guided practice until they are able to independently and correctly perform the skill. At such time, a new skill can be introduced, and the process begins anew (HillRAP, 2003). Once all of the skills in the continuum have been mastered, the phonological awareness portion of the HillRAP program ceases (HillRAP, 2003).

Word attack follows phonological awareness and allows students to practice decoding words by applying the phonics, syllabication and accent rules they have learned (HillRAP, 2003). Word attack word lists begin with one syllable short vowel

words and increase in difficulty as skills are mastered (HillRAP, 2003). In kindergarten, the word lists begin with consonants and vowels in isolation followed by short a CVC words and short a word families, then short i CVC words and short i word families, and so on until all of the short vowels have been covered within both CVC words and word families (HillRAP, 2003).

After word attack, children practice fluency of words in isolation (HillRAP, 2003). Word attack lists that have been mastered or have been moved to weekly review are used for the fluency drills (HillRAP, 2003). In the fluency portion of HillRAP, students review the rules or strategies necessary to decode the listed words with the teacher, practice reading the words for a minimum of one minute, and then orally read as many words as they are able to in one minute. Any errors are noted and reviewed with the teacher, the words read correctly, and errors are graphed, and after three days of reading the same list a goal intended to be both reachable as well as to stretch the student is set. Once the student reaches their goal three consecutive times, that fluency list is considered mastered and a new list is chosen (HillRAP, 2003).

Explicit vocabulary instruction begins in HillRAP in level 1 (HillRAP, 2003). However, there is no specific curriculum or continuum for vocabulary development in HillRAP. Instead, teachers are encouraged to teach "specific word-learning strategies [that] includes assisting students in appropriate dictionary use (traditional and online dictionaries) and in developing contextual and morphemic (root words, suffixes, prefixes) analysis skills, "(HillRAP, 2003, p. 73).

Reading and comprehension are the final component of the HillRAP program (HillRAP, 2003). Oral reading is emphasized in the earlier grades and viewed as an opportunity to apply the skills learned through word attack and fluency drills (HillRAP, 2003). Likewise, practice in oral reading is intended to increase fluency, oral expression, and automaticity (HillRAP, 2003). Like the other components of the HillRAP program, reading comprehension is highly individualized meaning that each child is likely to have a different text from which to read orally (HillRAP, 2003). For the youngest readers, decodable texts are recommended such that the texts used here can closely match a student's word attack proficiency level (HillRAP, 2003). Comprehension strategies are also taught during this time. They are modeled and practiced continuously throughout the program and include: think-alouds and mental imagery for monitoring comprehension, making connections and making predictions, story and text structure with the aid of graphic organizers, question answering and generating, and summarization (HillRAP, 2003).

## Analysis

Thematic analysis using a constant-comparative method was used for data analysis. Constant-comparison is based on grounded theory and allows for the identification of important themes (i.e. those that help answer the research question). It is done systematically, providing an audit trail of the process from start to finish (Hancock, Ockleford, & Windridge, 2009). Ezzy (2002) describes thematic analysis as an inductive means of discovering patterns in text. The first step in this process is open coding where the researcher creates categories based upon patterns presented in the

text. The text, therefore, guides the analysis. For this study, texts included interview transcripts, observation protocols and field notes, and the following documents: kindergarten report cards, ELA unpacking documents, curriculum calendars and curriculum guides, and teacher manuals for Letterland, Fundations and HilRAP. All of these were also analyzed, in turn, for patterns.

Prior to analysis, the data from interviews were transcribed verbatim. As I read over each transcript, I highlighted noteworthy points and employed an open coding method for context and meaning, noting themes, patterns, and differences as they emerged. The coding process began immediately after the first interview and continued throughout the course of the study. Initial coding entailed a process of looking closely at the data and attempting to note what was "going on" in the data. This was done word by word and line by line using the constant-comparative method as defined by Thornberg and Charmaz (2012) and included an iterative process of going back and forth between each piece of data and the codes, as they began to emerge, to determine whether the data fit the codes. Data and codes were compared within single interviews, then between interviews. According to Dewalt and Dewalt (2002) field notes are both data and analysis as observations alone are not data unless they are recorded in field notes. Thus, observation protocols and subsequent field notes were reviewed concurrently, and analyzed to provide the necessary details, which supported the analysis. Finally, documents were examined and analyzed noting connections to emerging themes and patterns as they related to the original research questions. Similar codes were examined closely to determine if they fit broader

categories. Categories, as they emerged, were also compared in terms of the original data, and their initial codes. This continued until no new codes or categories were found. Themes were considered based on the categories that emerged and compared in a similar manner. Throughout the process, a conscious effort was made to use the participants' own language to describe each theme and highlighted 'quotable quotes' were used within the analysis. With a plethora of data to analyze, organization throughout data collection and analysis became a significant component of the study. For this reason, a crosswalk was used to ensure organization and efficiency of both data and analysis. Additionally, inter-rater reliability was utilized with a colleague (a peer within the later stages of the doctoral program at the University of North Carolina Charlotte for Curriculum and Instruction) to ensure the accuracy and validity of all identified codes and themes. We unanimously agreed upon each of these.

Each participant was interviewed once, classroom observations occurred three times for each participant, and documents were collected throughout the study allowing for triangulation of data sources. According to Maxwell (2013) triangulation reduces the risk of chance associations and biases. In this case, triangulation was used to ensure the analysis was comprehensive and well-developed. Data retrieved from interviews, observations and documents allowed for rich interpretation of data and led to several themes including: balance, let the curriculum be your guide, data-driven, and all in a day's work. Each of these themes related to one or more of the research questions. The themes balance, let the curriculum be your guide, and all in a day's work are related to how kindergarten teachers embed instruction in phonemic

awareness across the school day. The themes let the curriculum be your guide and all in a day's work are also related to how closely aligned instruction in phonemic awareness in kindergarten is to research based best practices. Finally, the themes data-driven and all in a day's work relate to how kindergarten teachers use DIBELS next assessments to assess student growth in phonemic awareness as well as how the assessments inform their instruction.

**Balance**

The first theme to emerge was that of balance. This theme refers to the participants stated beliefs regarding the best way to teach reading to young children as well as from their observed lessons and district curriculum calendars and guides. Several participants made reference to the way(s) they strived for balance in their reading instruction. Beth, for example, said "a balanced approach to literacy is best for most students." April reinforced this ideology saying, "it's all important. Everything from phonemic awareness and phonics to vocabulary and strategies for comprehension, to fluency. It all matters, and not just a little. It matters a lot." Kay continues this theme stating, "I don't really separate phonemic awareness from phonics when I'm teaching, or from spelling and writing for that matter." Kay elaborates on this theme saying, "to build some cohesiveness, I try to pull a thread so-to-speak through it all to help the children build connections to what we've already done and what we're doing next." Leslie further maintains that "bringing a balance to literacy instruction means tailoring it to the strengths and needs to the students

themselves do that each child gets precisely what they need to be successful and continue to grow and develop as learners."

Piedmont Platte's curriculum calendars and guides support the idea of balance in kindergarten literacy instruction. Each of these documents includes standards, instructional practices, and suggested resources for the instruction of phonemic awareness. The calendar lays out how phonemic awareness instruction should progress over the course of the year, and the guides provide parameters for the instructional practices including how much time should be provided per day for instruction. The calendars and guides do the same for comprehension, vocabulary, phonics, spelling, and writing as well.

**Let the Curriculum Be Your Guide**

The next theme to emerge was let the curriculum be your guide. This theme refers to the participants consistent use and reference to the curriculum resources, calendars, and guides provided by Piedmont Platte. Several participants spoke about their reliance on district approved resources and curriculum when planning and delivering their phonemic awareness lessons. For example, Holly stated, "I use a combination of Letterland and Fundations with lots of work with CVC words." Beth echoed Holly's sentiment saying, "I use Letterland mostly with some Fundations for phonemic awareness. I also have a book I use sometimes called *Phonemic Awareness For All*. Sometimes I might get something off of teacher-pay-teacher. But, mostly I use Letterland." Likewise, Kay declared, "I use mostly Letterland and I teach the rules I learned in school like silent e, two vowels go walking, digraphs, blends and even

some basic suffixes and prefixes." April also weighed in stating, "I'm a kind of by-the-book teacher when it comes to some of this. I still feel somewhat new to kindergarten, so I do what the teaching guides tell me to do."

In each of the 18 observations, the activities and lessons could be directly linked back to the teacher manuals Piedmont Platte provided to kindergarten teachers for phonemic awareness and phonics instruction. Moreover, many resources linked to Letterland (letter cards) and Fundations (magnetic letter boards) were seen in use during observations. Furthermore, it was also possible to connect the observed lessons to the district's curriculum calendars and guides. The teachers did not stray from these resources when planning for or delivering their lessons. Even on the rare occasion where different materials were used, the gist of the lesson remained the same. For example, Holly's students used slinky toys to practice segmenting and blending onsets and rimes during my first observation in her classroom. Though the use of slinky toys was not mentioned in the Letterland manual, segmenting and blending onsets and rimes is covered. Moreover, the specific lesson dictated on the curriculum calendar and outline in the curriculum guide for the day of this observation, can be tied to one of the lessons (108) specific to blending and segmenting onsets and rimes in the Letterland manual.

**Data-driven**

Another theme that emerged was data-driven. This theme refers to the participants numerous references to testing and resulting data as well as to how they use the data within both the classroom and grade level. Each participant discussed

assessments, the assessment process, the resulting data, and how the data were used. Some shared positive views, while others were less enthusiastic about it. Their views even contradicted one another at times.

Beth, for example, had a positive view. She said, “I use mCLASS more for choosing groups and rely more on my day to day note taking for phonemic awareness instruction.” She continued, “we use the results of mCLASS in our data walls for interventions groups and some of those have a focus on phonemic awareness or even letter sounds depending on where students are at.” Beth also said, “I use mCLASS assessments at the benchmark times or to progress monitor growth for those students who didn’t meet the benchmark.” Beth does not rely solely on mCLASS however. She states, “I use anecdotal record-keeping to help me know where my students are with their skills so that I can ask students to respond based on what they are able to do. For example, I might ask one student to give me the middle sound but ask another for a beginning sound. Another student might be asked to segment the whole word. It really depends on what I know they are ready for.”

Holly, also shared a positive outlook. She stated, “the district requires us to progress monitor our students who don’t meet the benchmarks for mCLASS every 10-20 days. I progress monitor my students in FSF, PSF, or NWF depending on which area is lowest for them. If they passed the benchmark, I don’t need to do the assessments but once a quarter.” Holly continues, “the grade level uses the data that we get from mCLASS to make groups for E/I time after BOY and MOY then we use the progress monitor data to help us revise the groups after about six weeks. This way,

kids who don't need the same intervention can move into a different group. Also, the kids who aren't making progress, we can look at why and make changes to what they get for interventions." Holly concludes her thoughts stating, "I use my mCLASS assessment data to group students for guided reading. Typically, the kids who are reading lower level texts need more practice in phonemic awareness."

Leslie was possibly the most enthusiastic of the participants. She claimed, "I'm glad we have the mCLASS assessments. I know not everyone is, but I like it. Maybe I've been teaching long enough that I remember what it was like without the assessments. It was really a lot harder. You had to figure everything out on your own. It was a struggle for me trying to figure out what the kids needed help in. With mCLASS, there's no wondering. You don't doubt yourself. Here's the test, the data, and I'm not questioning myself over which area they need the most help in. It's right there in black and white. And even the progress monitoring, though it can be time consuming, it tells you whether there's progress being made or not. Again, no doubts." Karen, too, shared a positive view. She claimed, "I use my mCLASS data all the time. The data really let me know where my kids begin the year. Then, with progress monitoring, I get to see how quickly, and in some cases how slowly, my kids were learning. I also use the data to help me plan. Not so much my whole group lessons. That comes more from the pacing guides, but for my small groups where I am doing more of a guided reading group. This is where the data really helps me. I can target more precisely what each student or group of student's needs." Karen continues, "our school is really looking at the data more to give targeted interventions to our kids too.

I think this is helping a lot because my kids are not just getting help from me, they are getting it from a reading specialist too."

April is less enthusiastic about the assessments. She opines, "mCLASS is a necessary evil. We have to do them. The data we get is useful to a degree, but it is so time consuming. I mean, I have overall gotten a lot of good data from it, but I really struggle with the amount of time, and with the windows of time to complete it. It's just overwhelming really. I spend a lot of time progress monitoring because, well, I'm supposed to pm the reds every other week and the yellows every fourth week and I just, it is very time consuming keeping up with that on top of just day to day learning." April continues, "I think I probably could tell you the same information, maybe a bit differently, but essentially the same information, just telling you about my kids and what I observe in our day to day lessons. Seriously, there are no surprises when I see my mCLASS data. I pretty much know which skills my kids have down, and which ones they are still struggling with. But you know, you do it because you have to, not because it tells you anything you don't already know." Kay, too, is not enthusiastic about the assessments. She says, "personally, I don't like mCLASS. I don't, you know, but we're told to do it, so…. If we didn't have mCLASS though I do believe our teachers would teach our children to read and I do believe our children would grow as readers even without mCLASS. I know this because it's exactly how we use to teach." Kay continues, "I think the tests, they can be frustrating. It's really sad how our littlest learners pick up on how poorly they test compared to their peers. It isn't directly talked about or made to be a big deal, but they all notice who has the

beginning books still in May and who had moved on to much tougher books. It seems kindergartners should be joyous about learning, and since these tests have been around I've seen a lot of sad faces in kindergarten." Kay does capitulate acknowledging that, "we are teaching our children differently now. Through the assessments, we find out what the children need extra help in and then we work with them on that skill where before we really didn't do that. Don't misunderstand, we helped them in ways they needed help before, but now the help we provide is more targeted and more specific to student's actual needs, and we're doing that differently because of mCLASS. Well, because of the data we receive from mCLASS."

**All in A Day's Work**

The final theme to emerge was all in a day's work. This theme refers to the ways the participants talked about their daily instructional practices as well as both district and personal expectations for instruction. In addition, this theme refers to the instructional practices observed in each participants classroom throughout the duration of the study as well as the documentation of instructional expectations via curriculum calendars, curriculum guides, and teacher manuals for district provided resources such as Letterland, Fundations, and HillRAP.

Most participants discussed how they incorporated phonemic awareness instruction into different aspects of the school day as well as the important role phonemic awareness plays in their overall literacy instruction. Most participants, for example, talked about how they build in both lessons and practice with phonemic awareness skills into their day. For example, Holly said, "I also incorporate some

phonemic awareness in my small group guided reading groups." She continues saying, "the kids also get additional practice during our E/I (enrichment and intervention) time. Likewise, Beth stated, "I probably spend 10-15 minutes teaching phonemic awareness to the whole group, and maybe another 10-15 minutes total within my small guided reading groups." Beth continued, "I use anecdotal record-keeping to help me know where my students are with their skills so that I can ask students to respond based on what they are able to do." Leslie maintained, "I also use a combination of whole group and small group instruction. During my guided reading time, I tend to pull small groups and focus part of the time on phonemic awareness using the HillRAP program." Finally, Kay remarked, "our reading block in 90 minutes, but it isn't consecutive because of the schedule." Kay explained, "we do a lot of group learning, A lot of whole class responding. I use technology, but not all the time. That' just my way."

Participants also discussed the importance of phonemic awareness instruction. For example, Holly proclaimed, "phonemic awareness, I think, has always been a part of our day. It's so important to developing young readers—helping them transition from oral language to written." Karen claimed that, "phonemic awareness is the core of reading instruction in kindergarten. Everything we do, really, stems from it. We begin the year teaching letters and sounds, move on to identifying the first sounds in words then start to segment and blend words, and by the end of the year we are decoding. This is so important because we basically have to get children who may not even have basic print concepts down and get them to read by the end of the year."

Karen concurred stating, “so many of my students begin the year with no real school experience. They don’t recognize their name in print. There’s a huge amount of learning that has to happen.” Beth suggested “not every child needs the same amount of support for phonemic awareness or phonics or comprehension skills like retelling.” Thus, Beth stated, I rely more on day to day what my kids can do.”

**Data Linked to Research Questions**

The themes that emerged from the data addressed each of the questions posed in this study. For example, the themes of balance, let the curriculum be your guide, and all in a day’s work provide an answer to question one, how closely does instruction in phonemic awareness in kindergarten align with what research has deemed best practice. The themes of let the curriculum be your guide and all in a day’s work also address question two: how do kindergarten teachers embed instruction in phonemic awareness within their instruction across the school day. Finally, the theme of data-driven addresses question three: how do kindergarten teachers use DIBELS Next assessments to assess phonemic awareness in their students, and how are the results of these assessment used to drive their instruction.

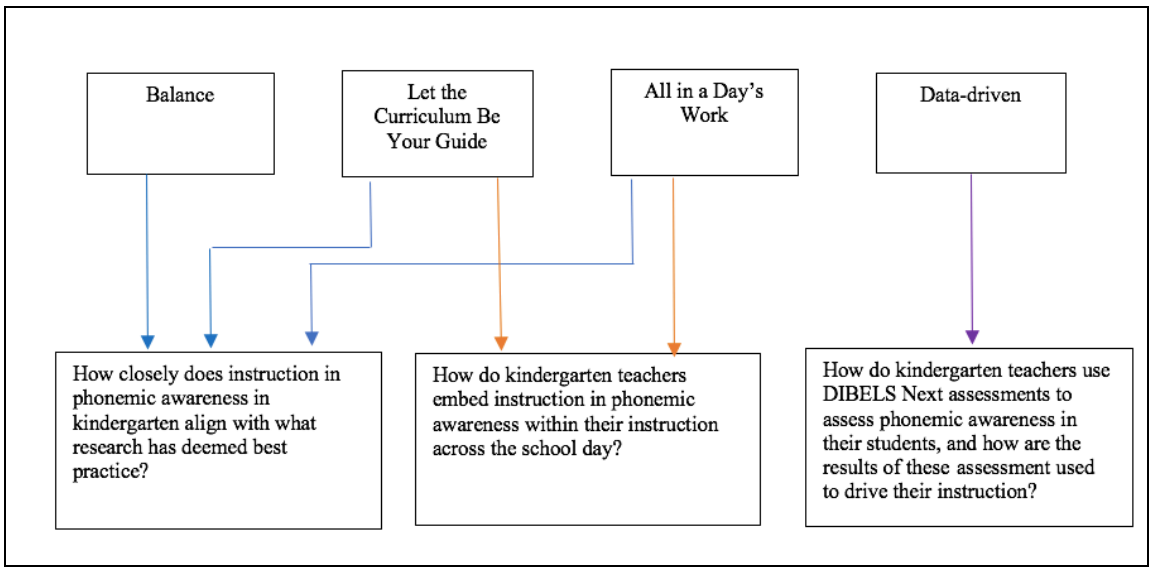



*Figure 2*: Date Linked to Research Questions. This figure illustrates how the themes are linked to each of the research questions.

## Summary

Chapter four describes the setting of this study and the background of the selected teacher participants. Detailed descriptions of each case study are presented including interviews, observations, and documents collected for analysis. Research questions were used to guide the analysis and themes were linked to results. During data collection, the following themes emerged: balance, let the curriculum be your guide, data-driven and all in a day's work. Each theme related to one or more of the research questions. All themes were linked to previous research and theory. The theme of balance related to the first question: How closely does instruction in phonemic awareness in kindergarten align with what research has deemed best practice? The themes of let the curriculum be your guide and all in a day's work related to question one: How closely does instruction in phonemic awareness in kindergarten align with what research has deemed best practice, and question two: How do kindergarten

teachers embed instruction in phonemic awareness within their instruction across the school day? Finally, the theme of data-driven related to question three: How do kindergarten teachers use DIBELS Next assessments to assess phonemic awareness in their students, and how are the results of these assessments used to drive their instruction?

Chapter five will present a summary of the overall study on phonemic awareness instruction in kindergarten. Conclusions are drawn from the data presented in chapter four. Chapter five will then provide a discussion of the implications based on the data and recommendations for both practice and future research in the area of phonemic awareness instruction.

# Chapter 5: DISCUSSION AND IMPLICATIONS

## Overview

Chapter five presents a summary of the study on phonemic awareness instruction in kindergarten. Conclusions are drawn from the data presented in Chapter four. The chapter then addresses implications for practice and makes recommendations for future research in the area of phonemic awareness instruction in kindergarten.

The link between phonemic awareness in kindergarten and future reading achievement is so strong that a child's ability or inability to manipulate phonemes correlates with reading success or failure through the twelfth grade (Adams, 1990). Consequently, phonemic awareness is an essential component in kindergarten reading programs. Kindergarten teachers need to use research-based best practices when instructing children in phonemic awareness in order to maximize student achievement in reading and minimize or eliminate the number of readers struggling to read throughout their school years. Teachers who use these instructional practices with their kindergarten students are more likely to build a solid foundation in the phonemic awareness skills that provide students a meaningful link between oral communication and reading.

As one reviews the research, it becomes apparent that though there is abundant research in phonemic awareness and its connection to reading success in later years as well as what constitutes best practice, there is a lack of research regarding whether or not practice mirrors what research has found. This study explored the instructional

practices that teachers are using, examined teacher familiarity and knowledge of research based best practices, explored district provided curricular materials and resources used in instruction, and investigated how this translated into effective instruction of phonemic awareness skills in kindergarten in one high performing school district's kindergarten teachers. The following questions guided this study:

1. How closely does instruction in phonemic awareness in kindergarten align with what research has deemed best practice?
2. How do kindergarten teachers embed instruction in phonemic awareness within their instruction across the school day?
3. How do kindergarten teachers use DIBELS Next assessments to assess phonemic awareness in their students, and how are the results of these assessments used to drive their instruction?

Chapter 3 discussed methodology used for this study. A survey was sent to the district's 21 kindergarten teachers. Six participants representing each of the three school sites in the district were then interviewed. Each was then observed three times delivering lessons in phonemic awareness to their students over the course of twelve weeks. In addition to interviews and observations, document used and described by the teachers in both surveys and interviews for their instructional planning were collected and analyzed. Data were coded, and the following themes emerged: balance, let the curriculum be your guide, data-driven and all in a day's work. Chapter 4 connected the guiding research questions to the data and resultant themes. Chapter 5 discusses the implications of the findings based on the data analysis in Chapter 4. This

chapter begins with a summary of the findings and is followed by the impact of the results of this study. Possibilities for future research are also discussed.

## Findings

The primary focus of this study was to explore how closely kindergarten teachers in a high performing school district in North Carolina instruct students towards mastery of phonemic awareness skills. Fifteen of the district's 21 kindergarten teachers responded to a preliminary survey. Six of these respondents participated further through interviews and classroom observations of their phonemic awareness instruction. Documents were collected throughout the study and included kindergarten report cards, ELA unpacking documents, curriculum calendars and curriculum guides, and teacher manuals for Letterland, Fundations and HilRAP.

When analyzing the data for this study, four themes emerged. Themes have been described by Braun and Clarke (2006) as capturing "something important about the data in relation to the research question and represents some level of patterned response or meaning within the data set," (p. 82). Often referred to as meaningful units for the data, themes can be considered attributes, elements, or concepts (Rice & Ezzy, 1999). Each of the findings discussed in this section were derived from the themes produced from the data and included: balance, let the curriculum be your guide, data-driven and all in a day's work.

### Balance

Balanced literacy was a concept first addressed by Michael Pressley in 1998 and continues to appear in the latest edition of his book *Reading Instruction That*

*Works* (Pressley & Allington, 2015). In writing about effective early literacy instruction, Pressley and Allington (2015) emphasize a need for a balanced approach that combined the strengths of both whole-language and skills instruction suggesting a marriage of sorts between the development of necessary skills and the real-world application of those skills in the practice of authentic reading and writing tasks. Shanahan (2014) contends that balance is an ambiguous term and is often not practiced as Pressley initially intended. Shanahan (2014) suggests that many "kids don't get substantial explicit instruction in phonological awareness, phonics, vocabulary, spelling, handwriting, oral reading fluency, reading comprehension, or writing," (p. 3).

The theme of balance derived from the data reflects the beliefs of the participants regarding their views on the best way to teach beginning reading. Balanced literacy was expressed as being "best for most students." Moreover, the concept of balanced literacy was described as all-encompassing and including "everything from phonemic awareness and phonics to vocabulary and strategies for comprehension, to fluency," as well as "spelling and writing." In addition, there was a desire to "build cohesiveness" throughout these component parts as well as tailoring their instruction to the "strengths and needs to the students themselves so that each child gets precisely what they need to be successful and continue to grow and develop as learners." Finally, the documents reviewed supported the idea of balance in kindergarten literacy instruction as well.

The theme of balance as articulated by the participants aligns with both Social Constructivism and Emergent Literacy theory. The words of April and Kay, in particular, bring to mind to the perception of emergent literacy as encompassing reading, writing, listening, speaking, thinking, and viewing (Cooper, 1997; Teale & Sulzby 1986). Furthermore, Kay's remark regarding the need to "pull a thread through it all" invokes the idea that there is an interrelatedness in the development of children's listening, speaking, reading, and writing skills (Morrow, 2012; Sulzby & Teale, 1991). Similarly, Leslie's thoughts on "tailoring [instruction] to the strengths and needs to the students themselves" is akin to the notion that learning is dependent on the individual learner, the child's zone of proximal development, and the social setting in which it occurs (Vygotsky, 1978).

**Let the Curriculum Be Your Guide**

Let the curriculum be your guide refers to the participants consistent use and reference to the curriculum resources, calendars, and guides provided by Piedmont Platte. Participants relied heavily on district approved resources and curriculum when planning and delivering their phonemic awareness lessons. Participants endorsed programs such as Letterland and Fundations and emphasized that they often "do what the teaching guides tell me to do," and "follow the curriculum guides closely." Likewise, in each of the observations, the activities and lessons were readily linked back to the teacher manuals and curriculum guides referred to by participants. The teachers rarely strayed from these resources when planning for or delivering their lessons.

The theme let the curriculum be your guide aligns with the notion that districts must not assume teachers have the knowledge base necessary to effectively instruct children in phonemic awareness (Cheesman, McGuire, Shankweiler, & Coyne, 2009). Instead, they should assume they do not and provide adequate on-going professional development to ensure students receive the best instruction possible. Piedmont Platte offers a plethora of resources and guides, along with the training necessary to carry out instruction, to its kindergarten teachers. Thus, though they may not be proficient on their own in phonemic awareness knowledge and skills, there are numerous resources at their fingertips to access which follows the typical phonemic awareness continuum which grows in complexity as children progress (Fox & Routh, 1975; Treiman & Zukowski, 1996). The resources followed the best-practices premise for instruction in that instruction should be simple with a focus on one or two skills at any one time (Armbruster, Lehr, Osborn, & Adler, 2009; Ehri et al., 2001; Shanahan, 2005). Moreover, the resource the participants relied upon followed Shannahan's (2005) advice to combine phonemic awareness and phonics. In addition, the resources also tended to pair explicit instruction in spelling with phonemic awareness and phonics as recommended in previous research (Byrne & Fielding-Barnsley,1993; Wagner & Rashotte, 1993).

**Data-driven**

Data-driven refers to the participants use of assessments and resulting data as well as to how they used the data for instructional purposes. Each participant discussed assessments, the assessment process, the resulting data, and how the data

were used. Participants had a lot to say on the subject of assessments and data, though not all views expressed were positive, nor were they always consistent.

Data-driven also refers to the notion that the curriculum is but one guide for instruction. It is equally important to weigh the individual strengths and needs of the children when planning for instruction. After all, "learning to become literate is very individual," (Zeiler, 1993, p. 110) as each child presents differently in terms of their background, experiences and expectations of literacy and learning (Zeiler, 1993). Assessments and their resulting data allow teachers to create learning situations that fall within each child's ZPD.

The data-driven theme aligns with best practices for phonemic awareness instruction. For example, Shanahan (2005) found the amount of time needed for instruction will vary based on the individual needs of each child. Consequently, research deemed it imperative to use diagnostics to assess the needs of each child and make adjustments to instruction as needed (Armbruster, Lehr, Osborn, & Adler, 2009; Shanahan, 2005). Piedmont Platte and the participants in this study regularly used assessments and data to assist their planning of instruction specifically to target instruction to individual student needs. They did not necessarily use the data to inform whole group instructional needs, but rather to facilitate differentiation within whole group and small group settings as well as to determine individual needs to students for the purpose of interventions.

**All in A Day's Work**

All in a day's work refers to the instructional practices observed in each participants classroom throughout the duration of the study as well as the documentation of instructional expectations via curriculum calendars, curriculum guides, and teacher manuals for district provided resources such as Letterland, Fundations, and HillRAP. It also is reflected in the ways in which participants talked about their daily instructional practices. For example, most participants discussed how they incorporated phonemic awareness instruction into different aspects of the school day as well as the important role phonemic awareness plays in their overall literacy instruction, the amount of time they devote to it both daily and over the course of a school year, and the ways in which they tailor instruction to fit both whole class and individual needs.

The theme all in a day's work aligns with research-based best practices for instruction in phonemic awareness (Armbruster, Lehr, Osborn, & Adler, 2009; Ehri et al., 2001; National Reading Panel, 2000). First, Ehri et. al. (2001) found that instruction need not last more than 30 minutes in length as to be effective. Most teachers adhered to this limit. Moreover, they tended to incorporate practice of learned skills throughout the day. Next, the research proffered that small group instruction was of greater benefit to children because it allowed them to listen to their classmates as they responded and received feedback from the teacher (Armbruster, Lehr, Osborn, & Adler, 2009). Shanahan (2005), however, acknowledged the time constraint of providing small group instruction and; therefore, recommended using a combination

of both whole group and small group instruction. Participants in this study actively engaged in both whole group and small group instruction. Moreover, many mentioned that some children identified through assessment data received additional instruction in phonemic awareness tailored to their specific needs as an intervention.

**Data Linked to Research Questions**

**How closely does instruction in phonemic awareness in kindergarten align with what research has deemed best practice?** The themes of balance, let the curriculum be your guide, and all in day's work speak to this research question. Through the participant's words, the various observations, and documents a clear picture develops. First, according to research, the time allotted for phonemic awareness instruction should be between 15 and 20 minutes in length (Adams, Foorman, Liundberg, & Beeler, 1998; Ehri et al., 2001; Shanahan, 2005). Next, research has shown that small group instruction is generally more effective than whole group instruction or one-to-one instruction (Armbruster, Lehr, Osborn, & Adler, 2009; Ehri et al., 2001; Shanahan, 2005). Shanahan (2005) did, however, acquiesce that some whole group instruction was likely unavoidable due to time constraints that occur in a typical school day. Third, the research recommends that instruction in phonemic awareness should be kept simple focusing on one or two skills (Armbruster, Lehr, Osborn, & Adler, 2009; Ehri et al., 2001; Shanahan, 2005). Research also suggested that it was more powerful to pair phonemic awareness instruction with instruction in spelling (Byrne & Fielding-Barnsley,1993; Wagner & Rashotte, 1993). Likewise, Torgesen and Mathes (1998) suggested pairing phonemic awareness with

explicit instruction in phonics. Shanahan (2005) further explains that children learned more quickly with a combination of phonemic awareness and phonics activities. Additionally, Ehri et al. (2001) and Shanahan (2005) suggested pairing phonemic awareness instruction with manipulatives such as letter cards or counters. Finally, the use of computer assisted instruction in phonemic awareness was found inconclusive by the National Reading Panel (NRP, 2001).

In Piedmont Platte, the length of time devoted to phonemic awareness instruction averaged between 15 and 30 minutes. Most instruction was delivered in conjunction with the district's approved phonics program called Letterland. Moreover, much of the instruction and practice was done in whole group settings. Small group settings were used as well and focused more on practice of previously taught skills. Lessons were kept fairly simple with a focus on one or two skills. Manipulatives like Elkonin boxes and counters, magnetic letters, and even slinky toys were used where appropriate in whole class and small group lessons. Computer assisted phonemic awareness instruction was not evident. Technology was used at times to facilitate learning, but participants did not mention using computer assisted instruction, no participant was observed using it in the classroom, and it was not suggested as a resource in any of the district documents. Overall, Piedmont Platte's kindergarten teachers, as represented in this six-person sample, closely align their instruction in phonemic awareness with research-based best practices as established by Ehri et al. (2001) and Shanahan (2005).

**How do kindergarten teachers embed instruction in phonemic awareness**

**within their instruction across the school day?** The themes of let the curriculum be your guide, and all in day's work speak to this research question. As with the previous question, the participant's words, the various observations, and documents create a distinct portrayal of just how phonemic awareness is embedded in Piedmont Platte's kindergarten teacher's instruction across the school day. First, the curriculum calendars and guides provide a scope and sequence of lessons to follow over the course of the year as well as the necessary resources to manage them. Teachers offer instruction using whole group lessons that combine phonemic awareness with phonics and spelling. During this time, new concepts and skills are taught and practiced. Teachers also use small group guided reading time to practice phonemic awareness skills targeted to individual student needs. Likewise, some students receive additional small group instruction and practice daily during school wide enrichment and intervention times. At times, teachers also incorporate practice of phonemic awareness skills during transitions and brain breaks using songs and more "play-like" activities. Schedules habitually dictate when teachers can provide instruction resulting in instruction in phonemic awareness that must, of necessity, occur at multiple points throughout the day.

**How do kindergarten teachers use DIBELS Next assessments to assess phonemic awareness in their students, and how are the results of these assessments used to drive their instruction?** The theme of data-driven speaks to this research question. The research has said that it is imperative to use diagnostics to assess the needs of each child and make adjustments to instruction as needed based on

the results obtained (Armbruster, Lehr, Osborn, & Adler, 2009; Shanahan, 2005). Piedmont Platte teachers appear to be following this recommendation. Each participant spoke at great length about mCLASS assessments (which feature DIBELS Next assessments) and the resulting data. Per state requirements, the Piedmont Platte district follows a thrice yearly assessment program for all kindergarten students. Moreover, students who fail to meet the benchmarks established for the assessments are progress monitored every 10-20 days until the next benchmarking period. Teachers, then, use the data from these assessments to create intervention groups, and small guided reading groups. Along with the assessment data derived from DIBELS Next assessments, some teachers use anecdotal records taken during the course of regular instruction to help them target individual student need, growth, and gains.

Though not all of the participants were enthusiastic about the mCLASS assessments, most found the data at least somewhat useful. Moreover, even if they did not particularly care for the assessments, they participated in at least grade level analysis of the data for the purpose of providing interventions for students in need of extra assistance with particular skills such as blending and segmenting, isolating phonemes, or identifying first sounds in words.

## Implications for Practice

This study presented data collected primarily from six kindergarten classroom teachers in the Piedmont Platte School District. The research explored the instructional practices teachers used, examined their familiarity and use of best practices in phonemic awareness instruction, as well as their use of assessment data, specifically in

terms of how it informed their practice. Based on the data, there is evidence to suggest that research-based best practices are in place during kindergarten instruction in phonemic awareness in Piedmont Platte schools. A great deal of that instruction was, however, provided in whole group settings, though small group lessons also occurred. Since small group instruction was found in previous studies to be more effective than whole group instruction or one-to-one instruction (Armbruster, Lehr, Osborn, & Adler, 2009; Ehri et al., 2001; Shanahan, 2005) it may be worthwhile to look for ways to maximize small group instructional time.

Prior research indicated that the use of diagnostics to assess individual student needs and to make adjustments to instruction was a key component of strong instructional practices in phonemic awareness (Armbruster, Lehr, Osborn, & Adler, 2009; Shanahan, 2005). Although the evidence suggested that Piedmont Platte teachers were using assessment data to inform their teaching in phonemic awareness particularly when differentiating instruction in the whole groups settings as well tailoring small group lessons to meet the needs of their students, overall instruction appeared to be very closely tied to curriculum calendars that plotted out exactly what skills were to be taught on specific days beginning with the basics of letters and sounds and progressively moving through more complex skills throughout the school year.

Keeping in mind Vygotsky's (1978) theory regarding the ZPD in learning, it would behoove Piedmont Platte's kindergarten teachers to use their assessment data in ways that ensure that children are working primarily within their ZPD. Certainly, there

is hope that whole group lessons would result in optimal learning as a result of others' scaffolding (Vygotsky1978; 1986). However, an over reliance on whole group lessons runs the risk of too many children working at tasks outside their ZPD resulting in a lack of new learning (Vygotsky, 1986). Professional development and continued coaching in this area would enable teachers the freedom to truly tailor their instruction to student needs and would likely result in increased learning for students. Moreover, creating lessons that fall within individual student's ZPD would likely result in an increase in small group instructional time. Thus, teachers would base their instructional decisions with equal measure on their knowledge of the continuum of reading and writing development, developmentally appropriate instructional strategies, and the individual strengths and needs of the students before them.

The time currently allocated for phonemic awareness instruction may be sufficient to meet the demands of increased small group instructional time. The amount of time teachers reported for instruction averaged between 15 and 30 minutes. Based on observations, much of this time was dedicated to whole group teaching. Additional time was spent in small group instruction and practice. Prior research indicated that time allotted for phonemic awareness instruction need not surpass 20 minutes per day (Adams, Foorman, Liundberg, & Beeler, 1998; Ehri et al., 2001; Shanahan, 2005), and that a total of 5 to 18 hours of instruction in phonemic awareness produced large gains in students' knowledge of phonemic awareness (Ehri et al., 2001). Thus, careful reallocation of time for small group instruction may be sufficient for meeting this need.

## Implications for Research

This case study examined kindergarten phonemic awareness instructional practices in one high performing school district in North Carolina. The study focused on the practice of each participant through surveys, interviews, observations, and document analysis. There were only six participants from three school sites in one district in this study and the preponderance of these participants were Caucasian, of middle age, and in the middle to late stages of their teaching lives, therefore generalization of the results of this study to other kindergarten teacher populations is problematic. The findings cannot be generalized to additional kindergarten teacher populations without replicating the study in various contexts to validate the results. Although this study provides a descriptive profile of how Piedmont Platte's kindergarten teachers align their phonemic awareness instruction with research-based best practices, to discover whether the findings are similar or different to other kindergarten teacher populations additional research is recommended. Future research may involve more participants across both high and low performing school districts, across racial backgrounds, and across urban, suburban and rural districts to broaden the data base and form stronger conclusions regarding phonemic awareness instructional practices. In addition, expanding the study to include instructional practices in phonemic awareness beyond kindergarten as well as expanding observations to include a larger sample of instructional time could add significantly to the research. I would be interested in seeing results from a larger sample of participants across several school districts and grade levels in a future study.

Another opportunity for future research could compare student achievement over time in classrooms where teachers plan their phonemic awareness lessons based on the assessment data of their students such that instruction is maintained within individual student's ZPD with those receiving instruction following a preconceived curricular calendar. The results of such a study would contribute to the research on instructional group size. Additionally, it would provide evidence towards the practicality of increasing small group instructional time for phonemic awareness.

## Concluding Remarks

As a special education teacher and reading specialist I have had the opportunity over the past 20 years to teach reading to a vast array of students as well as to provide professional development to teachers on various topics related to literacy. In my experience, despite their years in the classroom, many teachers are unsure of how reading develops in young children. A preponderance of teachers in grades two and above often do not know the fundamentals of beginning reading. Thus, they struggle to assist students reading below grade level make the gains needed to catch up to their peers. From these compelling realizations grew my desire to examine instructional practices in reading beginning with its very foundation: phonemic awareness. For, if we can pinpoint where our instruction breaks down, we can work towards improving it, thereby increasing reading achievement for all.

Research indicates that phonemic awareness has a significant impact on reading achievement in young learners. In fact, understanding the relationship between sounds and letters is thought to be one of the fundamental tasks for beginning readers

and writers (Adams, 1990). Moreover, across the continuum of phonological awareness tasks, phonemic awareness is often considered the most important in the development of reading and writing (Scanlon, Anderson, & Sweeney, 2017). As educators, we strive to provide effective reading instruction that moves our students toward reading success. To do this, we need to understand how reading works; how to incorporate the necessary skills in our classroom instruction. It begins in kindergarten as teachers assist children in becoming phonemically aware.

Though research has provided us with what constitutes best practices for instruction in phonemic awareness (Ehri et al., 2001; Shanahan 2005) there is a lack of research regarding whether or not practice mirrors what research has found. Moreover, though high performing schools like those in Piedmont Platte may know what research says about best practices, there is often a gap between their knowledge of best practices and actually using them (Shannon & Bylsma, 2007). The evidence, as shown in this study, suggests that instructional practices in phonemic awareness are following research based best practices relatively well. Still, there is room for improvement especially regarding the importance of basing our instruction on the strengths and needs of the children entrusted in our care. To this end, future research should include an exploration of a wider selection of both high and low performing districts to determine if research-based best practices hold true across larger geographic regions. In addition, future research should include examinations of both how teachers maintain instruction within individual student's ZPD as well as research that compares the achievement of students receiving such instruction. Finally, with a clear picture of

how instructional practice is carried out regarding this beginning step on the journey to successful reading, the other pillars of successful reading can open to exploration.

# References

Abrami, P., Borohkovski, E., & Lysensko, L. (2015). The effects of abracadabra on reading outcomes: A meta-analysis of applied field research. *Journal of Interactive Learning Research, 26*(4), 337-367.

Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. Cambridge, MA: MIT Press.

Adams, M. J., Allington, R. L., Chaney, J. H., Goodman, Y. M., Kapinus, B. A., McGee, L. M.,… Williams, J. P. (1991). Beginning to read: A critique by literacy professionals and a response by Marilyn Jager Adams. *The Reading Teacher, 44*(6), 370-395.

Adams, M. J., Foorman, B. R., Lundberg, I., & Beeler, T. (1998). *Phonemic awareness in young children*. Baltimore, MD: Paul H. Brookes.

Alegria, J., Pignot, E., & Morias, J. (1982). Phonetic analysis of speech and memory codes in beginning readers. *Memory and Cognition, 10*(5), 451-456.

Alghazo, E. M., & Al-Hilawani, Y. A. (2010). Knowledge, skills, and practices concerning phonological awareness among early childhood education teachers. *Journal of Research in Childhood Education, 24*(2), 172-185.

Amplify Insight. (2014). *mCLASS: Reading 3D: Observational reading assessment software in English and Spanish for grades K-5.* Retrieved from http://www.amplify.com/assessment/ mclass-reading-3d

Angrosino, M. (2007). Doing ethnographic and observational research. Thousand Oaks,CA: Sage.

Archer, A. L., & Hughes, C. A. (2011). Exploring the foundations of explicit instruction. In K. R. Harris & S. Graham (Eds.), *Explicit Instruction: Effective and Efficient Teaching* (pp. 1-21). New York, NY: Guilford Press.

Armbruster, B. B., Lehr, F., Osborn, J., & Adler, C. R. (2009). *Put reading first: Kindergarten through grade 3*. National Institute for Literacy: The Partnership for Reading. Retrieved from: https://lincs.ed.gov/publications/pdf/PRFbooklet.pdf

Ball, E. W., & Blachman, B. A. (1991). Does phoneme awareness training in kindergarten make a difference in early word recognition and developmental spelling? *Reading Research Quarterly, 26*(1), 33-44.

Baxter, P., & Jack, S. (2008). Qualitative Case Study Methodology: Study Design and Implementation for Novice Researchers. *The Qualitative Report 13* (4): 544-559.

Blachman, B. A., Schatschneider, C., Fletcher, J. M., Francis, D. J., Clonan, S. M., Shaywitz, B. A., & Shaywitz, S. E. (2004). Effects of intensive reading remediation for second and third graders and a 1-year follow-up. *Journal of Educational Psychology, 96*(3), 444-461.

Blevins, W. (2001). *Teaching phonics & words study in the intermediate grades: A compete sourcebook*. New York, NY: Scholastic Professional Books.

Bogdan, R. C., & Biklen, S. K. (1982). *Qualitative research for education: An introduction to theory and methods*. Boston, MA: Allyn and Bacon, Inc.

Bos, C., Mather, N., Dickson, S., Podhajski, B., & Chard, D. (2001). Perceptions and knowledge of preservice and inservice educators about early reading instruction. *Annals of Dyslexia, 51*, 97-120.

Bowen, G. A. (2009). Document analysis as a qualitative method. *Qualitative Research Journal, 9*(2), 27-40.

Byrne, B., & Fielding-Barnsley, R. (1993). Evaluation of a program to teach phonemic awareness to young children: A 1-year follow-up. *Journal of Educational Psychology, 85*(1), 104-111.

Byrne, B., & Ledez, J. (1983). Phonological awareness in reading disabled adults. *Australian Journal of Psychology,* 35,185-197.

Cardoso-Martins, C. (1995). Sensitivity to rhymes, syllables, and phonemes in literacy acquisition in Portuguese. *Reading Research Quarterly, 30(*4), 808-828.

Carson, K.L., Gillon, G. T., & Boustead, T. M. (2013). Classroom phonological awareness instruction and literacy outcomes in the first year of school. *Language, Speech and Hearing Services in Schools, 44*, 147-160.

Carter, S., & Weldon, L. (2011). *Letterland teacher's guide: Step-by-step Kindergarten daily lessons* (Vols 1-2). Baron, Cambridge: Letterland International Ltd.

Center for Public Education. (2005). *High-performing, high-poverty schools: Research review*. Retrieved from: http://www.centerforpubliceducation.org/Main-Menu/Organizing-a-school/High-performing-high-poverty-schools-At-a-glance-/High-performing-high-poverty-schools-Research-review.html

Chard, D. J., & Dickson, S. V. (2015). Phonological awareness: Instructional and assessment guidelines. Retrieved from: www.ldonline.org/article/6254/

Chard, D. J., Simmons, D. C., & Kameenui, E. J. (1998). Word recognition: Research bases. In D. C. Simmons & E. J. Kameenui (Eds.). *What reading research tells us about children with diverse learning needs: Bases and basics* (pp. 141-168). Mahwah, NJ: Lawrence Erlbaum Associates.

Cheesman, E. A., McGuire, J. M., Shankweiler, D., & Coyne, M. (2009). First-year teacher knowledge of phonemic awareness and its instruction. *Teacher Education and Special Education, 32(*3), 270-289.

Cooper, J. D. (1997). Literacy: *Helping children construct meaning* (3rd ed.). Boston, MA: Houghton Mifflin.

Corbin, J. & Strauss, A. (2008). Basics of qualitative research: Techniques and procedures for developing grounded theory (3rd ed.). Thousand Oaks, CA: Sage.

Cossu, G., Shankweiler, D., Liberman, I. Y., Tola, G., & Katz, L. (1988). Awareness of phonological segments and reading ability in Italian children. *Applied Psycholinguistics, 9*(1), 1-16.

Creswell, J. W. (2012). *Qualitative Inquiry & Research Design: Choosing Among Five Approaches.* Thousand Oaks, CA: Sage Publications.

Creswell, J. (2013). *Qualitative inquiry & research design: Choosing among five approaches* (3rd ed.). Thousand Oaks, CA: Sage.

Crotty, M. (1998). The foundation of social research: Meaning and perspectives in the research process. Thousand Oaks, CA: Sage.

Cunningham, A. E., Perry, K. E., Stanovich, K. E., & Stanovich, P. J. (2004). Disciplinary knowledge of K-3 teachers and their knowledge calibration in the domain of early literacy. *Annals of Dyslexia, 54*(1), 139-168.

Cunningham, A. E., & Stanovich, K. E. (1997). Early reading acquisition and its relationship to reading experience and ability 10 years later. *Developmental Psychology, 33*(6), 934-945.

Denzin N. K. (1978). *Sociological Methods*. New York, New York: McGraw-Hill.

Denzin, N. K., & Lincoln, Y. S. (2005). Introduction: The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (3rd ed., pp. 1-32). Thousand Oaks, CA: Sage.

Denizin, N. K., & Lincoln, Y. S. (2013). The discipline and practice of qualitative research. In N. K. Denizen & Y. S. Lincoln (Eds.). The landscape of qualitative research (4th ed) (pp. 1-41). Thousand Oaks, CA: Sage.

Dessoff, A. (2007) DIBELS draws doers & doubters: Dynamic indicators of basic early literacy skills monitor reading progress but raise questions. *District Administrator Magazine,* 1-8. Retrieved from http://www.districtadministration.com/article/dibels-draws-doers-doubters

DeWalt, K. & DeWalt, B. (2002). *Participant Observation: A Guide for Fieldworkers.* Walnut Creek, California: AltaMira Press.

DIBELS Next. (2016). DIBELS Next benchmark goals and composite score. Retrieved from: https://dibels.org/papers/DIBELSNextBenchmarkGoals.pdf

Ding, C., Richardson, L., & Schnell, T. (2013). A developmental perspective on word literacy from Kindergarten through second grade. *The Journal of Educational Research, 106*, 132-145. doi:10.1080/00220671.2012.667009

Early warning! Why reading by the end of third grade matters. (2010). A KIDS COUNT special report from the Annie E. Casey Foundation. Retrieved from http://www.aecf.org/m/resourcedoc/AECF-Early_Warning_Full_Report-2010.pdf

Ehri, L. C., Nunes, S. R., Willows, D. M., Schuster, B. V., Yaghoub-Zadeh, Z., & Shanahan, T. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. *Reading Research Quarterly, 36*(3), 250-287.

Eide, D. (2012). *Uncovering the logic of English: A common-sense approach to reading, spelling, and literacy*. Minneapolis, MN: Pedia Learning Inc.

Elkonin, D. B. (1973). U. S. S. R. In J. Downing (ed.), *Comparative reading: Cross-national studies of behavior and processes in reading and writing* (pp. 551-579). New York, NY: Macmillan.

Entwisle, D. R., Alexander, K. L., & Olson, L. S. (2005). First grade and educational attainment by age 22: A new story. *American Journal of Sociology, 110*(5), 1458-1502.

*Excellent Publish Schools Act*. NC-S795. (2012). Retrieved from http://www.ncleg.net/Sessions/2011/Bills/Senate/PDF/S795v1.pdf

Ezzy D. (2002). *Qualitative Analysis Practice and Innovation*. Victoria, Australia: Routledge.

*Factors affecting reading ability in school age children*. (2013). Strategic Market & Research Inc. Retrieved from http://www.evancedsolutions.com/wp-content/uploads/2015/01/Factors_Affecting_Reading_Ability_White_Paper.pdf

Farquhar, J. D. (2012). *Qualitative Research in Business Management.* Thousand Oaks, CA: Sage Publications.

Farrell, S. (2016). *28 tips for creating qualitative surveys*. Retrieved from: https://www.nngroup.com/articles/qualitative-surveys/

Fiona, K., Kujala, J., Richardson, U. Lyytinen, H., & Goswami, U. (2013). Assessing the effectiveness of two theoretically motivated computer-assisted reading interventions in the United Kingdom: GG Rime and GG Phoneme. *Reading Research Quarterly, 48*(1), 61-76.

Flick, U., Von Kardorff, E., & Steinke, I. (Eds.). (2004). *A companion to qualitative research.* Thousand Oaks, CA: Sage.

Fox, B., & Routh D. K (1975). Analyzing spoken language into words, syllables and phonemes: A developmental study. *Journal of Psycholinguistic Research,* 4, 331-342.

*Fundations Teacher's Manual: Levels K-1*. (2002). Oxford, MA: Wilson Language Training Corporation.

Gallant, P. A. (2009). Kindergarten teachers speak out: "Too much, too soon, too fast." *Reading Horizons, 49*(3), 201-220.

Gambrell, L. B., & Morrow, L. M. (2015). *Best Practices for Literacy Instruction* (5th ed.). New York, NY: The Guildford Press.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. New Brunswick, NJ: AldineTransaction.

Glesne, C. (2011). *Becoming qualitative researchers: An introduction* (4th ed.). Boston, MA: Pearson.

Goodman, K. (1985). Growing into literacy. *Prospects, 15*(1), 57-65.

Gray. W. S. (1927). Training and experiences that prepare for reading. *Childhood Education, 3*(5), 210-214.

Griffith, P. L., & Olson, M. W. (1992). Phonemic awareness helps beginning readers break the code. *Reading Teacher, 45*(7), 516-523.

Guest, G., Namey, E. E., Mitchell, M. L., (2013). *Collecting Qualitative Data: A Field Manual for Applied Research*. Thousand Oaks, CA: Sage Publications, Inc.

Hancock, B., Ockleford, E., & Windridge, K. (2009). An introduction to qualitative research. The NIHR RDS EM / YH. Retrieved from: http://www.rds-yh.nihr.ac.uk/wp-content/uploads/2013/05/5_Introduction-to-qualitative-research-2009.pdf

Hill, D. A., & Flores, M. M. (2015). A preliminary investigation of the benefits of computer-aided instruction in reading decoding for students with autism spectrum disorder and other developmental disabilities. *Journal of the American Academy of Special Education Professionals*, 72-82.

*HillRAP Reading Achievement Program*. (2003). Durham, NC: The Hill Center Inc.

Høien, T., Lundberg, I., Stanovich, K. E., & Bjaalid, I. (1995). Components of phonological awareness. *Reading and Writing, 7*(2), 171-188.

Hong, B., Diamond, L., & Gutlohn, L. (2000). *Teaching reading sourcebook for kindergarten through eighth grade*. Novato, CA: Arena Press.

Hoover, W. A. (2002). The importance of Phonemic awareness in learning to read. *SEDL Letter, XIV*(3). Retrieved from: http://www.sedl.org/pubs/sedl-letter/v14n03/3.html

Hulme, C., Bowyer-Crane, C., Carroll, J., Duff, F., & Snowling, M. (2012). The causal role of phoneme awareness and letter-sound knowledge in learning to read: Combining intervention studies with mediation analysis. *Psychological Science, 23*(6), 572-577.

International Reading Association (IRA), & National Association for the Education of Young Children (NAEYC). (1998). Learning to read and write: Developmentally appropriate practices for young children. *The Reading Teacher, 52*(2), 193-216.

Johnson, D. (1999). *Critical issue: Addressing the literacy needs of emergent and early readers*. Oak Brook, IL: North Central Regional Educational Lab. Retrieved from: http://files.eric.ed.gov/fulltext/ED480227.pdf

Joshi, R. M. Binks, E., Hougen, M., Dahlgren, M. E., Ocker-Dean, E., and Smith, D. L. (2009). Why elementary teachers might be inadequately prepared to teach reading. *Journal of Learning Disabilities, 42*(5), 392-402.

Juel, C. (1988). Learning to read and write: A longitudinal study of 54 children from first through fourth grades. *Journal of Educational Psychology, 80*(4), 437-447.

Juel, C., Griffith, P.L., & Gough, P. B. (1986). Acquisition of literacy: A longitudinal study of children from first through fourth grades. *Journal of Educational Psychology, 78*, 243-255.

Kagan, S. L., & Kauerz, K. (2006). Making the most of kindergarten: Trends and policy issues. In D. Gullo (Ed.), *Teaching and learning in the kindergarten year* (pp. 161-170). Washington, DC: National Association for the Education of Young Children.

Kaminski, R. & Cummings, K. D. (2007). *DIBELS: Myths and facts*. Retrieved from the Dynamic Measurement Group website http://dibels.org/papers/Myths_0208.pdf

Keessey, S. Konrad, M., & Joseph, L. M. (2015). Word boxes improve phonemic awareness, letter-sound correspondences, and spelling skills of at-risk kindergartners. *Remedial and Special Education, 36*(3), 167-180.

Kim, J-H. (2016). *Understanding narrative inquiry: The crafting and analysis of stories as research*. Thousand Oaks, CA: SAGE Publications, Inc.

Kjeldsen, A-C, Karna, A., Niemi, P., Olofsson, A., & Witting, K. (2014). Gains from training in phonological awareness in kindergarten predict reading comprehension in grade 9. *Scientific Studies in Reading, 18*(6), 452-467.

Kvale, S., & Brinkmann, S. (2008). Interviews: Learning the craft of qualitative research interviewing (2nd ed). Los Angeles, CA: Sage.

Kyle, F., Kujala, J., Richardson, U., Lyytinen, H., & Goswami, U. (2013). Assessing the effectiveness of two theoretically motivated computer-assisted reading interventions in the United Kingdom: GG rime and GG phoneme. *Reading Research Quarterly, 48*(1), 61-76.

Liberman, I. Y., Rubin, H., Duques, S. & Carlisle, J. (1985). Linguistic abilities and spelling profi- ciency in kindergartners and adult poor spellers. In D. Gray & J. Kavanagh (Eds.), *Biobehavioral measures of dyslexia* (pp. 163-176). Parkton, MD: York Press.

Liberman, I. Y., Shankweiler, D., Fisher, F. W., & Carter, B. (1974). Explicit syllable and phoneme segmentation in the young child. *Journal of Experimental Child Psychology, 18*(2), 201-212.

Louis, G. W. (2009). Using Glaser's choice theory to understand Vygotsky. *International Journal of Reality Therapy, 28*(2), 20-23.

Love, P. (2003). Chapter 6: Document analysis. In F. K. Stage & K. Manning (Eds.), *Research in college context: Approaches and methods* (pp. 83-97). New York, NY: Brunner-Routledge.

Lundberg, I., Olfosson, A., & Wall, S. (1980). Reading and spelling skills in the first school years predicted from phonemic awareness sills in kindergarten. *Scandinavian Journal of Psychology, 21*(1), 159-173.

MacLachlan, C., & Arrow, A. (2014). Promoting alphabet knowledge and phonological awareness in low socioeconomic child care settings: a quasi experimental study in five New Zealand centers. *Reading and Writing, 27*, 819-839.

Mann, V. A. (1984). Longitudinal prediction and prevention of early reading difficulty. An*nals of Dyslexia, 34*, 117-136.

Marcel, A. J. (1980) Phonological awareness and phonological representation: investigation of a specific spelling problem. In U. Frith (ed.) *Cognitive Processes in Spelling.* London: Academic Press Inc.

Maxwell, J. (2013). *Qualitative Research Design. An Interactive Approach*. Thousand Oaks, CA: Sage.

Melby-Lervåg, M., Halass Lyster, S. A., & Hulme, C. (2012). Phonological skills and their role in learning to read: A meta-analytic review. *Psychological Bulletin, 138*(2), 322-352.

Merriam, S. (1998). *Qualitative research and case study applications in education*. Jossey-Bass. San Francisco, CA.

Merriam, S. (2009). Qualitative research: A guide to design and Implementation. San Francisco, CA: Jossey- Bass.

Moats, L. C. (2010). *Speech to print: Language essentials for teachers* (2nd ed.). Baltimore, MD: Paul H. Brookes Publishing.

Moats, L. C., & Foorman, B. R. (2003). Measuring teachers' content knowledge of language and reading. *Annals of Dyslexia, 53*(1), 23-45.

Mooresville Graded School District. (2017). About Us. Retrieved from: http://www.mgsd.k12.nc.us/page.cfm?p=2477.

Morais J., Cary, L., Alegria, J., & Bertelson, P. (1979). Does awareness of speech as a sequence of phones arise spontaneously? *Cognition, 7*,323-331.

Morrow, L. M. (2009). *Literacy development in the early years: Helping children read and write* (6th ed.). Boston, MA: Pearson.

Morrow, L. M. (2012). *Literacy development in the early years: Helping children read and write* (7th ed.). Boston, MA: Pearson.

National Assessment of Educational Progress. (2011). *The nation's report card*: Reading 2011. Washington, DC: National Center for Education Statistics.

National Assessment of Educational Progress. (2017). *The nation's report card: Reading 2017*. Washington, DC: National Center for Education Statistics.

National Center for Education Statistics. *National Assessment of Educational Progress (NAEP), various years, 1998-2015 Reading Assessments*. Retrieved from: https://nces.ed.gov/nationsreportcard/subject/publications/stt2015/pdf/2016008NC4.pdf

National Center for Education Statistics. (1996). *Reading Literacy in the United States: Findings From the IEA Reading Literacy Study*. Washington, D.C.

National Center for Education Statistics. (n.d.). Search for Public School Districts: of Data District Directory Information (2015-2016 school year). Retrieved from: https://nces.ed.gov/ccd/districtsearch/district_detail.asp?ID2=3703120

National Reading Panel. (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction.* (NIH Publication No. (00-4754). Washington, DC: US Government Printing Office.

North Carolina Department of Public Instruction (NCDPI, 2017). *2016–17 Performance and Growth of North Carolina Public Schools: Executive Summary.* Retrieved from: http://www.ncpublicschools.org/docs/accountability/reporting/2017/documentation/exsumm17.pdf

*North Carolina read to achieve legislative summary*. (n. d.). Retrieved from http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=16&ved=0CEMQFjAFOAo&url=http%3A%2F%2Fwww.tcs.k12.nc.us%2FUserFiles%2FServers%2FServer_980866%2FFile%2FNC%2520Read%2520to%2520Achieve%2520Legislative%2520Summary.docx&ei=OSlGUpj6NNa64AOIuIGAAQ&usg=AFQjCNFyDAEquAQbbP9Hl5PqoQ-1xBHKSw&bvm=bv.53217764,d.dmg

Partnership for Reading. (2003, Spring). *Put reading first: The research building blocks for teaching children to read: Kindergarten through Grade 3*. Washington, DC: Author.

Patton, M. (1990). *Qualitative Evaluation and Research Methods* (2nd ed.). Newbury Park: CA, Sage.

Pearson, P. D. (2006). Forward in Goodman, K. S., *The truth about DIBELS: What it is what it does.* (p. v-xix). Portsmouth, NH: Heinemann.

Perfetti, C., & Stafura, J. (2014). Word knowledge in a theory of reading comprehension. *Scientific Studies of Reading, 18*, 22-37.

Pressley, M. & Allington, R. (2015). *Reading instruction that works: The case for balance teaching* (4th ed.). New York, NY: The Guilford Press.

Public Schools of North Carolina, State Board of Education: Department of Public Instruction (2010). *North Carolina Standard Couse of Study for English Language Arts*. Retrieved from: http://www.dpi.state.nc.us/docs/curriculum/languagearts/scos/ncscs-ela.pdf

RAND Reading Study Group. (2001). *Reading for understanding: Towards an R & D program in reading comprehension*. Santa Monica, CA: Author.

Reardon, S. F. (2016). *School district socioeconomic status, race, and academic achievement*. Retrieved from: https://cepa.stanford.edu/sites/default/files/reardon%20district%20ses%20and%20achievement%20discussion%20draft%20april2016.pdf

Rice, P. & Ezzy, D. (1999). *Qualitative Research Methods: A Health Focus*. Melbourne, Australia: Oxford University Press.

Rog, L. J. (2001). *Early literacy instruction in kindergarten*. Newark, DE: International Reading Association, Inc.

Scanlon, D. M., Anderson, K. L., & Sweeney, J. M. (2017). Early intervention for reading difficulties: The interactive strategies approach (2nd ed.). New York, NY: The Guilford Press.

Scarborough, H. S., Ehri, L. C., Olson, R. K., & Fowler, A. E. (1998). The fate of phonemic awareness beyond the elementary school years. *Scientific Studies of Reading, 2*(2), 115-142.

Segers, E., & Verhoeven, L. (2005). Long-term effects of computer training of phonological awareness in Kindergarten. *Journal of Computer Assisted Learning, 21*(1), 17-27.

Shanahan, T. (2005). *The national reading panel report: Practical Advice for Teachers*. Naperville, IL: Learning Point.

Shanahan, T. (2014, Oct. 31). Unbalanced comments of balanced literacy. [Blog post]. Retrieved from http://shanahanonliteracy.com/blog/unbalanced-comments-on-balanced-literacy#sthash.SPkmuKtW.dpbs

Shankweiler, D., & Fowler, A. E. (2004). Questions people ask about the role of phonological processing in learning to read. *Reading and Writing, 18*, 483-515.

Shannon, G.S., & Bylsma, P. (2007). *The nine characteristics of high-performing schools: A research-based resource for schools and districts to assist with improving student learning*. (2nd Ed.). Olympia, WA: OSPI

Shaywitz, B. A., Shaywitz, S. E., Pugh, K. R., Menci, W. E., Fulbright, R. K.., Skudlarski, P., ... Gore, J. C. (2002). Disruption of posterior brain systems for reading in children with developmental dyslexia. *Biological Psychiatry, 52*(2), 101-110.

Simon, M.K. (2011). *Dissertation & scholarly research: Recipes for success*. College Grove, OR: Dissertation Success, LLC.

Sims, J. (2013). *NC third graders face new reading hurdle*. Retrieved from http://www.wral.com/nc-third-graders-face-new-reading-hurdle/12880905/

Slavin, R., Madden, N., Dolan, L., & Wasik, B. (1996). *Every child, every school: Success for all*. Thousand Oaks, CA: Cornwin Press.

Snow, C., Burns, M, & Griffin, P. (Eds). (1998). *Preventing reading difficulties in young children.* Washington, DC: National Academy Press.

Spear-Swerling, L., & Brucker, P. O. (2003). Teachers' acquisition of knowledge about English word structure. *Annals of Dyslexia, 53*(1), 72-103.

Stahl, S. A., & Murray, B. A. (1994). Defining phonological awareness and its relationship to early reading. *Journal of Educational Psychology, 86*(2), 221-234.

Strauss, A., & Corbin, J. (1994). Grounded Theory Methodology. In N. K. Denzin and Y. S. Lincoln (Eds). *Handbook of Qualitative Research*, (pp. 273-285). Thousand Oaks, CA: Sage

Strickland, D. (1989). *Emerging literacy: Young children learn to read and write*. Newark, DE: International Reading Association.

Sulzby, E., & Teale, W. (1991). Emergent Literacy. In R. Barr, M. Kamil, P. Mosenthal, & P. D. Pearson (Eds.), *Handbook of reading research* (Vol 2. pp. 727-757). New York, NY: Longman.

Teale, W., & Sulzby, E. (1986). Introduction: Emergent literacy as a perspective for examining how young children become writers and readers. In W. Teale & E. Sulzby (Eds.), *Emergent literacy: Writing and reading* (pp. vii-xxv). Norwood, NJ: Ablex.

Temple, C., Ogle, D., Crawford, A., & Freepon, P. (2011). *All children read: Teaching for literacy in today's diverse classrooms* (3rd ed.). Boston, MA: Pearson.

Thornberg, R., & Charmaz, K. (2012). Grounded theory. In S. Lapan, M. Quartaroli, & F. Riemer Eds.). *Qualitative research: An introduction to methods and design*, pp. 44-64. San Francisco, CA: Wiley.

Torgesen, J. K. & Mathes, P. G. (1998). *What every teacher should know about phonological awareness*. Tallahassee, FL: Florida Department of Education Division of Public Schools and Community Education Bureau of Instructional Support and Community Services.

Torgesen, J. K., Rashotte, C. A., & Lindamood, P. (2010). Computer-assisted instruction to prevent early reading difficulties in students at risk for dyslexia: Outcomes from two instructional approaches. *Annals of Dyslexia, 60*(1), 40-56.

Torgesen, J. K., Wagner, R. K., & Rashotte, C.A. (1994). Longitudinal studies of phonological processing and reading. *Journal of Learning Disabilities, 27*(5), 276-286.

Tracey, D. H., & Morrow, L. M. (2012). *Lenses on reading: An introduction to theories and models* (2nd ed.). New York, NY: The Guilford Press.

Treiman, R., & Zukowski, A. (1996). Children's sensitivity to syllables, onsets, rimes, and phonemes. *Journal of Experimental Child Psychology, 62*(3), 193-214.

Tuner, D. (2016). Triangulation if qualitative research. Retrieved from: https://www.quirkos.com/blog/post/triangulation-in-qualitative-research-analysis

University of Oregon, Center on Teaching and Learning (2012). *2012-2013 DIBELS Data System Update Part I: DIBELS Next Composite Score* (Technical Brief No. 1202). Eugene, OR: University of Oregon.

Vygotsky, L. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.

Vygotsky, L. (1986). *Thought and language*. Cambridge, MA: MIT Press. (Original work published 1962)

Walmsley, B. B., Camp, A. M., & Walmsley, S. A. (1992). *Teaching kindergarten: A developmentally appropriate approach*. Portsmouth, NH: Heinemann.

Watson, T., & Hempenstall, K. Effects of a computer based beginning reading program on young children. *Australian Journal of Educational Technology, 24*(3), 258-274.

Webb, B. (1991). The art of note-taking. In RG Burgess (Ed.) *Field Research: A Sourcebook and Field Manual* (pp. 191-194). London, England: Routledge.

Yin, R. K. (2003). *Case Study Research* (2nd ed.) Thousand Oaks, CA: Sage.

Yopp, H. K., & Yopp, R. H. (2009). Phonological awareness is child's play! *Young Children, 64*(1), 12-21.

Zeiler, I. (1993). Emergent literacy: From theory to practice. In *Emergent literacy in early childhood education* (pp. 109-117). Haifa, Israel: UNESCO.

Zygouris-Coe, V. (2001). *Balanced reading instruction in K-3 classrooms*. (FLaRE Document #1-001). Orlando, FL: Florida Literacy and Reading Excellence Center.

APPENDIX A: SURVEY PROTOCOL

**Phonemic Awareness Survey**

**Email address** *

**Please choose one of the following in order to complete the survey.**

*Mark only one oval.*

- Yes, I give my consent and will freely participate in the survey.
- No, I do not give my consent and do not wish to participate in the survey.

**Which race/ethnicity best describes you? (Please choose only one.)**

*Mark only one oval.*

- Caucasian
- African American/Black
- Hispanic/Latino/Latina
- Mixed race
- Rather not say
- Other:

**What is the highest level of school you have completed or the highest degree you have received?**

*Mark only one oval.*

- Bachelors
- Masters
- Doctoral

**Do you hold National Board Certification?**

*Mark only one oval.*

- Yes
- No

**What is your gender?**

*Mark only one oval.*

- female
- male

**What is your age?**

*Mark only one oval.*

- 21-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65 and older
- Other:

**How many years of experience do you have teaching?**

*Mark only one oval.*

- less than 1 year
- 1-3 years
- 4-7 years
- 8-12 years
- 13-20 years
- more than 20 years

**How many years of experience do you have teaching kindergarten?**

*Mark only one oval.*

- less than 1 year
- 1-3 years
- 4-7 years
- 8-12 years
- 13-20 years
- more than 20 years

**What school site do you work at?**

*Mark only one oval.*

- Park View
- Rocky River
- South

**My pre-service training included education in phonemic awareness**

*Mark only one oval.*

1 2 3 4 5

strongly disagree strongly agree

**My school/district has provided me with professional development in phonemic awareness instructional skills and teaching strategies.**

*Mark only one oval.*

1 2 3 4 5

strongly disagree strongly agree

**How prepared/competent do you feel to teach phonemic awareness?**

*Mark only one oval.*

1 2 3 4 5

not at all prepared/competent extremely prepared/competent

**Phonemic awareness is an integral part of my classroom instruction.**

*Mark only one oval.*

1 2 3 4 5

**Instruction in phonemic awareness is necessary for early learners to achieve reading success**

*Mark only one oval.*

1 2 3 4 5

strongly disagree strongly agree

**State assessments such as mCLASS are the primary reason we teach phonemic awareness in our school.**

*Mark only one oval.*

1 2 3 4 5

strongly disagree strongly agree

**There is a high value placed on the instruction of phonemic awareness by my school's administration.**

*Mark only one oval.*

1 2 3 4 5

**What is phonemic awareness?**

**Briefly explain how you teach phonemic awareness. Include any curricular resources you use within your instructional practice.**

**Are you willing to be observed teaching phonemic awareness?**

*Mark only one oval.*

- Yes
- No

**If you answered yes above, please indicate the best time to observe you teaching phonemic awareness.**

# APPENDIX B: INTERVIEW PROTOCOL

## Interview Protocol

Establishing rapport:

1) How long have you been teaching?
2) Have you always taught kindergarten? What other grades/subjects have you taught?
3) Have you taught in any other states besides North Carolina? Where? What was it like teaching there?

Phonological awareness:

1) What is phonological awareness?
2) How is phonolgical awarness different than phonemic awarness?
3) How are these different than phonics?
4) How do you teach phonemic awareness skills to your students?
5) In a typical teaching day, how much time do you alot for phonemic awarness instruction?
6) What resources, programs, and materials do you use to plan for and deliver your instruction in phonemic awareness?
7) How do you group students for instruction in phonemic awareness?

Read to Achieve:

1) How do you use your mCLASS data to monitor student growth in phonemic awareness?

2) To the best of your knowledge, which assessmsents measure phonemic awareness?

3) Do you use any other assessments to measure student growth in phonemic awarness? Please share what you use and how it informs your instruction.

4) How often to you asssess your students' growth in phonemic awareness?

5) How do you differentiate your instruction based on your assessment data?

Conclusion:

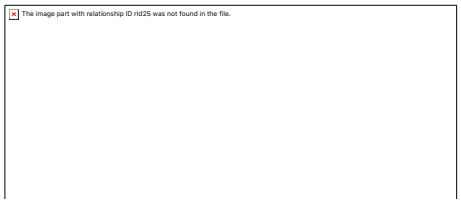
1) Is there anything else you'd like to share with me regarding your instructional or assessment practices specific to phonemic awareness?

# APPENDIX C: OBSERVATION PROTOCOL

| | Observation | Reflection |
|---|---|---|
| Participant | | |
| Date | | |
| Time of Day | | |
| Duration of Lesson | | |
| Grouping of Students (whole group, small group, individual) *indicate # of students present within groupings | | |
| Delivery Method (direct instruction, modeling, computer assisted, etc…) | | |
| Skills Taught | | |
| Resources Used | | |
| Student Behaviors (actively engaged, answering questions, moving manipulatives, | | |

| | | |
|---|---|---|
| watching a video, etc…) | | |
| # of students engaged at any one time during lesson | | |
| Other | | |

# APPENDIX D: CONSENT FORM




Department of
9201 University City Boulevard, Charlotte, NC 28223-0001

**Informed Consent for**
**Phonemic awareness instruction in kindergarten classrooms: An analyis of how closely classroom practices reflect research based best practices**

Project Title and Purpose:
You are invited to participate in a research study entitled (*Phonemic awareness instruction in kindergarten classrooms: An analyis of how closely classroom practices reflect research based best practices)*. This is a study which explores how kindergarten teachers' classroom practices in the instruction of phonemic awareness reflect research-based best practices.

Investigator(s):
This study is being conducted by UNCC doctoral candidate Joyce Farrow under the guidance of Dr. Maryann Mraz of the College of Education's Department of Reading and Elementary Education.

Description of Participation:
Participants will be asked to complete a survey related to their teaching practices and knowledge of phonemic awareness. Participants may be asked to be interviewed and observed for the purposes of this study. All interviews will be digitally recorded and transcribed.

Length of Participation
Participation in the survey will take approximately 20 minutes on one occasion to complete. Participants who volunteer for observation and further interview are asked to participate in a follow up interview lasting no more than 30 minutes to be held at a mutually agreed upon time and place. Observations will occur at least 3 times over the course of the study and last approximately 15-30 minutes for each occurrence.

Risks and Benefits of Participation:
There are no known risks to participation in this study. However, there may be risks, which are currently unforeseeable. Particpants involved in the study may find opportunties to refelct on their classroom practices and make changes that improve

student learning beneficial. Moreover, participants may find the opportunity to voice their views cathartic providing them with a means to be heard in a profession that does not often ask their opinion. I understand that I will not be compensated for my time or participation in this study.

Possible Injury Statement:
If you are hurt during this study, we will make sure you get the medical treatment you need for your injuries. However, the University will not pay for the medical treatment or repay you for those expenses.

Volunteer Statement:
You are a volunteer. The decision to participate in this study is completely up to you. If you decide to be in the study, you may stop at any time. You will not be treated any differently if you decide not to participate or if you stop once you have started.

Confidentiality:
Any information about your participation, including your identity, will be kept confidential to the extent possible. The following steps will be taken to ensure this confidentiality: names will be changed to protect the identity of participants, access to data, analysis, and interpretation of findings are limited to the researcher and dissertation committee, and data from interviews and observations including digital and audio recordings will not be distributed to any third parties for any purpose without the further written consent and agreement of participants. Audio recordings will be destroyed after member checks have been competed, and transcripts will be destroyed at the end of the IRB approval period.

Fair Treatment and Respect:
UNC Charlotte wants to make sure that you are treated in a fair and respectful manner. Contact the University's Research Compliance Office (704.687.1871) if you have any questions about how you are treated as a study participant. If you have any questions about the project, please contact Joyce Farrow at 980-275-3475.

This form was approved for use on November 5, 2017 for a period of one (1) year.

Participant Consent
I have read the information in this consent form. I have had the chance to ask questions about this study, and those questions have been answered to my satisfaction. I am at least 18 years of age, and I agree to participate in this research project. I understand that I will receive a copy of this form after it has been signed by me and the principal investigator.

_____ _____

Participant Name (PRINT) DATE

_____
_____
Participant Signature DATE

_____
_____
Investigator Signature DATE