THE UTLIZATION OF MUSIC TO TEACH PHONICS IN KINDERGARTEN: A MULTIPLE CASE STUDY

by

Cherie D. Hocanson

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University

2019

THE UTLIZATION OF MUSIC TO TEACH PHONICS IN KINDERGARTEN: A MULTIPLE CASE STUDY

by Cherie Dawn Hocanson

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

Liberty University, Lynchburg, VA

2019

APPROVED BY:

Dr. Meredith J. Park, Ed.D., Committee Chair

Dr. Jessica Talada, Ed.D., Committee Member

ABSTRACT

The purpose of this qualitative, multiple case study was to explore the utilization of music to teach phonics in kindergarten at four elementary schools in northwest Ohio. The theory guiding this study was the schema theory as it explains how individuals are able to recognize patterns previously learned, organize those patterns, and then use those patterns to perceive new information (Green, 2010). This research sought to answer the central research question, "How do kindergarten teachers utilize music to teach phonics within the classroom?" The study included 10 cases within four different school districts. The participants were kindergarten teachers in Northwest Ohio with a variety of teaching experiences. For this research, data collection took place through one-on-one, open-ended, semi-structured interviews with all 10 participants. Data collection followed case study protocol and included direct observation and physical artifacts, including photos of the classroom and lesson plans. Data analysis occurred through analytic strategies including coding and within-case and cross-case analysis (Yin, 2014). The analysis resulted in four themes. The first theme was pedagogy with the sub-themes of standard phonics curriculum and music-based curriculum. The second theme was perceptions with the sub-themes of benefits and challenges. The third theme was classroom management and the fourth theme was confidence. The results indicated that there is a strong correlation between using music to teach phonics and student retention. Finally, recommendations for future research were discussed to benefit kindergarten teachers, curriculum coordinators, administrators, and collegiate instructors.

Keywords: music, phonics, kindergarten, schema theory

Copyright Page

Dedication

This dissertation is dedicated to my three beautiful girls, Ally, Libby, and Lexi. You bring joy to my soul every day and encourage me to keep going, always hoping for the best. I know it has been a stressful and long road, but I did this for our family. I hope I have shown you that when you trust God to give you strength and put 100% into a goal, you can accomplish anything you desire! While this is a great accomplishment for me, there is still no greater accomplishment than being a mom to all three of you!

This is also dedicated to the loving memory of Mindy Peterson, my dear sister-in-law who was taken from her precious children and all her family and friends too soon. I know she would've been here cheering me on through this entire process. Mindy always said, "Find your joy," which has been a powerful reminder for me through some really difficult days. She'll be singing an extra song with the angels on my graduation day!

Acknowledgments

First, I would like to give thanks to my Lord and Savoir Jesus Christ. My faith and knowing that if He brings you "to it" He will also bring you "through it" is what helped me through many difficult days. I am thankful for the strength that comes from Christ alone!

I would also like to thank my chair, Dr. Meredith Park, and my committee member, Dr. Jessica Talada. Dr. Talada offered many words of advice and returned edits back to me in a timely manner despite her busy schedule. After I fell Dr. Park's group of doctoral candidates I soon realized how fortunate I was to have her for my chair. Her positivity and encouragement helped to guide me and I appreciate the confidence she had in me. Thank you, Dr. Park, for blessing me through this process!

My parents, Garry and Carol Peterson, have been a helpful part of this process. Thank you for lending a hand with my beautiful girls last two years so I could have some "mommy" quiet time to work without interruptions. Thank you for instilling in me a strong work ethic from early on in life and for always finding a way to help me reach my goals.

Finally, to my better half, Kai Roberts. You have been my listening ear, my shoulder to cry on, and my biggest supporter. Thank you for the selfless ways you continually step up to support my children and me. No one will truly understand how much you do for my family. You bring me joy and comfort and I can't imagine doing this crazy life without you!

Table of Contents

List of Tables

List of Figures

List of Abbreviations

Annual Yearly Progress (APR)

Association of Christian Schools International (ACSI)

Bachelor of Science degree (BS)

Coltheart's Dual-Route Cascaded model (DRC)

Computer-assisted qualitative data analysis software (CAQDAS)

Consonant-Vowel-Consonant words (CVC)

Early Education of the Handicap (EEH)

English as a second language (ESL)

Every Student Succeeds Act (ESSA)

Institute for Multi-Sensory Education (IMSE)

International Review Board (IRB)

K-12 (Kindergarten through Grade 12)

Master of Arts in Education (MA)

Magnetic Resonance Imaging (MRI)

National Center for Education Statistics (NCES)

No Child Left Behind (NCLB)

Orton-Gillingham Phonics Curriculum (OG)

Positron Emission Tomography (PET)

Phonics, Spelling, and Word Study (PWS)

Preschool (Pre-K)

CHAPTER ONE: INTRODUCTION

Overview

Reading is an important skill for all individuals to learn and improve upon throughout their lifetime. This skill is taught at the beginning of a child's formal education in kindergarten and continues through a child's entire education. Research shows that one of the five components of an effective reading program is the teaching of phonics (Buriss, 2001; de Graaff, Bosman, Hasselman, & Verhoeven, 2009; Mesmer & Griffith, 2006). Throughout the history of education, there has been continued debate on the most effective way to teach reading and phonics. Experts in the field have encouraged teachers to incorporate music into the daily reading curriculum in order to provide students an additional, meaningful way to remember and retain phonics. Incorporating music can also continue to develop higher-level, critical thinking skills (Burton, 2015; Gordon, Fehd, & McCandliss, 2015).

The purpose of this study was to explore the utilization of music to teach phonics within the kindergarten classroom. Chapter One provides an overview of this qualitative, multiple case study. This research addressed the background of reading and phonics including the historical, theoretical, and social significance of the study. The problem statement, purpose statement, and research questions are also introduced with supporting research.

Background

Phonics has been a vital part of reading since the early 1970s (Mesmer & Griffith, 2006). According to Venezky (1999), phonics describes the letters or symbols used to encode a language's spoken components. Cooper (2008) defined phonics as a component of reading that stresses the acquisition of letter-sound correspondence and then applying that correspondence to reading and spelling. When exploring the utilization of music to teach phonics, it is important to

note the historical, theoretical, and social relevance that phonics has played in both society and education.

Historical

For thousands of years, reading has been a part of education. Ancient Egyptians developed the oldest alphabet around 2000 BC in the form of hieroglyphics (Tahan, Cline, & Messaoud-Galus, 2011). As education has developed throughout centuries in various countries, the process of teaching reading has continued to develop into formal education. Throughout formal education, educators have researched helpful ways to instruct students in reading.

In the early 1970s, Coltheart created influential models of reading acquisition (Sheriston, Critten, & Jones, 2016). The Coltheart's Dual-Route Cascaded model (DRC) of reading argues that one of the main ways children learn to read is through the grapheme-phoneme system (nonlexical), which relates directly to phonics (Pinto, Bigozzi, Tarchi, Accorti, Gamannossi & Canneti, 2015). With this model, readers "sound out" the written words. Due to this model, and the success of many educators using this model for struggling readers, there is an increased demand for further research to determine the best practices to incorporate phonics into the classroom (Vadasy & Sanders, 2012).

The National Reading Panel report (2000) identified that the course of instruction needed for successful reading should include phonemic awareness, phonics, vocabulary, comprehension, and fluency. The decoding of phonemes and the rhythm of both spoken and written words are major building blocks in early childhood literacy (Sanacore, 2010). The U.S. Department of Education implemented the No Child Left Behind Act in 2001 (U.S. Department of Education, 2015). As a part of this program, the U.S. Department of Education then added the federally funded Reading First initiative beginning in 2005 (U.S. Department of Education, Reading First,

2005). This initiative mandated that public schools have a systematic course of instruction for reading and offers additional funding to school systems that apply scientifically based reading research into the reading curriculum to ensure that all children read at grade level by the end of third grade (US Department of Education, Reading First, 2005). Eventually, The Every Student Succeeds Act (ESSA) of 2015 replaced the No Child Left Behind (NCLB) of 2001. The implementation of ESSA requires the United States Department of Education to create a grant program that will "develop or enhance comprehensive literacy instruction plans that ensure high-quality instruction and effective strategies in reading and writing for children from early childhood through grade 12" (Samuels, 2016, p. 20).

Furthermore, the continued implementation of high stakes testing has caused educators, curriculum developers, and administrators alike to reflect on daily literacy instruction that can meet the elevated expectations while also providing developmentally appropriate lessons for kindergarten students (Loughlin-Presnal & Bierman, 2017). One particularly innovative approach to teaching phonics within kindergarten is the concept of using music, including rhythmic phrases, chants, and singing. This approach stems from research that has shown throughout many decades that incorporating music into reading and phonics can improve students' reading success (Hogenes, vanOers, & Diekstra, 2014; Walton, 2014).

Theoretical

The schema theory, as it relates to reading, was the basis for the theoretical framework of this study. The concept of the schema theory is that the reader imposes patterns stored in the mind onto texts, which help the reader understand the process of written language (An, 2013). The theory, as it relates to reading, is designed for teachers to evoke prior knowledge from students to help them understand new knowledge. Readers use schemata, or knowledge that is

put into units, to interpret texts. The reader uses schemata to evoke experiences including past and potential relationships in order to give letters, sounds, and words meaning (Jakarta, 2014). In addition, schema helps students with recall. Schemata shapes what students remember and allows them to recall things more easily (Green, 2010).

The schema theory focuses on the "bottom-up" approach to reading, which begins with the student deriving meaning from individual letters, then words, then phrases (McVee, Dunsmore, & Gavalek, 2005). According to Jakarta (2014), the bottom-up strategy as it relates to the schema theory encourages teachers to introduce names and shapes of the letters of the alphabet, then introduce combinations of letters in syllables, followed by reading words, phrases, and eventually sentences. This concept involves teaching from "simple to complex." (Jakarta, 2014, p. 25). As stated by Jakarta (2014), "The teaching of reading by applying bottom-up strategies triggers reading skills by identifying and decoding features of letters to eventually comprehending the whole text" (p. 25).

Social

It is important to note that literacy begins with early experiences in infancy and continues through a child's toddler and pre-school development. According to Soderman, Gregory, and McCarty (2005), emergent reading behaviors include children understanding that books are read from front to back and that print is organized from left to right and top to bottom on each page. While this emergent reading begins at home with parents, kindergarten is typically where a child will begin the formal process of reading instruction.

However, many children still struggle with the ability to read in a society where reading is paramount to success in most jobs. Due to many children struggling with reading, numerous schools and educational institutions developed curriculum to assist teachers with new and

innovative ideas and resources to teach literacy skills (Laman, 2015). Additionally, the United States has also experienced stronger push towards sending students to preschool in order to provide them exposure to environmental print and early literacy skills (Goldstein et al., 2017). According to Henk, Morrison, Thornburg, and Raya-Carton (2007), early intervention is considered essential for success in a literacy-rich environment.

With the push for early literacy intervention, as well as the push to find new strategies to get students reading earlier, the educational system within the United States has begun to incorporate music into the regular academic classroom. Throughout many centuries, educators have used music to teach concepts beyond just musical performance (Jones-Gensel, 2016). Teachers incorporate music into the daily academic curriculum to provide additional literacy skills with positive effects on reading abilities, as well as helping to produce well-rounded students who have both strong reading skills and musical abilities (Bolduc, 2009; Jones-Gensel, 2016; Moreno et al., 2011). Therefore, it is important to continue to research additional ways teachers use music within the early childhood educational environment.

Situation to Self

My motivation for conducting this study was to advance the implementation of utilizing music to teach phonics and to gain a better understanding of the use of music to teach phonics within the kindergarten classroom. I have a Pre-K through third grade early elementary education teaching license, as well as a K-12 music education license. I have taught music education for grades kindergarten through high school, as well as first grade and kindergarten early education. I believe that music is a God-given talent and that all individuals are able to learn through music. Personally, I am continually looking for ways to incorporate music into my teaching because I have seen the effect it can have on students' understanding and

comprehension. Music offers the opportunity for teachers to provide differentiated instruction to meet the needs of all students.

However, because of my close relationship with both music and kindergarten education, I had to be aware of and address any bias within my research. According to Schwandt (2015), "bias means individual preferences, predispositions, or predilections that prevent neutrality and objectivity" (p. 18). It was my goal as a researcher to acknowledge my potential predispositions. I carefully followed the methods set forth for this qualitative inquiry and then reflected on my preferences throughout the data collection and analysis.

The approach for this qualitative research study came from a Biblical perspective. I believe that music provides a calming effect on most children, and that music is a gift from God. As a Christian musician and general education teacher, I wanted to look at kindergarten teachers' perspectives on using music within the classroom, particularly in the area of phonics.

The research-based paradigm that guided this study was built upon constructivism. Constructivism is a learning theory that focuses on students "constructing" new knowledge or adding to existing knowledge. Existing knowledge is the foundation for new learning (Gangwar & Savita, 2017, p. 71). According to Lee & Kim (2017), constructivism is a view of learning in which learners personally interpret experiences (p5). Given this understanding that children construct knowledge, constructivism is "active, constructive, goal-directed, diagnostic, and reflective" (Vijaya, 2014, p. 36). It focuses on the brain's ability to link newly acquired information to existing knowledge in order to create meaning (Cornett, 2011; King, 2016).

In education, a constructivist approach emphasizes that a student learns in his or her own way. Therefore, instruction must be diverse and open-ended to support all backgrounds and learning styles (Gangwar & Savita, 2017). This approach enabled me to focus on how

individuals make meaning in relation to interactions between their experiences and their ideas. Vygotsky (1997) stated, “It may be said that the basic characteristic of human behavior in general is that humans personally influence their relations with the environment and through that environment personally change their behavior, subjugating it to their control” (p. 96).

Problem Statement

Due to the increased emphasis on raising reading scores across the nation, experts are researching additional strategies to help children become more independent and successful readers (Haning, 2016). According to Adelson, Dickinson, and Cunningham (2016), students who are not proficient readers score lower on tests and are at a higher risk of school failure. Walton (2014) discovered that music plays an important role in the mathematical and reading success of students. Phonological awareness and early reading skills were also found to correlate with pitch and rhythm skills in four to five year olds (Gordan, Fehd & McCandlis, 2015). Recent studies have been conducted on the efficacy of music and reading, particularly reading comprehension and reading fluency (Buriss, 2001; Hogenes, Oers & Diekstra, 2014; Hornsby & Wilson, 2009). Research shows a strong correlation of reading performance and music instruction when compared to other reading intervention methods (Haning, 2016; Walton, 2014).

While several quantitative studies have focused on the positive correlation of using music to teach reading at the elementary level (Bhide, Power, & Goswami, 2013; Cabanac, Perlovsky, Bonniot-Cabanac & Cabanac, 2013; Walton, 2014), no studies have explored the utilization of music to teach phonics within the kindergarten classroom, particularly as a qualitative, multiple case study. Additionally, no researchers have conducted qualitative studies that focus on the use of music to teach phonics within the state of Ohio. Phonics instruction is important because it teaches students the alphabetic system, which is the foundation for learning to read and write.

Foundational knowledge and the basic decoding skills for phonics instruction are taught during kindergarten and first grade (Ehri & Flugman, 2018).

The problem is that each year, approximately one-third of kindergarten students are not proficient in reading and phonics at the end of the kindergarten year (NCES, 2013). Furthermore, about one-third of fourth graders and one-fourth of eighth graders do not read at a "basic" reading level (Jones-Gensel, 2016; Spencer, Quinn & Wagner, 2014), which is defined as "partial mastery of prerequisite knowledge and skills that are fundamental for proficient work at each grade" (NCES, 2013, p. 6). Even with these alarming statistics, no studies provided an in-depth understanding of kindergarten teachers' utilization of music to teach phonics. This study qualitatively explored multiple cases of kindergarten teachers who used music to teach phonics and who have seen the impact of the use of music to teach phonics within the kindergarten classroom.

Purpose Statement

The purpose of this multiple case study was to explore the utilization of music to teach phonics in kindergarten classrooms within the state of Ohio. At this stage in the research, using music to teach phonics will be generally defined as incorporating songs or chants to teach the sounds of letters, groups of letters, and syllables (Mesmer & Griffith, 2005). The theory guiding this study was the schema theory of Richard Anderson, originally by Sir Frederic Bartlett, as it relates to reading. Schema theory recognizes the process in which some textual stimuli signal the reader to look for and evoke the relevant schema (the organization of data) from memory into the present reading task and focus (kindergarten classroom) (An, 2013; McVee, et al., 2005).

Significance of the Study

Teachers in classrooms across the United States have been faced with the challenge of improving literacy skills for early education students. With the implementation of ESSA in 2015, teachers, curriculum coordinators, and administrators must focus more on improving reading scores for all children. Register (2001) recommends tracking teachers' uses and reinforcements of music within the academic classroom to determine how both classroom teachers and music educators can strengthen the academic learning of children. Therefore, it is important to note the empirical, theoretical, and practical significance of this study to explore the utilization of music to teach phonics within the kindergarten classroom.

Empirical

Researchers have conducted several recent quantitative studies on the use of music to teach phonics and/or reading (Betteney, & Brooks, 2015; Flaugnacco, Lopez, Terribili, Montico, Zoia, & Schön, 2015; Slater, Strait, Skoe, O'Connell, Thompson, & Kraus, 2014). Results from the previously mentioned studies indicated there is a positive correlation between music and improved literacy skills. Additional examples include a quantitative causal-comparative study by Moradi and Shahrokhi (2014) that concluded music has a statistically significant positive effect on children's pronunciation, intonation, and stress patterns in reading. Another experimental research design study by Bhide, Power and Goswami (2013), concluded that providing children with rhythmic training within language has a positive effect on children's literacy and phonological skills. However, no research focused on an in-depth, qualitative study of how kindergarten teachers utilize music within classroom to teach phonics.

Providing an in-depth, qualitative, multiple case study on how teachers use music to teach phonics and the results of such utilization may help to fill the empirical gap in

research. This study is beneficial for all stakeholders including curriculum coordinators, administrators, and teachers. The results of this research may help to provide additional insight on beneficial ways to raise reading scores through phonics instruction.

Theoretical

The schema theory, as it relates to reading, was the basis for the Theoretical Framework. The underlying idea of the schema theory is that readers impose patterns stored in the mind onto the text, which helps them understand the process of written language. Teachers implement the theory, as it relates to reading, to evoke prior knowledge from students to help them understand new knowledge. The schema theory focuses on the "bottom-up" approach to reading, which begins with the individual deriving meaning from individual letters, then words, then phrases (McVee, et al., 2005).

According to An (2013), "schema" means "an active organization of past reactions or experiences (p. 130). The schema theory focuses on the concept that individuals read and understand text based on their background knowledge, or prior knowledge, and their previously acquired knowledge, or schemata. Reading requires an active process where the reader is fully engaged. The schema theory helps guide readers with the belief that readers will use schema to make sense of new materials read and then make predictions about what they are reading within a text. This theory will be useful to teachers, administration, and curriculum developers to establish how incorporating the experience of music into the teaching of phonics will enhance student learning.

Practical

As previously mentioned, research shows that music can be an effective tool for differentiating literacy instruction (Bhide, Power & Goswami, 2013; Cabanac, et al., 2013). This

study focused specifically on the kindergarten classroom within the state of Ohio and explored the utilization of music to teach phonics. The findings will be beneficial within the K-12 field including students, administrators, and curriculum developers, as well as teacher education departments in higher education.

According to Hall and Robinson (2012), music and phonics have three similar learning processes. These include the ability to hear and manipulate sound (auditory), the use of symbols to communicate information, and the use of encoding and decoding to process and construct meaning. While many studies have shown the similarities of music and reading (O'Keefe, Dearden & West, 2013; Cabanac et al., 2013; Haning, 2016), as well as the benefits of using music within the academic setting (Adelson, Dickinson & Cunningham, 2016; Ehri & Flugma, 2018; Gordan et al., 2015), no research has examined the use of music within the kindergarten classroom to teach phonics specifically.

This study may be important to kindergarten teachers, students, curriculum coordinators, administrators, and parents. Current research provides an in-depth look at how teachers utilize music to teach phonics within the kindergarten classroom, thus providing additional resources and differentiated teaching strategies to all stakeholders. The multiple case study explored the results of the implementation of using music to teach phonics from the kindergarten teacher's perspective and determined specific tools used within the classroom to enhance student learning.

Research Questions

The purpose of this study was to explore the utilization of music to teach phonics within the kindergarten classroom. It is important to gain a broad understanding of the definition of music, as well as the definition of phonics when addressing the central question and sub-

questions respectively. For the purpose of this study, and support of the central question, I defined music as rhythm, chant, or music with singing (Heller, 1998).

Phonics was defined as "a two-step process that connects aural representation of sound (phonemes) with written representation of sound (graphemes)" (Jakarta, 2014, p. 12). Phonics involves teaching students how to read and manipulate beginning and ending sounds and combine those with short and long vowel sounds. Phonics also includes naming the sounds and letters of the alphabet, which is also a kindergarten national reading standard (National Reading Panel, 2000).

The research questions for this study were viewed through a theoretical framework incorporating the schema theory as it pertains to music and reading. The participants included kindergarten teachers from the state of Ohio. Therefore, the perception of these participants was of great importance when defining the research questions. Teachers involved in the study were asked to describe the ways in which they use music to teach phonics, making their descriptions essential to the research.

Support from literature led to the following research questions:

Central Question

How do kindergarten teachers utilize music to teach phonics within the classroom?

Research shows that using music within the classroom can benefit students' reading abilities (Fox, 2000; Flaugnacco et al., 2015; St. Clair, 2014). However, there is still little known about the teachers' perspectives and approaches utilized within the kindergarten classroom to continually develop phonics skills in young readers through the use of music (Holmberg, 2010). The purpose of the central research question was to inform educators, administrators, and pre-

service teachers on the current approaches to aid kindergarten teachers with more effective phonics instruction through the use of music.

Sub-Question One

What types of instructional methods and techniques do teachers use to incorporate music in order to teach phonics?

The purpose of this research question was to explore the variety of instructional methods and techniques kindergarten teachers use to incorporate music to teach phonics within their classroom. According to Newland (2013), there is a positive connection between music instruction and increased student achievement. However, no researchers have conducted any qualitative studies to explore the specific instructional methods that kindergarten teachers use to incorporate reading skills, specifically phonics, into the reading curriculum.

Sub-Question Two

How do teachers integrate music within the context of direct phonics instruction in the kindergarten classroom?

Children must recognize that reading is made up of individual sounds that are able to be manipulated (St. Clair, 2013). Studies have concluded that music also encourages children to attend to individual sounds. Therefore, it can be beneficial to teach reading, including phonics, through the utilization of music (Newland, 2013; St. Clair, 2013; Yopp, 1992). This research question explored which, if any, specific music techniques teachers incorporated into the phonics curriculum to gain a better understanding of the benefits of such approach.

Sub-Question Three

How do teachers perceive the connection of using music and phonics to teach early literacy skills?

According to Register (2001), tracking teachers' use and reinforcement of music

experiences within the classroom is helpful in order to examine the ways collaboration exists between educators, specialists, and children to strengthen learning. Therefore, gaining the teachers; perspectives on the connection between music and phonics in the kindergarten classroom provided insight to the overall central research question. This research question explored teachers' perceptions about how music and phonics are connected for effective classroom instruction. Data from the results of this question allowed for further instructional strategies for kindergarten teachers to incorporate effective phonics instruction through the implementation of music. As noted, there is a significant gap in the literature to address these qualitative questions (Curtis, 2007; Holmberg, 2010; Sullivan, 2016).

Definitions

Terms and definitions include:

1. *Digraph*- A digraph is a combination of two letters making one sound. An example is "ph" and "sh" (Price, 2015).
2. *Grapheme*- A grapheme is an individual letter or group of letters that represent phonemes. An example is the "th" in the word "mouth" (Jerger, 1996).
3. *Phoneme*- A phoneme is the smallest unit of sound in speech. An example is the word "cat" has three phonemes: 'c', 'a', 't' (Jerger, 1996).
4. *Phonics*- Phonics is the relationship between letters of written language and sounds of spoken language. (Doty, Hixson, Decker, Reynolds & Drevon, 2015). In education, phonics refers to teaching students the relationship between sounds and letters and how to use those sounds and letters to recognize words (Mesmer & Griffith, 2005).
5. *Schema*-Schema is a knowledge structure. Schema is a concept or set of concepts about objects, ideas or phenomena (Irwin, 1986, p. 103).

6. *Schemata*- Schemata is the plural form of schema. (Meurer, 2008).

Summary

Chapter One provided a general overview of the multiple case study that was researched. With the increased demand for reading readiness in kindergarten and the requirements of high stakes testing, there is a growing need for additional strategies to help children become better readers. However, the problem is that each year, approximately one-third of kindergarten students are not proficient in reading and phonics at the end of the kindergarten year (readingisfundamental.org).

Chapter One also identified the significance of the study through empirical, theoretical, and practical sources to support the problem statement and guide the researcher in creating the central research question, "How do kindergarten teachers utilize music to teach phonics within the classroom?" Schema theory as it relates to reading was the theory guiding the research process. Chapter Two discusses related literature including the theoretical framework supporting the current research, brain-based research, and current phonics and music research within early education.

CHAPTER TWO: LITERATURE REVIEW

Overview

The ability to read is important to not only an individual's academic success, but also success within the social environment. Reading is a necessary skill in order for an individual to be a contributing member of society. Children must be able to read beginning in kindergarten and continue to develop those reading skills throughout high school, college, and into the workforce. One of the foundations of literacy is the teaching of phonics, which typically begins in kindergarten.

This chapter contains a substantial amount of resources that support the theoretical framework of this study. Furthermore, this literature review includes detailed information regarding kindergarten in the United States, phonics, music within the classroom, the use of phonics and music within the general education classroom, and brain-based theory as it relates to music. Each component of music and early literacy is divided into a theme and discussed in detail. A gap in current literature supported the rationale for conducting research on the utilization of music to teach phonics in kindergarten.

Theoretical Framework

The theoretical framework for this research centered on the schema theory as it relates to reading. This section gives a brief literature review about the history and definition of the schema theory. Research-based literature is also reviewed on the schema theory as it relates specifically to phonics.

Description of Schema Theory

According to An (2013), "Schema theory is an explanation of how readers use prior knowledge to comprehend and learn from text" (p. 130). "Schema" comes from the Greek word

skhema, which means shape or plan (Li, 2014). The psychologist Kant first used the word "schema" in 1781 and Piaget reintroduced the term in 1926 (Little & Box, 2011). However, British psychologist Sir Frederic Bartlett created and first used schema theory in 1932 (Rumelhart, 1980).

Kant claimed that new information and new ideas have meaning for an individual only when one can relate ideas to something that the individual already knows (Carrell, 1984). The concept of schema theory accepts that text does not carry meaning by itself but rather it provides direction for the reader. The reader must then use their previous knowledge to construct their own meaning of the text. In education, this is also called the reader's background knowledge (Carrell, 1984).

American education psychologist Richard Anderson further developed the schema theory in 1970 (Little & Box, 2011; Mandler, 1984). Anderson believed that one must teach general knowledge and generic concepts first in order to promote more effective reading (Little & Box, 2011). Other theorists have adapted the schema theory and used terms such as "scaffolding," "building blocks of cognition" (Schatzberg-Smith, 1988, p. 66), and "skeleton around which the situation is interpreted" (Rumelhart, 1980, p. 37) to explain schema theory.

Throughout the development of cognitive psychology, various psychologists have studied and built upon schema theory. Through this process, educational psychologists have created a variety of names and definitions as part of the schema theory. These terms include the "frame concept," "plans," "event sequencing," "script," or even "scenario" (Li, 2014, p. 1469; Liu, 2015, p. 1349). Nevertheless, the various terms all share the same concept that a reader's prior knowledge and how each person interprets that knowledge will directly impact their ability to learn within a new situation or learn new content (Liu, 2014).

Schema theory centers around how an individual acquires, retrieves, and processes knowledge (Liu, 2014). Nelson (2015) defined schema as "the knowledge unit that tells us how to react to a particular stimulus" (p. 215). Alba and Hasher (1983) defined schema theory as knowledge that is organized into units, or schemata. Those units then store information to help individuals interpret the world around them. A simple example of the schema theory in action is an example of an individual's schema for a cat. Individuals know that a cat usually has four legs, fur, a tail, and so on. Individuals may also know more specific information about types of cats, such as calico cats. Knowledge of cats may extend beyond facts and also incorporate personal experience, such as the knowledge that cats are usually domestic or that some may have allergies to cats. This is an example of the development of schema. Each new experience incorporates more and more information into an individual's schema (Nassaji, 2007).

The schema learning theory constructs knowledge using a network of abstract mental structures that an individual's understanding of his or her own experiences and previous knowledge represent (Little & Box, 2011). The schema process allows each individual to create new ways of understanding information and enables each person to organize data into "schematic routines" to then interact with the world (Schatzberg-Smith, 1988, p. 68). In education, schema theory requires teachers to help learners build knowledge by making connections between ideas. Teachers must access prior knowledge before moving on to new concepts in learning (Little & Box, 2011). Prior to schema theory's re-emergence, psychologists and educators referred to this concept as "background building" (Schatzberg-Smith, 1988, p. 67).

Rummelhart (1980) stated that schemata are "the building blocks of cognition" because they are an elaborate network of information that people use to make sense of new stimuli, new events, and new situations (Li, 2014). Rummelhart (1980) also identified that a schema has

some defining characteristics. The most important characteristic is that schema has variables. Variables help an individual identify aspects of a situation and also help determine "initial guesses" for something that an individual has not learned yet or even observed (Rummelhart, 1980, p. 25). Schema often can help an individual make an inference about unobserved aspects of a situation. For example, if someone walks into a home and smells bread, they may infer that there is bread baking, even though they have not actually seen the bread.

Another defining characteristic of schema noted by Rummelhart (1980) is that schemata are active processes. A schema is a procedure wherein each individual must determine to what degree schema accounts for the pattern of observation. Schema helps provide meaning to any given situation, whether it is social or academic. An individual, whether aware or not, is constantly using schema to observe, interpret, and make meaning (Shea & Wulf, 2005).

Schema is an important concept in reading and is discussed in further sections of Chapter Two. Effective reading relies on students being able to access prior knowledge in order to manipulate the symbols seen on the page into letters, the letters into sounds, the sounds into a blended word, and the words into sentences and paragraphs. The reader must then also make meaning or comprehend what he or she is reading, which is called reading comprehension (Haning, 2016).

The schema theory supports reading in several ways. First, schema activation is a process in which textual stimuli, which varies with each word or passage read, sends a signal to the brain to provide a direction in which the reader then looks at the word or phrase (Green, 2010). This process then evokes a relevant schema from memory to complete the given reading task (An, 2013). Schemata is necessary for a reader to remember what they have learned thus far and apply that knowledge to the current text to be able to read each word.

Second, schema helps the reader interpret the text they are reading and then evaluate and hypothesize the best possible interpretation of the text (Green, 2010). This enables the reader to make accurate predictions and interpretations to fully comprehend what they are reading. However, in order for an individual to comprehend a text, they must first use schema to understand and interpret each individual sound and word. Once an individual reads and interprets the words, the reader is able to use schema to give that word meaning.

Third, schema theory provides readers with necessary skills to break down the complex process of reading (An, 2013). Psychologists and educational researchers have proven that schema-based reading instruction can reduce intrinsic cognitive load and improve diagnostic performance within a classroom setting (Blissett, Goldsmidt & Sibbald, 2015). "Schemata optimizes intrinsic load by reducing the total number of facts, grouping similar information and organizing information into a relevant format" (Blissett et al., p. 335). Therefore, when students are able to successfully use components associated with schema theory, research shows an increase in academic performance (An, 2013; Blissett, et al., 2015; Green, 2010).

Finally, research shows the benefits of schema theory and how it can help students achieve success in reading (Blissett et al., 2015; McVee et al., 2005; Shea & Wulf, 2005). Schema theory has helped both researchers and teachers understand how students organize knowledge. Schema theory also provides a guide for how individuals implement cognitive routines from past experience into the reading process (McVee, 2005, et al.). According to An (2010), schema allows an individual to determine what information he or she selects to focus on in order to help with more explicit concentration and understanding.

A recent study by Farangi and Saadi (2017) studied the effects of participants' comprehension with one group receiving a schema treatment, where the participants received

prior knowledge and the content was focused as such, while the other group received only brand new information. The group that received schema theory treatment scored significantly higher on listening and comprehension tests than those who did not receive schema theory treatment. This study determined that "student stored knowledge structure (schemata) to enhance comprehension, as well as creating new schemata are far more important than imparting new knowledge of the language system" (Farangi & Saadi, 2017, p. 33).

As previously noted, schema theory established the idea that individuals use schema, or knowledge structure, to support previous knowledge to be able to assimilate new information (Liu, 2015). In the same manner, schema theory will help guide this research to understand how teachers utilize music to teach phonics in order to improve students' reading scores within the kindergarten classroom. The schema theory will guide the study to discover how teachers encourage students to use prior knowledge, or schema, through the use of music, to increase understanding of phonics and ultimately the reading process.

Schema Theory and Phonics

While many substantial and well-respected reading theories exist, other reading theories have only come into existence within the last few decades. It is equally important to consider substantiated theories that researchers and psychologists have developed throughout many decades along with those that have the newest trend. Raphael, Florio-Ruane, Kehus, George, Hasty and Highfield (2001) argued that, "instead of recognizing that with each passing decade, our field has learned more about how to teach literacy…. We [have] essentially [fallen] into the trap of assuming that new knowledge somehow replaced or overshadowed previous practice" (p. 9). While not to discredit newer reading theories, psychologists have researched schema reading theory for over 50 years and proven it to be an effective concept to instruct all types of learners,

including early readers, illiterate adults, and ESL (English as a second language) individuals (Hudson, 1988; Lui, 2015).

Despite much research in schema theory as it relates to reading (Blissett et al., 2015; McVee et al., 2005), there has been no research on schema theory as it provides a theoretical framework for teaching phonics. Studies have used a variety of research designs to determine the use of prior knowledge structure, or schema, on reading comprehension. These studies determined that when students used schema to interpret unfamiliar words there was a significant, positive impact on reading comprehension (Carrell, 1984; Hudson, 1988; Liu, 2015). This study sought to determine how schema theory influenced the utilization of music to teach explicit, direct phonics through a qualitative, multiple case study approach in order to fill in a significant gap in research.

While there is no research on schema theory as it relates specifically to teaching phonics, there has been a substantial amount of research on the success of incorporating specific, direct phonics instruction into the reading curriculum (Liu, 2015; Sadoski, Paivio, & Goetz, 1991). This research used the schema theory as it relates to reading as the theoretical framework to guide the approach of teaching phonics by incorporating additional components to activate students' schema. Specifically, research was conducted on using music to activate prior knowledge (schema) to teach kindergarten children phonics. The approach was from the perspective of the kindergarten teacher and how each teacher was able to activate prior knowledge through music to encourage successful learning of phonics and eventually promote successful reading.

When readers read a given text and come to an unknown word, they must activate phonics skills in order to identify the unknown word. They will need to activate all the prior

knowledge previously learned. This includes graphic information, which involves sounding out the letters and words, semantic information, which involves using the pictures and the story context to identify the unknown word, and syntactic information, which is the rule of the English language that allows individuals to form words and phrases (Fisher, 2008).

Furthermore, when teaching beginning reading, a study by Ehri (2005) suggested students learn words by forming connections between letters in the spellings and sounds of the words. Readers form these specific connections through pre-existing schema of grapheme-phoneme relations, phonemic awareness, and the alphabetic system. Schema therefore directly relates to the process of reading to connect phonics skills of individual sounds into whole words. After one reads a word a few times correctly, that word then moves into long-term memory. This process continues throughout a reader's entire lifetime of reading.

Lui (2015) stated that schema theory suggests that meaning does not reside within the text itself. Individuals use schema to reconstruct the text through the interaction between the text and the reader's prior knowledge in order to create meaning. Schema theory suggests that using prior knowledge and organizing this knowledge to identify the unknown word will help students become more successful and independent readers (Green, 2010; Liu, 2015). Furthermore, the qualitative study by Lui (2015) concluded that reading without the activation of schema will result in a very labor-intensive process for the reader, thus resulting in lower levels of comprehension.

Schema theory is a theory about how knowledge is represented and how an individual uses previous knowledge in particular ways to make sense of and interpret new information (Jakarta, 2014). Schema theory as it relates to reading is an important theory because readers use schemata to make sense of text and evoke both past and potential relationships in order to

comprehend information (Jakarta, 2015). Due to the importance and relevance of this theory as it relates to reading, this will be the guiding theory throughout this holistic, multiple case study on the utilization of phonics to teach music within the kindergarten classroom.

Related Literature

While there is not an abundance of research on schema theory as it relates to reading, and even less research on the schema theory as it relates directly to phonics, there is a substantial amount of research discussing the history, positive correlations, and negative correlations of phonics and early literacy. Research-based literature also supports brain-based research and learning as it relates directly to music and the use of phonics in early literacy. Subsequent sections address teachers' perspectives on music within the classroom to teach reading, including phonics.

Brain-Based Research

In order to fully support research that focuses on incorporating music to increase student success in phonics, it is also important to note scientific, brain-based research about music and learning. Over the past two decades, there have been increasing advances on the understanding of the brain as a part of the human body through Magnetic Resonance Imaging (MRI) and Positron Emission Tomography (PET). These pieces of technology have allowed scientists and medical experts to more fully understand how the brain works (Cornett, 2011; King, 2016). Nonetheless, additional research still needs to be conducted on the relationship between the functions of the brain and student learning.

Researchers from the University of Iowa conducted one of the first studies to address early childhood education, music, and the brain in 1921 (John, 2002). The study concluded that music played a positive role on both brain development and the academic advancement of young

students (John, 2002). This study marked the beginning of brain-based research to focus specifically on the importance of early childhood and the use of music to instruct children within the academic setting.

Project Zero in the 1970s, led by philosopher Nelson Goodman at Harvard Graduate School of Education and the philosopher Howard Gardner was an interdisciplinary research program that investigated the benefits and potential detriments of aesthetic education (Carter, 2000). Through their research in Project Zero both Goodman and Gardner focused on cognitive musical development in children and how that development can enhance student learning (John, 2002). Both philosophers, although varying in their general philosophical approaches to education, provided major insights into brain development and how music can play a vital role in child's development and educational experience.

Studies have also shown that, given music's complex and temporal patterns, when exposing the brain to music on a regular basis, the brain can be wired more effectively in relation to perceptual experience (Colucci, 2014). Magnetic resonance imaging (MRI) also showed that music training can actually change the brain's anatomical structures (Xing, Xia, Kendrick, et al., 2016). These studies help support the benefits of music on the brain and how listening and actively participating in music can have a positive effect on an individual's academic success.

Brain-based research in regard to music and education can also relate directly to schema theory. According Siegel (2000), brain development requires experiences, which directly shape the selection and timing of how the activity of genes influences the structure of the brain (p. 36). This relates directly to the idea that one must reflect on schema, or units of knowledge previously learned, in order to further understand new information. Therefore, both schema and a

child's musical experiences may have a direct influence on his or her own learning due to the way our brain processes perceptions, movements, and skill acquisition (John, 2002).

Tierney and Kraus (2013) compared generational tasks between music and language. The result was that music and language showed many overlapping and parallel similarities within the neural system, thus providing strong, scientific support for the use of music to promote phonology. An example of this research finding is an individual singing a song. When a child is actively listening, his or her brain responds using regions of both the auditory and visual systems (Damasio, 1999). When recalling the song later, using schema, the individual recalls and "hears" the information within the song all over again. The brain processes the information and allows a learner to recall important information when necessary through the use of music, particularly song.

Music and language have many similarities within the brain. Music processing and language processing both use similar cognitive skills (Schons, 2008). As previously mentioned, individuals read music from left to right and, likewise, they read text from left to right. This concept allows musicians to more effectively read music like they read a textbook.

Fluency also plays a large part in both music and reading (2015). Individuals need to segment sounds into perceptual units in both music and phonics (St. Clair, 2014). For example, when looking at an entire sheet of music, readers must first look at each note on the page, and then subsequently process that note into a name and a pitch. Similarly, when looking at an entire page of words, individuals must first look at each word and then each letter. The reader must then process the name of the letter and the sound before being able to read the words on the page. In addition, the same brain functions that are needed while processing music are the same brain functions used to process language and reading skills (Moreno, Friesen & Bialystok, 2013).

Playing and listening to music also promotes more activity within the medial frontal and superior temporal areas of the brain in both hemispheres (Schons, 2008). Research suggests a constant interaction between episodic memory, or the memory of events, and semantic memory, or the memory of meaning and knowledge gathered over time (Cabanac et al., 2013). This relates directly to the schema theory in that providing students the ability to use recall to activate prior knowledge enhances their ability to learn new tasks.

The next section will further discuss well-known theories such as the Mozart Effect. Music researchers have studied this phenomenon for many years and it is a well-known theory within music education (Cabanac et al., 2013; Colucci, 2014; Taylor & Rowe, 2012). Throughout years of research, including the Mozart Effect, it has been proven that music increases individuals' skills in verbal memory and wide brain function (Chan, Ho & Cheung, 1998; Nunley, 2003; Tomlinson, 2013). The brain has also processes and sequences music in the same way it processes language and sight (Newland, 2013). According to decades of research, music also aids in the development of speech, visual-motor skills, fine motor skills, and memory which provides a direct connection to research music and reading (Hannaford, 1995; Levintin, 2006; Nunley, 2003).

Additional research shows that when children engage in literacy tasks, they are able to "co-construct" texts by drawing on semiotic resources, or resources that help students make meaning (Standley, 2008; Telesco, 2010; Tierney & Kraus, 2013). The use of musical, multimodal strategies in reading aids individuals in the higher-level, critical thinking they need for comprehension of text, and relating the text to one's own self and personal experiences. These strategies include using gestures in song, repeating melodic motifs with reading content and skills, and using invented song to engage in literary tasks (Tomlinson, 2013).

Kindergarten in the United States

According to the US Department of Education (2015), each year about 4 million children begin kindergarten in the United States. Friedrich Fröbel first introduced the term "kindergarten" in 1840 (Elicker & Mathur, 1997). Fröbel argued that teachers should use music, stories, and dramatic play to educate children and focus on hands-on manipulatives and crafts to encourage their creativity and curiosity (Passe, 2010). This approach by Fröbel has led to additional demands on research to determine best practices for instructing children in kindergarten.

"Kindergarten" literally means "garden for the children." This term was meant metaphorically by Fröbel in the sense of kindergarten being a "place where children can grow in a natural way" similar to a garden (Cryan, Sheehan, Wiechel & Bandy-Hedden, 1992). In comparison, other educational philosophers define "kindergarten" as an educational approach that focuses on playing, singing, and other practical activities. Practical activities include drawing and social interaction as part of the transition from home to school (Xue & Meisels, 2004).

The state of Wisconsin housed the first kindergarten in the United States in 1856. The school was built for immigrant German children (Elicker & Mathur, 1997). Elizabeth Peabody started the first American English-speaking kindergarten in Boston in 1860 (Passe, 2010). Peabody stated, "The object of the Kindergarten is to form and open the mind of childhood, rather than to fill it" (Marshall, 2005, p. 387). The intent in creating kindergarten classes within the school system was to provide children at a younger age the opportunity to explore beginning academic skills in a creative environment while also providing them social and emotional skills to cope with the ever-changing world around them.

Between 1935 and 1986, every state within the United States subsidized kindergarten into the public school systems (Dhuey, 2011). A study by Dhuey (2011) determined that the increase of kindergarten programs decreased the probability that a child will be below his or her grade level upon entering first grade. In addition, Cheney, Friedman, Hilger, Saez, Schanzenbach and Yagan (2010) determined that children who had experienced teachers in kindergarten had higher test scores throughout their academic career and also higher earnings as adults versus those that either did not attend kindergarten or had inexperienced teachers.

Originally, educators designed kindergarten classes to be full-day programs in order to focus on both academics as well as social and emotional goals for children. Only the wealthy could afford to send their children to kindergarten. During World War II, school systems were forced to move kindergarten to half-day classes due to teacher shortages (Thompson & Sonnenschein, 2016). Half-day kindergarten continued in most states through the 1980s (Thompson & Sonnenschein, 2016).

In the United States, there has been an increased demand for higher literacy scores from preschool through the collegiate level. This has put a higher importance and emphasis on kindergarten due to multiple studies showing the benefit of early literacy programs, most of which should begin in kindergarten or sooner (Cheney et. al., 2010; Dhuey, 2011; Thompson & Sonnenschein, 2016). However, since the 1970s, there has been a strong push to move kindergarten classes back to full day instruction to meet the academic, as well as socio-emotional needs of the students (Passe, 2010). According to recent studies, as of 2013, 77% of kindergarten children were enrolled in full-day versus half-day kindergarten classes (Child Trends Data Bank, 2015).

In 2010, forty-two states mandated kindergarten in every school district (Passe, 2010). Children are eligible to attend kindergarten beginning at the age of five (Child Trends Data Bank, 2015), although some parents opt to wait until their child is six to send them to kindergarten. A study by Thompson and Sonnenschein, (2016) determined that, regardless of the age in which children begin kindergarten, children who attend full-day kindergarten programs that provide relevant reading instruction at developmentally appropriate levels were more likely to achieve early word reading and thus develop a high reading performance. Similarly, a meta-analysis by Cooper, Allen, Patall, and Dent (2010) surmised that there is a positive correlation academically between children who attend all-day kindergarten in the United States and first grade readiness. Children who attend full-day kindergarten enter first grade about one nine weeks ahead of peers who did not attend full-day kindergarten programs (Cooper, Allen, Patall & Dent, 2010).

However, it is important to note that the same study by Cooper, Allen, Patall, and Dent, (2010), discovered that this academic advantaged disappeared by third grade and children became more academically equal regardless of whether they attended full-day kindergarten, half-day kindergarten, or did not attend kindergarten at all. Regardless, most research supports the push towards full-day kindergarten in the United States to provide students with academic success and support at the beginning of their educational career.

Phonics and Early Literacy

The English language is a complex language. There are only 26 letters in the English alphabet but there are approximately 44 sounds (Hornsby & Wilson, 2009). Tahan, Cline, and Messaoud-Galusi (2011) noted that the English language is complex because "letter-sound" correspondences are inconsistent and "several grammatical rules have to be taken into account

while reading" (p. 1064). A phoneme can have different sounds depending on the word. For example, the letter "g" in "giraffe" versus the letter "g" in "goat" or the letter "c" in "circus" has two different sounds in the same word. This makes early phonics skills and asking children to use schema to recall previous knowledge, very important to literacy success.

The National Reading Panel (2000) identified phonics and reading fluency as the two critical components in early elementary reading instruction. Research supports early and explicit phonics instruction as one of the key predictors of reading success in children (Adams, 2001; Ehri & Roberts, 2006). Phonics is an auditory process because no printed text is involved. Phonics is also highly and positively correlated with an individual's reading ability (Wolf, 2007). Research shows that as phonological awareness and ability increases, a child's reading ability also increases (Tracey, 2017). Additional studies also note that students with strong early literacy skills have a higher success rate in not only kindergarten, but also have higher graduation rates from high school (Morrow & Dougherty, 2011).

Phonics instruction requires multiple components of instruction and there are a variety of thoughts within education about the best approach to teaching phonics (Campbell, 2015). These approaches include synthetic phonics, analytic phonics, embedded phonics, onset-rime, and phonics through spelling. While there is no "right" or "wrong" approach, a study by Ehri, Nunes, Stahl and Willows (2011) suggest a combined approach of several of the aforementioned styles to teach phonics.

Synthetic phonics takes a part-to-whole approach requiring children to convert graphemes into phonemes. Analytic phonics, or a whole-to-part approach, teaches children to analyze letter-sound relations based off identifiable words. For example, students might identify that dog, dig, and dug start with "d" and end with "g." Other approaches to phonics include

embedded phonics, onset-rime phonics, and phonics through spelling in which students segment and then write the phonemes in words (Ehri, Nunes, Stahl & Willows, 2001).

Many studies have concluded that successful early literacy programs must combine skill-based reading models with child-centered instruction (Morrow & Dougherty, 2011; Jones-Gensel, 2009). Regardless of the approach, children who engage in literacy tasks must begin with the basic concept of sounding out letters and relating those letters and sounds to words (Fisher, 2008). According to Tracey (2016), students will only be able to read after they are effectively and efficiently able to process sounds, called decoding, and match that to printed words.

The National Reading Panel, or NRP, (2000) conducted scientific-based research of 418 separate studies on reading instruction and determined that students in the United States in grades K-4 have lower reading scores than that of 13 other countries. The National Assessment of Educational Progress report also indicated that the average reading score for children in the United States was lower in 2015 than in 2013 (National Center for Educational Statistics, 2017). The results from both studies indicate that there is a substantial need for additional focus on literacy skills including phonemic awareness, phonics, fluency, and reading comprehension within the kindergarten classroom (Cooper, 2008; Sousa, 2001).

Further studies by Reschly, Busch, Betts, Deno and Long (2009) and Kaplan and Walpole (2005) determined that a student's ability and mastery of early reading skills by the end of kindergarten predicts their success in word recognition and reading comprehension in upper grade levels. Similar studies determined a strong correlation between a student's phonological awareness in kindergarten and their success in reading fluency later in their academic career (Ehri & Roberts, 2006; Thompson & Sonnenschein, 2016). Many of these recent studies have

similar conclusions, focusing on the importance of early and explicit reading instruction in kindergarten in order to continue student reading success throughout students' schooling.

According to the National Reading Panel (2000), phonics, or the relationship between letters of written language and sounds of spoken language, is under the umbrella of phonological awareness (Doty et al., 2015). Phonological awareness moves beyond letters and sounds to include rhymes and alliterations (Fisher, 2008). The question then rises of what types of phonics instruction teachers should include in early literacy and how much they should include within the school day.

At the most basic, beginning levels of phonics instruction is the alphabetic principle. This principle is based on the concept that letters in words represent specific sounds. Beginning readers must be able to identify each letter and related sound(s) before being able to begin to read consonant blends (bl, st, cr), consonant digraphs (th, sh, ch and wh) and vowel digraphs (ee, oa, oo) and dipthongs (aw, ou, ow). Therefore, to be successful readers, phonics instruction must begin with the alphabetic principle and then progress into more advanced phonics instruction while incorporating the reader's schema throughout the process (Stahl, Duffy-Hester, & Doughtery, 1998).

According to Carbo (2007), several components impact early readers. These include students' overall reading environment, their own emotional needs, sociological preferences, and their means of processing new information. Because each individual learns in a unique way and at his or her own pace, it is important to provide a variety of learning strategies to engage and instruct young readers. Gray, Ferguson, Behan, Dunbar, Dunn & Mitchell (2007), who have spent decades studying learning style preferences, recommend that reading teachers use a variety of styles to teach reading, paying special attention to global strategies (Harris & Smith, 2017).

Fountas and Pinnell (2012) conducted several studies on phonics within early literacy. Many school systems within the United States use the Fountas and Pinnell reading benchmark system as a summative assessment tool to identify grade school children's reading levels. Fountas and Pinnell's research found that children need many repeated experiences in phonics in order to correctly identify phonemes, or the smallest unit of speech (Jerger, 1996). Phonics instruction should include chant, singing poems or songs, and rhymes to help students become familiar with, and eventually identify how sound patterns are connected (Pinnell & Fountas, 2012; St. Claire, 2014).

Recent studies determined that explicit and purposeful instruction of phonics in kindergarten and first grade enhanced the students' abilities to understand and manipulate the sound-symbol correspondence necessary for beginning reading skills (Cooper, 2008; Lesaux & Siegel, 2003). The decoding process, or the process of translating a printed word into a sound (Snow, Burns & Griffin, 1998), if taught along with phonemic awareness, can increase students' overall reading fluency, and in turn, increase students' reading comprehension (Cooper, 2008; Gunn, Biglan, Smolkowski & Ary, 2000). Furthermore, Miller (2013) concluded in a quantitative study that students who received systematic phonics instruction showed statistically significant growth in letter-sound knowledge, which results in more fluent reading at an earlier age.

However, while there is a push towards small group, individualized, explicit phonics instruction, some research indicates that reading instruction is more effective when teaching the whole group of students. Whole group language instruction uses shared reading and writing while explicit daily phonics incorporates both small group and whole group tools such as oral-sound worksheets and blending (Buriss, 2001; deGraaf et al., 2009; Suggate, 2016). These

studies claim that direct phonics instruction is not the best practice for teaching early childhood literacy skills.

In comparison, other research studies have shown that a systematic phonics program had a more positive effect on both reading skills and spelling for both kindergarten and first grade students (deGraaf et al., 2009; Manning, Manning, & Kamii, 1988). In addition, research shows that students who were taught a systematic, explicit phonics curriculum had great gains in reading over those who were taught only using a whole language approach (Hornsby & Wilson, 2009; Stice & Bertrand, 1990). With the governmental push from ESSA (2015), as well as the studies from the National Reading Panel (2000), the majority of school systems are moving towards a direct phonics instruction approach versus a whole group, whole language approach in order to try to meet the needs of each individual student.

Due to the recent research supporting the need for explicit phonics instruction in early education, this study explored the use of music to teach phonics within the kindergarten classroom. Studies show that a systematic phonics program can improve the reading abilities in early elementary students (Fisher, 2008; Liao & Campbell, 2016; Snow et al., 1998). However, the research questions within this study sought to understand how teachers incorporated music specifically into the kindergarten classroom to teach phonics. This method may provide students and teachers with a different approach to phonics and reach an additional learning style of individuals.

Music Within Education

The benefits of direct phonics instruction have been noted, including resistance to the idea of direct, explicit phonics instruction for early readers in kindergarten. However, it is equally important to address how music relates to literacy and education. According to research

noted below, there are many substantial benefits of using music within the academic realm to improve students' reading, writing, math, and overall academic success.

Over the past two decades, the push for better literacy programs in American schools has led to many educators, as well as other "non-academic" teachers such as physical education and visual arts teachers, losing significant instruction time in order to make room for more reading instruction time within the classroom (Hansen & Bernstorf, 2002). However, a study by the National Research Council concluded that removing and/or decreasing the amount of time teachers provided musical experiences to their students within the school day deprived each student of kinesthetic, aural, oral, visual, and emotional experiences that allow written texts to be brought to life through music (Burns, Griffin, & Snow, 1999).

Incorporating music into the academics of education, including reading, writing, and math can be beneficial to students' academic success (Cabanac et al., 2013; Curtis, 2007; Hogenes et al., 2014). Students often have a great deal of success using music within the academic realm. According to Salmon (2010), music is often called the "universal language" and allows for students to activate previous knowledge, or what is often referred to as schema, for scaffolding, which then enhances reading instruction.

Although some researchers and educators alike have skewed results to push for both participation and funding within fine arts programs, many studies still support through both quantitative and qualitative research that students who participate in music-related activities have stronger academic skills (Gadberry, 2010). Specifically, students who study music have better grades in all subjects, especially math and language arts, than those that do not study music (Cabanac et al., 2013; Curtis & Fallin, 2014; Gadberry, 2010). These recent studies further

support the need for the use of music within the general education classroom as well as specific music courses within the school day.

Numerous studies have also concluded that individuals who are involved with music throughout school have higher levels of academic achievement (Holochwost, Propper, Wolf, Willoughby, et al., 2017). A meta-analysis from the College Board indicated that students who took at least one music course in high school had higher SAT math and verbal scores than those that did not take any music courses (Vaughn & Winner, 2000). Another study by Holochwost, Propper, Wolf, Willoughby, et al., (2017) found comparable results in which students in music education courses scored higher on standardized tests and also scored higher on math and language arts tests than students who did not take music education courses.

Further qualitative studies indicated that music education can assist students in the processing of lexical skills, or verbal/word skills (Kolinsky, Cuvelier, Goetry, Peretz & Morais, 2009). In addition to lexical skills, learning pitch patterns also directly relates positively to a child's performance on phonological skill tests (Moreno, Marques, Santos, et al., 2009). These studies determined that music might be a possible intervention for both early readers, as well as those who struggle with reading later in the education process.

However, while a multitude of studies have shown the benefit of music in education to increase academic performance, other studies have shown little to no statistical difference in the academic performance of students who participated in music courses versus those who did not. A study by Hogenes, van Oers and Diekstra (2015) showed that there was no difference in the learning outcomes of musical versus non-musical students in regard to intelligence and academic achievement. Nevertheless, musical students in this particular study did out-perform nonmusical students in reading comprehension.

Researchers in both Germany and Switzerland conducted studies with elementary school children ages nine to twelve. These studies both found that there was no statistically significant difference in the academic grades between students who were enrolled in music classes and those who were not enrolled in music classes (Bastian, 2000; Weber, Spychiger, & Patry, 1993). These studies were similar to the findings in the previously mentioned study by Hogenes, van Oers and Diekstra (2015). However, these studies are also contradictory to a plethora of other studies that have shown a statistically significant academic benefit to students who participate in music courses and their academic success. Further analysis is needed to determine the variables within each study.

When relating music education research specifically to early childhood literacy, there is a multitude of research on the benefits of music with specific academic skills. Some of the prominent research comes from Hallam's (2010) study that found that music instruction with the elementary classroom can improve students' perceptual and literacy skills, numeracy, and creativity. Similarly, Weinberger's (2000) research concluded that music instruction within the elementary classroom provides students with additional learning skills including strategies for gathering and conceptualizing information.

Perhaps the most recognized research application of music within academia is The Mozart Effect. This concept relates directly to increased spatial-temporal reasoning (Vitale, 2011). Dr. Alfred Tomatis first described the Mozart Effect research in the 1950s. He claimed that when students listened to the music of Mozart for 10 minutes, they scored higher on spatial-temporal tasks than students who did not listen to Mozart's music (Vitale, 2011). This concept has been researched many times throughout many decades and has led to an increased push from parents and administration alike to incorporate music, particularly classical music, into the

classrooms from preschool to the collegiate level to increase student learning and academic success (Vitale, 2011; Hauserman, 1998).

Regardless of the rationale behind The Mozart Effect, research shows that young children are able to actively engage in music activities including singing melodies, discriminating between pitches, and even producing spontaneous song. According to a study by Minami and Nito (1999), children as young as six months were able to match pitch. By kindergarten, children can differentiate between similar and contrasting phrases, accompanied versus unaccompanied music, dynamic and tempo changes, high versus low pitches within music, and repeat basic melodic and rhythmic features (John, 2002). The ability to differentiate basic music components is based upon a child's own life experiences beginning in utero.

Music in education also relates directly to schema theory in order to enhance student organization and memory. To be successful academically, students must be able to receive information, remember it, and store it to be recalled at a later time. Similarly, music involves repetition through recall and increased retention and performance of that recalled information (Curtis, 2007).

Phonics and Music in Elementary Education

As previously stated, one-third of kindergarten students are not reading at grade-level by the end of kindergarten (NCET, 2013) and two-thirds of all children are not reading at grade level by the start of fourth grade (Annie E. Casey Foundation, 2015). This produces a spiraling effect on student achievement for years to come. Snow and Matthews (2016) explained, "Longitudinal research conducted over almost 40 years has confirmed that differences between high school dropouts and graduates can be identified as early as third grade" (p. 58). A recent

study by Adelson, Dickinson and Cunningham (2016) concluded that only 36% of fourth grade students perform at or above a "proficient" reading level nationally (p. 258).

However, in order to increase student achievement in reading, educators must develop further strategies. One strategy teachers use to improve phonics and reading skills is incorporating music into the classroom. Tomlinson (2013) wrote, "Multimodal redesign in young children's music and verbal linguistics is explored as a rich source for communicating meaning and developing higher thinking" (p. 4). The support behind this is due to the benefits of both music and phonics within literacy. Combining the two elements of music and phonics instruction may have very positive benefits for both the teacher and students, providing them with a different approach to the traditional phonics instruction.

Studies have also shown that an emergent literacy approach is the most effective way to teach early literacy skills (Flaugnacco et al., 2015; Patel, 2003). In this approach, students learn both phonological awareness and phonics. Students learn these skills through play-based instruction including singing, rhymes, chants, dramatic play, and shared reading (Britto, Brooks-Gunn & Griffin, 2006; Campbell, 2015). The most important concept is for educators to present students with a wide variety of approaches to reading in order to improve reading instruction that will meet the needs of all students (Tracey, 2016).

Suggested strategies for improving literacy skills in early childhood education focus on reaching a variety of learning modalities, including kinesthetic, aural, and verbal (Betteney & Brooks, 2015; Walton, 2014). Incorporating music into phonics provides an opportunity for teachers to adapt instruction for all three learning modalities. Research shows that when incorporating a song, or the use of music and printed text, into the reading program to relate

content to phonemic awareness and fluency, students, on average, made more than a year's growth in reading skills (Iwasaki, Rasinski, Yildrim & Zimmerman, 2013).

A reading program that specifically focuses on the use of music to guide the curriculum is the program *Earobics* (USDOE, 2009). According to Jones-Gensel (2016), the *Earobics* program has a positive effect on both literacy in alphabetics and reading fluency. When schools incorporated this program which includes music, audio recordings, videotapes, letter-sound review, read alouds, and leveled books for small group instruction, students' reading scores went up 25% in alphabetics and 15% in reading fluency (Jones-Gensel, 2016; USDOE, 2009).

One important part of teaching reading through music includes the use of rhyme. The most important reading pattern for early readers are rimes, also known as word families or phonograms (Rasinski, Rupley & Nichols, 2008). Many early children's songs incorporate rhymes into the lyrics to help children begin to identify early rhyming patterns. The purpose is to teach students musical songs using rhymes so they are able to then use their schema later as they incorporate similar rhymes within their reading (Rasinksi, Rupley & Nichols). Music also allows students to creatively think of their own rhymes, such as in the song "Down By the Bay" where students can use rhymes to complete a phrase in the song, such as "did you ever see a fly wearing a tie?"

An in-depth study by Hansen and Bernstorf (2002) revealed that there are many similarities in reading texts and reading music. Many skills overlap between music and reading and can therefore provide a multifaceted approach to reading instruction. These similarities include reading or decoding of text. An individual reading a text, as well as an individual reading a sheet of choral music must use phonological awareness, phonemic awareness, sight

identification, orthographic awareness (which includes the conventions needed for writing), cueing systems awareness, and fluency (Hansen & Bernstorf, 2002).

Phonological awareness refers to the ability to discriminate between sounds without text (St. Claire, 2014). As previously mentioned, teachers often use rhymes to instill phonological awareness. In music, children learn similar skills through echo-clapping words they hear with a rhythm. Children's music also uses rhymes at the end of each musical phrase. Therefore, teachers should incorporate this important reading skill into both the reading classroom as well as the music classroom (Hansen & Bernstorf, 2002).

Phonemic awareness refers to the ability of an individual to decode individual sounds, or phonemes. Students in reading may need to "sound out" a particular word in order to read it. In music, music teachers may ask students to pair a symbol with a musical element or sound, such as saying "tah" for a quarter note or "sh" for a quarter rest when the students see it in written music (Hansen & Bernstorf, 2002). This again shows that educators can teach reading skills in both the academic classroom and the music classroom.

A well-known reading and phonics program that incorporates music with a phonics curriculum is the Sing, Spell, Read, Write (SSRW) curriculum. The SSRW program uses music, including sing-along songs and games to teach literacy skills (Green, 2001). However, there is no recent research on this particular approach as the original edition was published in 1972 and many now feel it is an outdated phonics system (Green, 2001). Despite SSRW being an outdated phonics program, this curriculum's approach of using music to teach literacy is still a widely researched topic today.

Another reading and phonics program that is gaining in popularity within the United States is the Phonics Dance. The Phonics Dance uses dance, rhythm, and chants to teach word

association, alphabet sound review, and “hunks and chunks” (or blends and digraphs) (Mullins, 2013). A recent study by Mullins (2013) concluded that when teachers incorporate the Phonics Dance into the curriculum along with a basal phonics approach, there was a greater, quicker impact on the students learning of letter-sound correspondences than only using a basal program. Therefore, this study clearly indicates that it is beneficial to incorporate music-based curriculum into the phonics program.

One of the most beneficial ways to increase early literacy in kindergarten is to provide a variety of instructional reading strategies into the daily curriculum. Students learn best when they activate prior knowledge (schema) (Clay, 2002), and when teachers use a variety of learning styles within reading instruction (Clay, 2002; Cooper, 2008; NRP, 2000). This qualitative research explored the specific approach of using music to teach phonics.

Teachers’ Perspectives Towards Music and Phonics

Both music and explicit phonics instruction enhance early literacy skills. However, there is little research about early childhood teachers’ perspectives on the teaching of phonics within early childhood education, particularly kindergarten (Campell, 2015; Hindman &Wasik, 2008). The purpose of this qualitative, multiple case study was to investigate 10 kindergarten teachers’ use of music to teach phonics within the classroom because: “Understanding early childhood educators’ beliefs about phonics can provide insights into how educators are building the foundations of young children’s literacy success prior to starting formal schooling” (Campbell, 2015).

Some studies have determined the use of music within the kindergarten classroom. For example, Sullivan (2016) concluded from his qualitative study on the effects of music within kindergarten that, “When music is used in kindergarten classrooms and included within

activities, student engagement is enhanced significantly and the learning of those kindergarten children is positively affected" (p. 4). Other studies have focused on phonemic awareness (Newland, 2013), the comfort level of the elementary teacher teaching music within reading (Campbell, 2014), and the role of music within early literacy in kindergarten (Curtis, 2007; St. Claire, 2014). Despite a great deal of research on other literacy approaches, no studies have studied the teacher's utilization of music to teach explicit phonics instruction within the kindergarten classroom.

Despite success with incorporating music into the kindergarten reading curriculum, some teachers still do not feel adequately prepared to teach kindergarten. The result is the teacher's tendency to shy away from incorporating various forms of music into the daily curriculum. A study by Neokleous (2014) suggested that pre-service music teachers tend to avoid using music as a teaching strategy due to their own insecurities about singing. Of the 33 participants in the study, 52% could not echo-sing a basic la-sol-mi pattern. Neokleous (2014) suggested that collegiate courses include private voice lessons, as well as a course in learning children's songs and basic music skills for early elementary pre-service teachers.

Vitale (2011) concluded in a quantitative study that parents and teachers alike perceive music as having a positive effect in both math and science scores. The study did not determine perceptions about music and reading. However, students in Vitale's (2011) research did not believe that music had an effect on their academic performance. This result, however, is consistent with Campbell (2010) who argues that music is so ubiquitous in the lives of children that they do not notice it or feel it is beneficial beyond using it for pure enjoyment.

In a recent study by O'Keefe, Dearden and West (2015), the authors argued that many teachers do not have positive perspectives towards incorporating music into the kindergarten

classroom. This is due, in part, to the demands placed on the kindergarten curriculum and the many other skills teachers believe they need to teach. In interviews with participants, teachers also shared that they are more likely to use music in the kindergarten curriculum if they have had musical training or if they are able to easily collaborate with the music education teacher within the building (O'Keefe et al., 2015).

It is important to also note the opposite view of the kindergarten teachers' perspectives on teaching phonics within the general education classroom. Many administrators and curriculum coordinators ask music educators to teach reading skills within their music classrooms. While some general classroom teachers do not want to give up instructional time to teach music skills, likewise, music educators also do not want to relinquish their short instructional time to incorporate reading into their music classroom. It is, however, beneficial for music educators, as well as general education kindergarten teachers, to develop a better understanding of the characteristics that are shared between music and reading (Hall & Robinson, 2012). This will allow cross-curricular teaching and enhance students' reading abilities throughout the entire day.

However, even with little musical training or musical background, many general education teachers are able to incorporate music effectively in the general classroom environment. Teachers need to improve their perceptions, or perhaps even insecurities, about using music to teach academics. Russell (1996) suggested providing professional teacher training in music and giving teachers the necessary tools to feel more adequately prepared to incorporate music into the classroom. This study explored what tools kindergarten teachers may use to teach phonics with music to provide other educators with ideas for their own classrooms to continue to raise students' reading abilities in kindergarten.

Summary

Reading is a necessary skill for all individuals to be successful in society. Reading instruction, particularly the teaching of phonics, begins in kindergarten. As the research shows, the use of phonics is a key component within the reading curriculum. However, given the staggeringly low reading scores of kindergarten through third grade students across the nation, as well as the push for high-stakes testing from elementary to high school, research has suggested finding additional ways to teach phonics instruction within the classroom.

Brain-based research shows the close relationship between music and reading. Recent improvements in brain imaging gives experts a clearer understanding of how well the brain responds to music and language (Patel, 2003). Research also shows the direct correlation between how the brain interprets music and how the brain interprets words within a written text. Brain-based research also supports schema theory and provides a clear argument as to why the use of music to teach reading skills, such as phonics, is beneficial to students.

This chapter identified a substantial amount of research about the effects of music on the brain, as well as the effects of music on a child's academic success. However, no research explored, through a qualitative approach, the use of music to teaching phonics within the kindergarten classroom. This research hopes to fill the gap within the current research and provide a better understanding of how teachers use music within the kindergarten classroom during phonics instruction.

Chapter Three provides a detailed explanation of the design for this multiple case study. The setting for each case, as well as all participant information and selection of the participants for the study is also discussed at length. Finally, a step-by-step description of the procedures and

data collection is discussed in order to provide a full rationale for the selection of a multiple-case study.

CHAPTER THREE: METHODS

Overview

The purpose of this multiple case study was to explore the utilization of music to teach phonics within the kindergarten classroom. The theory guiding this research was the schema theory as it relates to reading. Schema theory, as it relates to reading, focuses on the process of using a reader's existing knowledge, called schemata, to interpret letters and sounds into words in order to construct meaning (Fahriany, 2015).

Chapter Three focuses on the research design and data collection of this study. Data collection included interviews, direct observation, and physical artifacts through case study protocol (Yin, 2014). The participants consisted of 10 individual cases in order to effectively see how a variety of kindergarten teachers use music to teach phonics within their own classrooms. Data analysis relied on theoretical propositions and employed pattern matching analytic technique (Yin, 2014). Coding was completed using Computer-Assisted Qualitative Data Analysis Software (CAQDAS) to transcribe all interviews and analyze the results. A detailed description of each step of the research process is included to provide a comprehensive overview of the research study.

Design

This research study was a qualitative, multiple case study that used a holistic, analytic, explanatory approach to collect and analyze data. The study followed a cross-cases synthesis design for data analysis as recommended by Yin (2014). According to Stake (2005), a qualitative case study will place a high priority on the direct interpretation of events. This study explored kindergarten teachers' use of music to teach phonics, which allowed me, the researcher, to directly interpret and analyze events that happened during direct phonics instruction within the

kindergarten classroom. A qualitative study is more justifiable than quantitative due to the desire to explore kindergarten teachers' perspectives on the use of music to teach phonics.

Stake (2005) also noted that qualitative research does not focus as much on the measurement of data, but rather seeks to find patterns of both unanticipated and expected relationships within a specific case. Yin (2014) explained that qualitative research orients "away from cause and effect explanation and toward personal interpretation" (p. 43). The purpose of this study was to interpret the ways in which teachers utilize music within their kindergarten classrooms to teach phonics. The study did not measure data, but rather found patterns within and between each case being studied.

The design of this research used a multiple case study approach. According to Stake (1995), the purpose of a case study is to study the "particularity and complexity of a case, coming to understand its activity within important circumstances" (p. 11). Given that definition, a case study approach was valid for this study for several reasons. Yin (2013) emphasized that a case study investigates a contemporary phenomenon (or a case) in-depth and relies on multiple sources of evidence, with data needing to converge in a triangulating fashion (p. 17).

The purpose of a case study is to explain, explore, and describe (Bryan, Dykstra, VanDam & Worley, 2017) cases within set parameters. These are bounded by time (two months of data collection), place (kindergarten classrooms within Ohio) and focus (incorporating music to teach phonics). The cases were various kindergarten teachers in several school districts within the state of Ohio who volunteered to give their perspectives on the use of music to teach phonics within their classroom. The intent of the study was to report on several cases of teachers and examine the kindergarten teachers' utilization of music to teach phonological skills.

The multiple case study used replication when determining each case. A literal replication was used in an attempt to select cases that had similar conditions and thus predicted similar results (Yin, 2014). The intent was for each case study to be as similar as possible in order to fully explore the use of music to teach phonics within the state of Ohio. I reached data saturation after 10 cases. Therefore, no additional cases were added.

For the purpose of replication, each individual case was a "whole" study in and of itself (Yin, 2014). The conclusions reached for each case then determined the needed replication for the other individual cases. The number of replications (10 total) was justifiable due to the fact that the theory, which was the utilization of music to teach phonics connected to the schema theory, was straightforward and "does not demand an excessive degree of certainty" (Yin, 2014, p. 61).

The approach for this design was intrinsic and holistic, meaning the approach was to understand "how" teachers use music within the kindergarten classroom. I then sought to understand this phenomenon better through in-depth analysis. Conducting a questionnaire to select individuals (15 or fewer) that best fit the case was the justification for a one-phase approach instead of a two-phase approach (Stake, 1995). Yin (2014) also suggests a one-phase approach when only a dozen or so possible candidates serve as cases. This study analyzed 10 kindergarten teachers from several different school districts based on meeting specific criterion, as well as their willingness to participate, justifying a one-phase approach.

Research Questions

Central Question

How do kindergarten teachers utilize music to teach phonics within the classroom?

Sub-Questions

1. What types of instructional methods and techniques do teachers use to incorporate music in order to teach phonics?
2. How do teachers integrate music within the context of direct phonics instruction in the kindergarten classroom?
3. How do teachers perceive the connection of using music and phonics to teach early literacy skills?

Setting

The setting for each case was crucial for understanding the case. According to Stake (2005), the context and nuances of the setting shaped the qualitative understanding of cases. The background shaped the experience itself and was foundational to interpreting the activity within each case. This research study was conducted in four different elementary buildings within Ohio. Yin (2014) recommended using at least three individual cases and/or a minimum of 10-12 participants. This allowed a sample size that was large enough to ensure desired results were obtained.

The sites were chosen due to the gap in research within the state of Ohio as it pertained to the utilization of music to teach phonics to kindergarten students. As previously mentioned, no researchers have conducted any qualitative studies to explore the utilization of music to teach phonics in Ohio. Each school district in the study had at least two and upward of four kindergarten teachers who currently use music to teach phonics. Each educator currently teaches in a school district with similar class sizes and other similar criteria, such as similar reading scores and number of at-risk students entering kindergarten, which created a literal replication, multiple case study.

No other criteria, such as race, gender, socio-economic status of the school, state report cards scores, etc. were used to determine the site. However, each teacher was required to be a licensed, full-time kindergarten teacher in order to participate in the study. Interviews with all participants took place at the elementary building in which they currently teach. In addition, I observed the teacher providing direct phonics instruction through the use of music within the classroom for approximately 45 minutes.

The study used the following pseudonyms for the four different schools: Astros Elementary, Freedom Elementary School, Rockets Elementary, and Vikings Elementary. Teachers from Freedom Elementary instruct students in the largest school district with approximately 2,500 students enrolled in grades K-5. Teachers from Vikings Elementary have an enrollment of approximately 600 students in grades K-5. Rockets Elementary has an enrollment of approximately 400 students in grades K-5. Finally, teachers from Astros Elementary have an enrollment of approximately 350 students in grades K-5 in their district.

All four elementary schools are located in northwest Ohio. All four elementary schools use similar testing for their students to determine reading readiness including Star Early Literacy Assessments and benchmark assessments for reading using running records. All four elementary schools have all-day, everyday kindergarten. Finally, almost every school district uses the phonics program called *The Phonics Dance* as discussed previously in Chapter Two. However, each teacher uses additional, supplemental materials at the teacher's discretion for other phonics instruction materials.

All elementary schools are within a 45-mile radius of one another. It was important to find similar school districts with similar demographics for each teacher in order to create a literal replication. A literal replication was used in an attempt to select cases that had similar

conditions and thus predicted similar results (Yin, 2014). The schools had many similarities but also enough differences to understand more fully how teachers utilized music to teach phonics within their own individual classrooms.

The research sites all provide daily reading instruction for at least one hour within the kindergarten classroom. There is no script for the reading program at each site, allowing each teacher some flexibility within the curriculum to incorporate a variety of music activities to teach phonics. Each research site also has an administrator and either a curriculum coordinator or literacy coach who is available as an additional resource for the classroom teachers.

Each site was chosen due to location within the state of Ohio. Additionally, each site had participants who elected to be a part of the study and met the pre-determined criteria. It was also important to use sites with participants who had a variety of years of experiences teaching kindergarten in order to gain a better understanding of the utilization of music to teach phonics within the classroom.

Participants

For this multiple case study research, criterion or purposeful sampling was used, meaning all cases met the criteria listed below. According to DiCicco-Bloom and Crabtree (2006), selecting in-depth interview participants is based on an iterative process referred to as purposeful sampling that seeks to maximize the depth and richness of the data to address the research question (p. 317). Therefore, each participant met the following criteria:

1. Be a state licensed teacher currently teaching kindergarten in the state of Ohio.
2. Use song or chant on at least a weekly, if not daily, basis to teach phonics to kindergarten students.
3. Document their teaching via written lesson plans.

I created a questionnaire following the case study protocol defined by Yin (2014) to find participants that met the above criteria. I used to a one-phase approach screen the candidates (Yin, 2014). I also sent a researcher-created questionnaire was sent to all kindergarten teachers at the four pre-determined school districts. I obtained emails via the curriculum coordinator for school districts in northwest Ohio. Each kindergarten teacher received an online link asking specific questions to ensure they met the criteria above.

A total of 10 educators agreed to participate in this study and met the criteria. According to O'Reilly and Parker (2013), a sample in qualitative research explores a range of opinions on a given topic. Sampling should continue until saturation occurs. Saturation refers to the collection of data until no new information is generated (Schwandt, 2015). For the purpose of this study, the sample size consisted of two to four teachers within a specific school district and used a total of four school districts and 10 kindergarten teachers until saturation was reached. I selected participants using criterion sampling that is discussed in the next section of this chapter. I sent all kindergarten teachers in the four selected schools an e-mail asking for participation in the research study and all teachers who responded initially were considered. Once I narrowed down participants who met the previously mentioned criteria, demographic information including age, ethnicity, gender, education, and years of teaching experience was described in narrative and tabular form.

Surveys/Questionnaires

I e-mailed a general questionnaire to all kindergarten teachers initially within the four selected school districts in northwest Ohio. I gathered the teachers' information from the listing of kindergarten teachers on the Ohio Department of Education website, as well as from e-mails received from the curriculum coordinator in this area of northwest Ohio. A case study protocol

was followed to develop a researcher-created instrument for finding participants. The instrument addressed the following criteria in order to determine appropriate participants that met the requirements of the study.

1. What is your name?
2. What is the name and location of your school district?
3. Are you a licensed, practicing teacher in the State of Ohio?
4. Are you currently teaching Kindergarten in Ohio?
5. How long have you been teaching?
6. Do you use music (including song, rhythms or chant) to teach phonics (including identification of written letters and their sounds)?
7. Do you regularly document your use of music to teach phonics via lesson plans?
8. Would you be willing to participate in a research project to explore your use of music to teach phonics within your classroom specifically?

To address validity, I first sent the survey to the committee members of this dissertation to check for bias and any other issues, as well as to ensure that the survey addressed the central question and sub-question to achieve the selection of necessary participants. Next, I sent the survey and interview questions to five kindergarten teachers locally to gain their feedback on the questions. This eliminated any potentially biased questions or questions that were confusing or led participants towards a specific answer.

Procedures

The following section identifies the steps that completed this research from the beginning to the final data analysis and conclusion. The first step was permission from each school district prior to beginning research at each of the four selected sites. Next, approval of research from the

Institutional Review Board (IRB) was acquired. After the dissertation chair's approval, the researcher submitted the research proposal and obtained IRB approval through Liberty University prior to beginning any research with participants (Appendix C).

After IRB approved the multiple case study for further research, I sent a researcher-created questionnaire to all kindergarten teachers within the four school districts in northwest Ohio to find participants. I chose to use a one-phase approach due to only 10 candidates participating in the case study (Yin, 2014). I selected participants based on those that met the criteria previously mentioned, as well as those that fit a literal replication design. I used criterion sampling to select participants, meaning each participant was willing to participate and also had to meet all pre-determined criterion previously mentioned (Creswell, 2013). Participants completed consent forms prior to interviews (Appendix D).

For the next step, I reviewed the case study interview questions and made necessary changes, which were minor. Once trustworthiness for the interview questions had been checked, the full interviews were conducted on-site using semi-structured, open-ended interviews. II recorded interviews using two types of digital recording for later transcription and data analysis. I also conducted a 45-minute observation of the classroom during phonics instruction which was also audio recorded.

Throughout the entire research process, I kept journal notes reflecting on my observations and the research process. I transcribed interview recordings and checked for accuracy after the completion of each interview. I read the transcripts of the interviews and listened to the observation recordings to look for recurring themes within the field observations and interviews.

Physical artifacts consisted of transcriptions of interviews and observation notes from the field. My field notes and/or journaling provided insight into each case and my reactions and

perceptions of each site and participant. Other physical artifacts included lesson plans and photos from classrooms.

I completed data analysis through transcribing interviews and reviewing observational notes. I then coded the transcriptions and notes into concepts, categories or nodes, and finally themes. After completing coding, I compared each case within each school district to identify differences and similarities. I also conducted a cross-case analysis amongst all 10 cases. These within-case and cross-case analyses results are discussed in Chapter Four. I presented the information back to each member for member checking once the data analysis was completed to assist with credibility of the research. I used Computer-Assisted Qualitative Data Analysis Software (CAQDAS) NVivo to assist with data analysis.

The Researcher's Role

I, Cherie D. Hocanson, am the researcher. I have a Pre-K through third grade early elementary education teaching license, as well as a K-12 Music Education teaching license in the state of Ohio. I am currently a kindergarten teacher in northwest Ohio, but also taught first grade for one year and music education for seven years. I personally use music to teach literacy skills within my classroom, including phonics. This may bring some bias about the use of music to teach phonics in the kindergarten classroom. I had to to be very aware of this potential bias as I worked through the data and analysis. While I currently teach in Ohio, I did not know any of the participants on a personal level, other than being colleagues within my same field of teaching. Personally, I am always looking for ways to incorporate more music into my teaching because I see the impact it can have on student understanding and comprehension.

The approach for this qualitative research study came from a Biblical perspective. I believe that music provides a calming effect on most children and that music is a gift from God.

As a Christian musician and general education teacher, I wanted to look at the kindergarten teacher's perspective on using music within the classroom, particularly in the area of phonics and reading.

Data Collection

During the research process, the multiple case study used three types of data collection. Both Yin (2014) and Stake (2005) identified types of data analysis, which include interviews, direct observation of the classroom, and physical artifacts. Physical artifacts included lesson plans and musical excerpts if the teacher used them. According to Yin (2014), "a major strength of case study data collection is the opportunity to use many different sources of evidence" (p. 119). The use of multiple sources of data collection, or data triangulation, also allowed me to gain a broader perspective on behaviors of the participants and allowed for further development of converting lines of inquiry during data analysis (Patton, 2000; Yin, 2014).

Direct Observation

For this multiple case study, I personally conducted all 10 observations. According to Yin (2014), direct observations can indicate something about the culture of an organization and can allow the researcher to see certain types of behaviors within the field. Furthermore, Merriam (1998) stated that direct observation helps to establish trustworthiness since the researcher is engaging in prolonged interaction with the participants in their own setting. I spent approximately 45 minutes in each classroom observing direct, whole group literacy instruction. I recorded the observations with two different audio recording devices for review later. I used a researcher-created observation instrument to observe specific components of the literacy instruction that teach phonics using music components including singing, chant and rhymes (Appendix F). The observation instrument used one column for note taking in the field and

another column for reflection. I finally reviewed the observation instrument results, memo notes from the researcher, and audio recording of the direct instruction for recurring themes.

Interviews

DiCicco-Bloom and Crabtree (2006) state, "The purpose of the qualitative research interview is to contribute to a body of knowledge that is conceptual and theoretical and is based on the meanings that life experiences hold for the interviewees" (p. 314). The largest compilation of data was through interviews. Interviews are an important source within a case study (Yin, 2014). While the participants received a constant line of questions, the responses and timing of the interview were open-ended and fluid. This type of interview process is also called a semi-structured interview (Weiss, 1994). This approach provided the participants the opportunity to share their experiences and the researcher the opportunity to explore the ways in which teachers used music to teach phonics.

According to DiCicco-Bloom and Crabtree (2006), semi-structured interviews are the most commonly used type of interview in qualitative research. The semi-structured interview provided a set of predetermined, open-ended questions that the researcher asked. However, the semi-structured interview allowed for in-depth responses from the interviewee as well as some dialogue between interviewee and myself in order to delve into the topic at hand.

The development of the interview questions occurred during the research design section. The interview questions did not last more than 45 minutes with each participant and were audio recorded on a digital recorder as well as on an iPad voice memo app. The majority of the interview questions were open-ended and semi-structured, allowing the participants to openly share their responses. The interview questions included level one questions, which are questions for each specific interviewee such as his or her name, position in the school, etc. Level two

questions were also used. Level two questions are questions asked of each individual case (Yin, 2014).

For this multiple case study, interviews occurred with all 10 kindergarten teachers at their own school. The teachers were encouraged to add anything else they believed was pertinent to the study. Upon completion of each interview, the entire interview was transcribed for later data analysis. I also kept personal memos on each interview.

One-on-one, open-ended interviews allowed me to provide important insights and help identify other relevant sources that served as evidence (Yin, 2014). The teacher interviews were conducted with semi-structured questions while still allowing for open-ended responses from the interviewees. Prior to beginning, participants granted written permission to audio record each interview with two types of digital recording. This interview provided kindergarten teachers the opportunity to share their experiences utilizing music within their own classroom to teach phonics. The interview questions for teachers are as follows and also found in Appendix A.

Standardized Open-Ended Kindergarten Teacher Interview Questions

1. Please introduce yourself to me.
2. What undergraduate courses, if any, did you take to help prepare you to use music within the general education class?
3. Please walk me through a typical daily phonics lesson.
4. How do you use music during phonics/reading in your classroom?
5. What resources (music/songs/chants) do you use to help you teach phonics?
6. What is your perception of using music within the classroom?
7. What do you believe are the influences of music in the learning process within reading?

8. If applicable, why have you been hesitant to incorporate music into your kindergarten classroom to teach phonics?
    a. What has been your greatest challenge, if any, in incorporating music to teach phonics?
9. What do you indicate are the results of the implementation of music in the teaching of phonics?
10. We've covered a lot of ground in our conversation, and I so appreciate the time you've given to this. One final question… What else do you think would be important for me to know about the utilization of music to teach phonics?

For the interview, questions one through three were background knowledge questions. These questions were follow-up questions to the survey sent out to select participants. The design of the questions allowed the interviewee the opportunity to settle into the interview process and answer some basic, non-threatening, or deeper-level questions. According to Yin (2014), this is a level one question, or question asked of the specific interviewee (p. 90).

Questions four and five focused more specifically on the central research question, "How do kindergarten teachers utilize music to teach phonics within the kindergarten classroom?" The design of the questions was to obtain a brief description of the use of music to teach phonics within the kindergarten classroom. Stake (1995) explained, "Two principal uses of case study are to obtain the descriptions and interpretations of others" (p.64). The questions related directly to sub-question one: "What types of instructional methods and techniques do teachers use to incorporate music in order to teach phonics?" These are considered level two questions, which are questions asked about the specific case (p. 90).

The remaining questions vary slightly. However, the design of all the remaining questions was to gain insight into research question two, "How do teachers perceive the connection of using music and phonics to teach early literacy skills?" These questions delved deeper into the understanding of the utilization of music to teach phonics and encouraged the interviewees to share their own experiences and insight into the topic.

The remaining questions varied between level two and level three questions. According to Yin (2014), level three questions ask about the patterns of findings. The final question for each interviewee was a level five question. Level five questions ask about policy recommendations and conclusions (p. 91).

After each interview, I wrote field observation notes, including thoughts on each interview. The notes included key ideas and episodes that occurred during the interview (Stake, 1995). A professional transcriptionist transcribed each interview. I established accuracy in the transcription by listening to each interview several times.

Physical Artifacts

Part of the data collection process was document analysis. Yin (2014) stated "artifacts can be an important component in the overall case" (p.117). A review of lesson plans from teachers looked at how often, if at all, each teacher used music to teach phonics in the classroom and the ways in which they incorporated music. I also took photos of the classrooms to document any musical instruments or tools that teachers used to implement music. Stake (1995) recommended analyzing documents for contingencies or frequencies, which helped to identify and support recurring themes.

The purpose of collecting additional documents, or physical artifacts, was due to a shorter time period of direct observation, that being approximately 45 minutes. In qualitative research,

documents often serve as substitutes for activity that the researcher was not able to observe directly (Stake, 1995). Therefore, I used additional physical artifacts for triangulation and additional understanding of data.

Data Analysis

According to Maxwell (1996), the purpose of data analysis is to classify and interpret linguistic material "to make statements about implicit and explicit dimensions and structures of meaning-making in the material and what is represented in it" (p. 5). In regard to this particular study, data analysis took place through coding using NVivo CAQDAS. Information from all 10 observations and interviews was placed into small categories of information. I then aggregated data into categories and then into themes. I identified four themes in total from participant interviews, observations, and physical artifacts.

The form of analytic strategy was used and is referred to by Yin (2014) as "relying on theoretical propositions" (p. 139). With this structure, the theoretical propositions, including theoretical framework, research questions, and review of the literature were considered and continually referred to throughout the data analysis process. The theory behind this research, which was the schema theory as it relates to reading, as well as the research questions, was the guiding force.

I used computer-assisted tools for the coding portion of data analysis. NVivo is a computer-assisted qualitative data analysis software (Yin, 2014). NVivo assisted with coding and categorizing the open-ended interviews and direct classroom observations, as well as the information gained from the physical artifacts and journaling notes. Qualitative researchers widely use this software based on affordability, ease of customer service, and the ease of learning how to use the software.

The process of coding allowed for careful analysis of each interview and observation. Through this process, the analytic techniques of within-case and cross-case synthesis were used (Yin, 2014). The key findings gradually moved into specific findings to help answer the research questions and find a solution to the research problem. Within-case and cross-case synthesis treated each individual case as a separate study and then aggregated the findings across a series of each individual case (Yin, 2014, p. 165). Stake (1995) recommends this approach for multiple case studies because one of the main goals of a multiple case study is to build a general, understandable explanation that fits not only each case, but also all the cases combined.

The use of photos of each classroom, as well as lesson plans from the teachers regarding the use of music to teach phonics, allowed for an additional perspective for the reader. The photos provided insight as to specific tools or instruments teachers used to teach phonics. The researcher looked for a reoccurrence of themes within pictures of the classroom. Photos also helped to provide detailed descriptions from the observations to look for specific themes during the coding process.

The lesson plans offered documented information from the participants, including frequency of the utilization of music to teach phonics within the kindergarten classroom. The researcher asked each teacher to provide one week of lesson plans, including the lesson directly observed. Enumeration indicated the frequency with which the 10 participants used specific music and phonics instructional aides to teach students. The recurring terms and vocabulary teachers used within lesson plans were also added to the coding process to assess recurring themes in the research data.

All of the above mentioned data analyses including observations, interviews, and physical artifacts fulfilled the requirements of triangulation. According to Creswell (2013), a

rigorous analysis of multiple sources and their convergence is one of the strongest validation strategies. Therefore, these methods provided a valid, qualitative, holistic, multiple case study.

Trustworthiness

Creswell (2013) defines trustworthiness, or validity, as the "accepted strategies" that document the "accuracy of their studies" (p. 250). According to Connelly (2016), "Trustworthiness or rigor of a study refers to the degree of confidence in data, interpretation and methods used to ensure the quality of a study" (p. 435). Trustworthiness includes credibility, dependability, transferability, and confirmability (Stake, 1995).

Credibility

Connelly (2016) refers to credibility as the confidence of the study (Connelly, 2016). In order to establish credibility, prolonged engagement and persistent observation in the field occurred. Credibility refers to the extent to which the findings accurately describe reality (Schwandt, 2015). Credibility depends on the richness of the information gathered and on the analytical abilities of the researcher. To assure credibility, I spent ample time in the field in order to build trust with participants, learn more about the culture of each school, and watch for misinformation or non-pertinent information the participants provided. The observations and data collection occurred over a one-month period of time. This process increased validity because qualitative research requires extensive time in the field in order to make decisions about the purpose of the study.

I also used member checking to assure accuracy and credibility for each of the participants. All participants were given the opportunity to read through transcripts and the data analysis (Chapter Four) to ensure their information was accurate. Methods triangulation using

data from document analysis, observations, and interviews was also used in order to assure credibility.

Dependability and Confirmability

Dependability helps to establish the research findings and refers to stability and reliability (Polit & Beck, 2014). Methods to ensure dependability included the research consultant and dissertation committee members, who are all experts in the field, reviewing results and conducting a research audit or external audit to ensure findings were consistent and repeatable (Shenton, 2004). Additionally, I kept detailed process logs (journals) to explain all the decisions and aspects of the study (Appendix H). This documentation allowed the reader to gain a better understanding of the thought process surrounding the research.

Confirmability is the verification that the participants shape the findings rather than the researcher. This is the neutrality of the degree that the findings are consistent and repeatable in a future study (Connelly, 2016). To establish confirmability, the researcher used an audit trail using both researcher reflective notes (Appendix H) and an audit trail time line (Appendix M). This provided a detailed process of data collection and data analysis by recording interesting topics, writing down thoughts about observations and coding, and provided a rationale on why codes were merged together.

In addition to prolonged engagement, clarifying researcher bias also aided in increasing validity. I noted any biases, past experiences, or prejudices. I have experiences in both music education and kindergarten and my bias may be that I believe music education can impact the general education classrooms and aide in improving most skills. I acknowledged and addressed this bias. The reader must be aware of any bias or previous experiences from the researchers to ensure validity.

As previously mentioned, member checking occurred at the end of the data collection phase of the qualitative study. The data, analyses, interpretations, and conclusions were presented back to the individuals who participated in the study. This method allowed the participants to give insight to the credibility of the findings and is widely practiced in qualitative case studies.

Transferability

According to Connell (2016), transferability is the extent to which the research findings are useful and applicable to other settings and persons. Providing thick description of the entire process, including location, participants' feelings, and any other information that added to the context of the research allowed other researchers to apply the findings to other settings. Researchers should provide a vivid picture for the reader in order for each reader to gain a full understanding of the entire process (Amankwaa, 2016).

Ethical Considerations

One must consider ethics in any research. Negative results could impact the participants involved, the school districts and, perhaps most importantly, music educators (if the teachers' perceptions are that music does not play a vital role in teaching phonic skills to kindergarten students). Confidentiality and anonymity helped to resolve the potential risks to the participants and the school district. Each participant also received a pseudonym to ensure confidentiality. I gained permission from the participants and the school districts and I was also sensitive to the needs of others (kindergarten students) during observations in order to consider ethics.

Participants and building supervisors were contacted and informed about the purpose of the study. Participants were reminded that they did not have to sign the consent forms however, all participants agreed and signed forms prior to beginning observations and interviews. The

consent forms also included a list of how a participant may withdraw from the study if he or she so chose. Finally, all data collected will be kept in a locked filing cabinet and all electronic files will be stored on password-protected devices. The IRB requires this step to ensure confidentiality of all participants.

Summary

Chapter Three provided a detailed description of the methods pertaining to this qualitative, multiple case study. Schema theory as it pertains to reading guided this study. The schema theory also supported the central research question, which drove the research. The approach taken by the sampling procedures, site selection, participants, and data collection also reinforced the central reearch question and overall design of this multiple case study. Data was analyzed through coding using computer-assisted qualitative data analysis software NVivo. Issues surrounding trustworthiness were addressed and ethical considerations were discussed per requirements of the IRB to ensure confidentiality of all participants.

Chapter Four presents the results from field observations, interviews, and a review of artifacts. I also conducted an in-depth data analysis and discussed the findings from the analysis in detail. A thorough look at each participant with thick descriptions for each individual participant, or case, was provided. Finally, codes and themes that resulted from the analysis were presented in paragraph and appendices form and further explained.

CHAPTER FOUR: FINDINGS

Overview

The purpose of Chapter Four is to present the results of the data analysis. The purpose of this holistic, intrinsic, multiple case study was to explore the utilization of music to teach phonics within kindergarten classrooms in the state of Ohio. Chapter Four describes in detail the kindergarten teachers who participated in this qualitative study. Participants were all licensed teachers in the state of Ohio who used music to teach phonics on a weekly basis in their kindergarten classrooms.

Data collection occurred through classroom observations, interviews with each kindergarten teacher, and physical artifacts including researcher journaling, photos of the classroom, musical examples the teachers used, and lesson plans clearly defining the use of music to teach phonics on a weekly basis. Data analysis was through the use of QSR NVIVO software. From this point forward, I will refer to it as NVivo. The development of themes transpired from data collection by comparing and contrasting successive segments of data to look for repeating phrases, comments, behaviors, or musical patterns, called pattern coding (Schwandt, 2015).

The approach to coding involved an a priori, content-specific scheme (Scwandt, 2015). The topics under exploration, as well as the underlying schema theory were influential in determining themes within the data. After pattern coding data into nodes and then aggregating the nodes into categories, four themes emerged. These themes are pedagogy, perceptions, classroom management, and confidence.

Chapter Four also includes a within-case analysis and a cross-case synthesis of all 10 cases within the study. Additionally, I compared all data analysis in regard to each of the four

research questions. I used an explanatory approach to analyze all of the themes identified and how they related directly to the research questions.

Participants

The participants in this study included 10 elementary teachers from four different school districts in northwest Ohio. All teachers were licensed teachers in the state of Ohio and currently teach kindergarten full-time. All teachers indicated via a survey that they use music to teach phonics on a weekly basis. For the purpose of this study, each participant allowed approximately a 45-minute observation within their classroom as well as a one-on-one interview. In addition, each teacher submitted lesson plans indicating the use of music to teach phonics (Appendix G).

In order to maintain anonymity and avoid deductive disclosure for each participant and research site, each participant was given a pseudonym (Creswell, 2013; Merriam, 1998). According to Creswell (2013), deductive disclosure is the ability to identify participants from specific characteristics that the research revealed. Deductive disclosure can occur even though I removed participants' names and other identifiable information. Therefore, I used composites including one-on-one interviews, classroom observations, and other artifacts the participants provided. While all names are pseudonyms and all details provided are accurate, the data and results are not necessarily reflections of the pseudonyms.

Astros Elementary School

Astros Elementary is a small, rural school with two kindergarten teachers. The principal and superintendent were both very friendly and open to me conducting this study within their school district. Astros Elementary is in a K-12 building. The district has 884 students in K-12 with 293 of those students in the K-5 elementary building. The students within the elementary school were 94.9% White, Non-Hispanic. The district has a 98.6% graduation rate. The

elementary building received an overall grade of "C" on their most recent state of Ohio report card (Ohio Department of Education, 2017). Both kindergarten teachers at Astros Elementary School agreed to be a part of the research project and were quick to respond to me when presented with the opportunity.

Both kindergarten teachers at Astros Elementary were experienced and highly qualified within their field. The two teachers worked together to communicate with me about specific times for observations and interviews. While the teachers managed and organized their classrooms differently, it was clear they worked well together and were both passionate about their teaching.

Karen. Karen has been teaching for four years total. She worked as a substitute teacher and worked in several long-term substitute positions prior to receiving her first full-time job at Astros Elementary four years ago. She has taught kindergarten for all four years. Karen has a degree in elementary education, a master's degree in educational leadership and a reading endorsement. Her room is very small and is located at the end of the hallway away from other teachers in the building. Karen had 24 students in her classroom. She was also the first to respond to my initial e-mail sent to all four pre-determined school districts.

Karen is passionate about education and I appreciated her willingness to share with me. Karen's students were very excitable and talkative. She was patient with them and often chose to ignore those that were off-task rather than continually stopping her lesson to deal with students who were misbehaving. Karen had a positive attitude with her students and encouraged them to interact with one another during their morning meeting time.

Throughout the interview and observation, Karen demonstrated several ways in which she uses music to teach phonics. Karen used a music video to have students check their

knowledge on the "et" family and then added answers on an anchor chart. Karen also used a brain break using the website GoNoodle.com to play a music and dancing video for the students. Karen stated in her interview that she also has a few songs she sings about vowels, putting students' names at the top of the paper, and also has the students recite the Phonics Dance daily.

Renee. Renee has been teaching for five years with four of those years in kindergarten at Astros Elementary. Renee has a bachelor's degree in early childhood education. Renee's room was larger than Karen's room and was located further down the hall from Karen's room. Renee's room was very bright and cheerful. She kept her posters and other decorations minimal and most toys and manipulatives were out of reach of the students. Renee had 21 students in her classroom as three students were absent the day I observed.

Renee has a quiet demeanor and was very modest in her responses during her interview. She had great rapport with her students. Renee was kind but firm with her students and it was clear that they knew her classroom routines and expectations. While teaching her phonics lesson Renee moved around the room to help guide off-task students to their assigned spot or to simply make her presence known to them.

Renee had a strong focus on technology within her classroom and used many technology components during her phonics lesson. Renee used a music video from Heidi Songs for her sight word of the week. She also had her class practice the Phonics Dance with Hunks and Chunks using chants and hand motions. Renee incorporated music while teaching the "an" word family. The class discussed a few words that included the "an" rime and then watched a Jack Hartmann music video on the "an" family to come up with more ideas.

Freedom Elementary School

Freedom Elementary School is one of five primary (K-3) elementary schools in a large school district in northwest Ohio. Freedom Elementary School is located in a city with a population of about 41,000 (datausa.io). There are 303 students that attend Freedom Elementary Primary School, which is a K-3 building. A total of 83.3% of the students are White, Non-Hispanic with the other 12.7% being Hispanic or Multiracial. The school district in which Freedom Elementary is a part of has a graduation rate of 89% (Ohio Department of Education, 2017). The school received an overall grade of "C" on the most recent state of Ohio report card (Ohio Department of Education, 2017).

Freedom Elementary School has four kindergarten classes within the school and three of the four teachers agreed to participate in the research study. One teacher was in her first year of teaching and therefore did not meet the criteria in the pre-interview survey and consent form agreement. The other three teachers have taught between 11 and 20 years.

Debbie. Debbie is a younger, energetic teacher with 11 years of experience. She has a bachelor's degree in early childhood education and a master's degree in literacy. Debbie's classroom was darker with wood paneling and high windows. She only had a few tables in her room and many of the tables did not have chairs but rather were close to the ground for the students to sit on the floor at the table. Debbie used a lot of flexible seating in her classroom and also had a large carpet area for whole group lessons.

Debbie spends most of her day in combined classes in a co-teaching environment with another kindergarten teacher named Katie. Katie also participated in this research and is discussed as a participant later. Debbie has a total of 23 students in her classroom, but during my observation, the class was combined with Katie's for a total of 46 students. Debbie incorporated

fun activities and motions into her teaching to keep her students' attention. She used a variety of phonics instruction during her class time to keep student's attention due to a large number of students in the classroom.

During Debbie's observation and interview, she used several musical elements in her phonics lesson. Debbie's class learns a sight word song or chant each week to help students remember the new sight word. Debbie's students also do a shortened version of the Phonics Dance, which she led during the lesson. The students incorporated some singing into the Phonics Dance. The students also sang a very simple song to the tune of "Here We Go Loopty Loo" to remember their vowels. Debbie also uses the Letter People at the beginning of year. Each character has a specific song and chant to help students remember the name and sound.

Katie. Katie co-teaches for most of the day with Debbie. My observation time began in Katie's room, which did not have any traditional seating. The classroom had 46 students sitting at the carpet due to the combined classes. Katie's room was a little crowded and had many visual tools posted on the walls for the students. Right away I noticed the Phonics Dance posters placed high on the walls near the windows for the students to easily recognize. Katie also has 23 students like Debbie. However, since Katie and Debbie's classes were combined for phonics, there were a total of 46 students in the classroom.

Katie is also an outgoing and energetic teacher. She has been teaching for 11 years. Katie has a bachelor's degree in early childhood education and a master's degree in technology integration. Katie and Debbie have a great relationship and bounce ideas off one another. Their lesson flowed very well and each took turns teaching a part of the phonics lesson in the classroom while the other teacher helped to manage the students.

Katie assisted as Debbie led the students in the Phonics Dance and Hunks and Chunks. She then reminded the students of a few words with the specific Hunks and Chunks in them and then led the students in the vowel song. After the phonics portion, Katie led the students into some writing time with a chant, "Every sentence in the whole wide world begins with a capital letter and ends with a period." Katie also stated during her interview that she and Debbie use Jack Hartman on a regular basis during their phonics lessons to teach blends, word families, and other phonics-specific lessons. She and Debbie also use Handwriting Without Tears, which uses songs and chants to teach letter formation.

Hadley. Hadley is more reserved than Debbie or Katie. Her room is across the hall from the other two teachers who participated in the study at Freedom Elementary. Hadley's room was very neat and tidy. She had a very quaint literacy corner with a Pete the Cat theme. Hadley's students either sat at large rectangular tables or on the carpet area during phonics time. She had a total of 21 students in her classroom.

Hadley has been teaching for 20 years. She has a bachelor's degree in early childhood education and a master's degree in education administration. Hadley is very structured during her day and follows a very specific schedule. When I asked what time would be best for her observation, she was quick to tell me her schedule and knew specifically when phonics happens each day. When I arrived, her class was just finishing up their morning calendar routine and immediately began their phonics lesson.

During the phonics lesson, as well as the interview, I saw several musical elements in use within the classroom. The students chanted the Phonics Dance, which also included the Hunks and Chunks. Hadley's students knew more Hunks and Chunks chants than any other kindergarten classroom in which I have observed. Her students also sang a vowel song to the

tune of "Old McDonald" to help them remember all the vowels. Hadley focused on the "an" family during phonics time and also incorporated several chants for sight words with her students. Her class was very engaged in her lesson due to her classroom management and effective use of voice levels.

Rockets Elementary School

Rockets Elementary has a newer facility in comparison to the other school districts participating in the study. While the school district is located in a very rural area, the community is very supportive of the school system. Rockets Elementary is located within a K-12 building. The school district's graduation rate is 94.6%. Rockets Elementary received an overall grade of "A" on the most recent state of Ohio report card making it the most successful academic school system of the four participating schools in this research (Ohio Department of Education, 2017).

Rockets Elementary has 226 students in their K-5 building (Ohio Department of Education, 2017). A total of 94.6% of the students are White, Non-Hispanic. The kindergarten team consists of four teachers and two of the four agreed to participate in the research for this study. The other two teachers did not respond to the initial survey. The two teachers had teaching experience ranging from 12 to 23 years.

Abby. Abby is a very well organized teacher, which was clear upon walking into her classroom. Her classroom was very large and she organized the students' desks well. She has been teaching for 12 years. Abby's students were the most well behaved students I observed throughout the 10 case studies. During the approximately 40-minute observation, I did not see one student off-task.

Abby has 19 students in her classroom. She has a very set routine, which she follows each day for her phonics lessons and the students know these routines well. Abby uses Orton-Gillingham (OG), The Letter People, and some teacher-created songs for her phonics curriculum.

During the classroom observation and interview, we discussed many components of phonics and I was able to see Abby implement these into her classroom lesson time. Abby used mirrors for her class to see their mouths say the letter of the day. She also used letter cards and a blending board for students to work on blending CVC words. Finally, Abby also used sand trays for students to write phonics sounds.

Abby implemented music into her classroom in several ways. Abby used "The Letter R Song" from The Letter People curriculum to introduce the letter of the week. She also sang several songs with her class for the letter of the week, sight words, and other letter sounds. These are all songs that Abby stated she created herself or learned from various teacher seminars.

Mary. Mary was the main point of contact for Rockets Elementary. She is very energetic and was very helpful in providing me any and all information I might need for observations, especially involving reading and phonics curriculum. Mary had to reschedule several times with me due to weather delays and cancellations and was always very accommodating.

Mary's classroom was next door to Abby's and both teachers set up their classrooms in a similar manner. Mary's classroom was more cluttered but she also had many items out for display for the students, such as all The Letter People puppets. Mary also had 19 students in her classroom. She is the most experienced teacher I observed with a total of 23 years of experience, most of which is in kindergarten.

Mary and Abby use the same curriculum. However, Mary did not use as much music during the whole group phonics instruction time. Mary used Orton-Gillingham sound cards and

The Letter People puppet, "Mr. R," and song. Mary had the letter R puppet sing the letter song and then she moved into independent work.

One particular element Mary incorporated often was the use of schema and then related that previous knowledge to real-world experiences. For instance, the "Letter Song R" talked about rainbows. Mary spent some time talking with students about their experiences with rainbows. She also gave the students a new kind of raisin, a golden raisin, to help relate to the letter R.

During independent work at students' seats, Mary used bumpy screens for students to write their letters. This provided students with some additional tactile input while writing their letters. Mary also took each instruction step-by-step to be sure students were not rushing ahead. It was clear Mary has been teaching for many years as she also had a great deal of teacher-created phonics tools that she used within her phonics instruction time.

Vikings Elementary School

Vikings Elementary was a very welcoming school. The elementary school principal was friendly and willing to help in any way possible. The school district has two buildings on the same campus. One building is a kindergarten through fifth grade building and the other building hosts junior high (grades six, seven, and eight) and high school (grades nine through twelve). The elementary building, which the community built within the last 10 years, has many new features including a large cafetorium and many additional classrooms for special needs students.

The school district has a graduation rate of 98.6% and an overall grade card score of a "C" on the most recent 2017 report card for the state of Ohio (Ohio Department of Education, 2017). The elementary school has a total of 469 students in grades K-5 (Ohio Department of Education, 2017). The elementary students are 85.4% White, Non-Hispanic, 5.7% Asian or

Pacific Islander, and the remaining students are Hispanic or Multiracial. There are four kindergarten teachers in the school and three of the teachers agreed to participate in the research. I did not receive any information back from the fourth teacher.

Adrienne. Adrienne was the first teacher from Vikings Elementary to contact me. She stated she uses a variety of music instruction in her classroom to teach phonics so it would not be an issue for her to participate in the research. Adrienne is a veteran teacher who has taught for 17 years and has a bachelor's degree in both special education and elementary education. She also has a master's degree in elementary education.

Adrienne is very organized and her classroom was neat and tidy. She was well prepared for her observation and promptly handed me a one week lesson plan showing her typical phonics routine in her classroom. Observations within the classroom made it clear that Adrienne has a structured schedule and her students were very familiar with the process. Adrienne has 17 students and a student teacher for the spring semester.

During the course of the observation, as well as the interview, Adrienne identified several ways in which she uses music to teach phonics on a daily basis in her classroom. Some specific instructional strategies include the Phonics Dance, singing songs using a familiar tune to focus on the specific objective on the week, and having students move and sing to music videos including StarFall and Jack Hartmann. Amy was not hesitant to use music in her lesson and the students seemed to enjoy singing along with her.

Melissa. Melissa is the youngest teacher that participated in the study. This is her fourth year teaching, and she is completing her last year of the Educator Resident Program in order to receive her full, five-year license next year. However, despite being the youngest participant, Melissa was extremely poised and established in her teaching philosophy and pedagogy.

Melissa's organized her classroom well. Her classroom was across the hall from Willow, another participant from Vikings Elementary. Melissa had a loft built in her classroom. The top floor was her writing center and the bottom floor was her library nook. Melissa had many bright colors in her room and I immediately felt at home in her room. Melissa had 16 students in her classroom with one student having a one-on-one aide due to an autism diagnosis.

Melissa did a lesson similar to other teachers I have seen through classroom observations. Her lesson was on the digraph "ch" and she first introduced the Hunks and Chunks dance, made a list of "ch" words with the class, and then ended with a video to compare the class' list with the video. However, there was no independent practice for the students for this portion of the lesson.

Willow. Willow was quieter than most teachers and had a pleasant, calming effect about her. This was very evident in her classroom management skills as well since her class was very well behaved and quiet during whole group instruction. Willow had 19 students in her class and three of the students are English as a Second Language (ESL) learner.

Willow used the Phonics Dance as her main phonics curriculum in her classroom. However, I noticed right away that she did not have it hung up on the wall like the other teachers at Vikings Elementary. Willow stated this is because she mixes up the letters as the year progresses so students have to recall letters out of order and complete the matching chant.

Willow used several songs during her phonics instruction including singing a student's name to the tune of "BINGO." She also used a Jack Hartman video during her lesson. Willow encouraged her students to take responsibility for their own behavior. She used the Class Dojo app and allowed her students to go up to the Smart Board to give themselve a dojo for making good choices if she instructed them to do so. The Class Dojo app is a behavior management app that teachers often use in the classroom to help monitor student behavior. Students receive

positive “dojos” for good behaviors and negative “dojos” for poor choices. It was obvious the students enjoyed the opportunity to give themselves dojos when making good choices in Willow’s classroom.

Below is a list of all teacher participants. The table includes the pseudonym for each teacher, each teacher’s race, degree level (either bachelors or masters) and the number of years they have been teaching.

Table 1

Teacher Participants

Name	Race	Education	Years Teaching
Karen	**Caucasian**	**BA + MA**	**4 years**
Renee	**Caucasian**	**BA**	**5 years**
Debbie	**Caucasian**	**BA + MA**	**11 years**
Hadley	**Caucasian**	**BA + MA**	**20 years**
Katie	**Caucasian**	**BA + MA**	**11 years**
Abby	**Caucasian**	**BA**	**12 years**
Mary	**Caucasian**	**BA+EEH+MA**	**23 years**
Adrienne	**Caucasian**	**BA + MA**	**17 years**
Willow	**Caucasian**	**BA + EEH**	**12 years**
Melissa	**Caucasian**	**BA**	**4 years**

Theme Results

The results are based upon a holistic, analytic approach primarily using classroom observations and interviews with each participant. Results also include photos from each classroom, lesson plans each participant provided, and my personal journaling. The most

substantial components of the results, the classroom observations and interviews, consisted of approximately 45-minute observation in each classroom and an interview with each participant. During the interview, each participant was asked 10 open-ended questions (Appendix A). Upon completion of transcriptions, each participant received the opportunity to read and approve the transcripts from the interview.

Following the classroom observation and interviews, the researcher personally reflected on the events. Journaling included my personal observations, first impressions of participants, and my observations of the physical classroom environment. Reflections also included my thoughts on specific phonics curriculum used during the lessons and how the students responded to the various curriculums. I wrote journal reflections the same day as each classroom observation and interview.

Each participant also provided the researcher with one week of phonics lesson plans (Appendix G). The purpose of the lesson plans was to give a clear depiction of specific curriculum used during classroom instruction time. The lesson plans allowed for additional insight and clarity for each of the four themes found from interviews, classroom observations, researcher journaling, participant lesson plans, and classroom photos.

All types of data collected allowed for triangulation, including interviews, observations and physical artifacts to determine consistency of the findings from a variety of sources (Yin, 2014). After I collected all data, I categorized the information with specific focus on the connections to the research questions. I transcribed the interviews, observation protocols, and classroom photos and then inserted into NVivo software to identify codes and then themes. From coding and analysis of classroom observations and physical artifacts, four themes emerged from the data. These themes included standard pedagogy, perceptions, classroom management,

and confidence (Appendix J). As indicated in the code book, four themes frequently occurred in the interviews, classroom observations, and physical artifacts (Appendix K).

Theme Development

Upon completion of all transcripts, I entered the data into NVivo software. To begin the data analysis portion of this research, I first created a general list of provisional and basic codes that the research questions guided (Appendix J). I analyzed interviews, classroom photos, lesson plans, and observations protocols from the classroom observations through NVivo and assigned general codes, or nodes, initially. After assigning all initial codes, I then cross-referenced each piece of data to then assign more specific codes. I assigned codes to address the various instructional methods used within the classroom, specific instructional strategies teachers use to effectively incorporate music into the kindergarten phonics lesson, and teachers' perceptions of using music to teach phonics in kindergarten.

Next, I aggregated the initial codes to support the themes identified through data analysis. I conducted both a within-case and a cross-case analysis in order to effectively identify similarities and differences amongst all 10 cases. Indicated below is each research question along with the themes and evidence to support the identified themes.

Theme one: Pedagogy. The first theme, pedagogy, focused on two sub-themes: standards-based phonics curriculum as well as music-based phonics curriculum. Both sub-themes were mentioned in each of the 10 cases after analysis of all sources of data. This theme relates directly to the central research question as well as research sub-question one. All 10 cases varied in teacher pedagogy, which Peercy and Troyan (2017) define as the method and practice of teaching and how one exchanges knowledge and skills. Participants used two types of curriculum to enhance teachers' pedagogy and thus enhance student learning. The two types of curriculum

that were evidenced through data analysis were standards-based phonics curriculum and music-based phonics curriculum.

Standards-based phonics. In studying teacher pedagogy as it relates to standards-based phonics curriculum, it is important to note that these curriculum pieces are all from published sources. Either the classroom teachers or the school districts purchased the standards-based curriculum. The important component to this theme is that none of the standards-based phonics curriculum participants identified included music as part of the whole group instruction time. The theme emerged from codes were phonics methods, Fountas and Pinnell, Orton-Gillingham (OG), and word families. All four of these codes focused only on phonics instruction with no specific musical tools involved in the teacher's pedagogy.

All 10 cases used some form of standards-based phonics curriculum in the classroom. All participants used standards-based phonics curriculum and this was also noted in all 10 participants lesson plans (Appendix G). It is important to note that incorporating music into phonics alone will not enable students to meet all kindergarten phonics expectations. Rather, there must be non-musical curriculum in place as well for student success.

Debbie and Katie's students use Fountas and Pinnell's program called Phonics, Word Study, and Spelling (PWS) for standard phonics curriculum. Debbie stated, "PWS provides a great foundation to ensure we are learning all the necessary phonics skills. We then supplement with music curriculum to engage the students." When I observed in both Debbie and Katie's classrooms, the students were working on the "bl" blend using a big book read aloud and an anchor chart to create words that began with the "bl" blend.

Six teachers including Karen used similar approaches to whole group phonics instruction using standard phonics curriculum that did not include any musical elements. Adrienne, Renee,

Hadley, Willow, Melissa, and Karen all presented students with a new word family/rime or digraph. Each teacher then created an anchor chart and had students generate words that included that digraph, such as "sh" from Adrienne's lesson, or the "an" rime from Hadley's whole group phonics lesson. Each teacher also indicated rimes/word families and digraphs in her weekly phonics lesson plan (Appendix G).

A specific example was Karen's phonics lesson that focused on the "et" word family. Karen did implement some music through a video to introduce the word family. However, the core of her lesson involved an anchor chart in which students generated words that ended with the "et" rime. This is evident in the Observation Protocol (Appendix F). Students then completed an "et" word house independently at their seats. Karen purchased the resource from teacherspayteachers.com. Karen stated, "We support our phonics song with hands-on worksheets or in centers. I have a center where they can build their own words."

Both Abby and Mary use Orton-Gillingham (OG) phonics. The Institute for Multi-Sensory Education (IMSE) created Orton-Gillingham curriculum. According to the OG website, the company designed the program to help struggling readers by explicitly teaching the connection between letters and sounds using multi-sensory strategies and systematic, sequential phonics lessons. I observed this standard phonics curriculum first-hand at Rockets Elementary. While the program was extremely engaging and hands-on, I did not see any music incorporated into the program.

Abby used Orton-Gillingham more often than any of the other teachers that participated in the research. Abby's students orally stated letters and sounds using hand motions and then wrote letters in sand trays and said each letter as they wrote (see photos in Appendix I). In

Abby's classroom, as well as Mary's, students blended CVC words using a blending board and consonant and vowel cards. Mary discussed the Orton Gillingham approach by saying:

> OG is writing and reading combined with phonics because you can't read or write if you don't know the sounds of the letters. As part of phonics students do a three part drill - sound cards, write the letter that makes the sound I say in sand, and a blending board - place letters on tray and blend into CVC words - say segmented sounds, then blend.

While all 10 cases had non-musical instructional time, all 10 participants also noted the benefits of implementing music into the classroom. In addition, all 10 cases utilized music in some form during their phonics lesson. Moreover, all 10 cases depicted the use of both standard phonics curriculum, as well as music curriculum within lesson plans. This led to the development of the second sub-theme under pedagogy.

Music-based phonics curriculum. The second sub-theme under pedagogy discovered through multiple data analysis was music-based phonics curriculum. All 10 cases mentioned specific musical tools used at least weekly within the whole group phonics instruction time to improve pedagogy. The music-based phonics curriculum data included lesson plans, classroom observations, observation protocols, and interviews. I coded each type of music instruction as a node in NVivo and then aggregated it into an over-arching theme of music-based phonics curriculum and then into pedagogy (Appendix J). It is important to note that most of the music-based phonics curriculum is not a standard, purchased curriculum that teachers use. Teachers often incorporated the integration of music into the phonics curriculum through the use of YouTube videos.

Abby, Katie, Debbie, and Mary all use The Letter People phonics curriculum published by Abrams Learning Trends. The Letter People is a published music-centered curriculum that a

school district can purchase. The company website states, “Based on 30 years of classroom research and testing, these special friends get children talking, moving, interacting, experimenting, drawing, counting and-ultimately-reading and writing” (“The Letter People,” 2016). The Letter People curriculum includes a balloon person for each letter of the alphabet, as seen in Katie’s room, or a puppet, as observed in Abby and Mary’s classroom photos (Appendix I). The Letter People curriculum also includes a set of Letter People alphabet cards to display on classroom walls (Figure 1) as well as a variety of additional phonics and writing materials.

Figure 1. The Letter People wall display

Mary indicated that the Letter People have been her phonics curriculum of choice for more than 20 years of teaching kindergarten:

> I’ve always used Letter People. I fought to keep Letter People when KeyLinks came out, and when we were looking, and they bought… Wonders or Treasures, whichever one we bought because, when I looked at Treasures, when I looked at Wonders, when I looked at all of those big box reading sets, none of them had a phonics component, especially including easy to remember songs that could compare to Letter People.

Debbie also revealed that she has always used Letter People during her 11 years of teaching kindergarten because she believes it sticks with students through adulthood.

> We have parents that will come in for orientation every year. And when we tell them our curriculum, that it has Letter People in it, they'll start to sing "Mr. M's Munching Mouth" song. So these parents are coming after how many years of kindergarten? And they can still sing the Letter People songs.

Similar to The Letter People, another phonics curriculum that focuses on rhythm and chant is the Phonics Dance. Ohio teacher Virginia Dowds created this program, which is available for purchase on the company's website, www.phonicsdance.com. The Phonics Dance has both alphabet cards with rhythmic chants and dances, as well as "Hunks and Chunks" that include dances and chants for students to remember. See Figure 2 for an example of the Phonics Dance alphabet cards and Figure 3 for an example of Hunks and Chunks cards. Other teachers also use more Phonics Dance resources evidenced in classroom observations (Appendix F) and classroom photos (Appendix I).

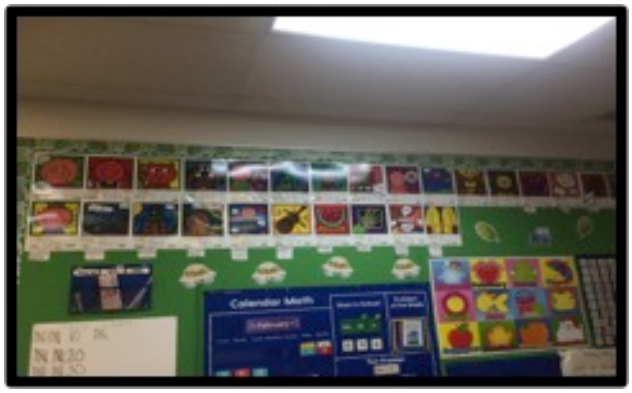


Figure 2. Phonics Dance Alphabet cards

Figure 3. Phonics Dance Hunks and Chunks cards

According to a study by Mullins (2013), students who participated in the Phonics Dance whole group instruction had quicker acquisition of word recognition skills versus children who only used a basal phonics program. Eight of the 10 cases in this multiple case study indicated that they use the Phonics Dance at least weekly during whole group phonics instruction. Almost all the teachers stated through interviews that they see a benefit of incorporating the rhythm of the Phonics Dance to help students remember letters and sounds. Additionally, seven of the eight teachers that use the Phonics Dance displayed the alphabet cards on their classroom walls (Appendix I).

Renee stated that she believes the Phonics Dance is beneficial for her student learning and retention of knowledge:

> The Phonics Dance . . .Well, it's not necessarily music. It's a lot of movement and rhythm and rhyme. So, I think that's a big part of it, because, I mean, a lot of these guys, if they're working at my table and they see a letter H, you could just start "/h/," or, you know… start part of the Phonics Dance and they know exactly what you're talking about, so I find that really helpful.

Willow also discussed the benefits she sees in her classroom with students' applying the Phonics Dance to their learning:

> I think they pick up on the letters much quicker, they pick up on the sounds, they're able to have those phonics skills that would be, you know, boring to teach, just sitting there and saying the letter, saying the sound… And it makes it more fun, and I think it stays with them. So, when we get to an assessment piece, and I get to the letter "y," which always trips them up at the beginning of the year, and I say, "I will not yak today," all of a sudden, they know, "Oh, /y/," and they get it. So, I think it just helps trigger them to know the response.

Likewise, Melissa explained how she uses the Phonics Dance in her classroom on a daily basis:

> We always start with the Phonics Dance, then make anchor charts, watch different videos and songs that incorporate that into letter or Hunks and Chunks into their learning. Then, we usually close with some kind of activity when they're doing hands-on, whether it's moving letter tiles, the Phonics Dance has a really good program that goes along with it where they can become… kind of… Hunks and Chunks detectives, and there's a poem that they read and they can circle the "ch" that they find throughout the entire poem and those things. We learn the Phonics Dance all through the alphabet and then I add in more music with Jack Hartmann.

Some teachers, such as Debbie and Katie, use the Phonics Dance and the Letter People together. Debbie stated:

> I like to use both the Phonics Dance and the Letter People. I think they work well together. The kids kind of choose which one they want to use as we get through the year.

> Especially in my class they will refer to whichever one that they like, because the Letter People are more of a song and the Phonics Dance is more of a chant.

The second sub-theme, music-based phonics curriculum, which was under the main theme pedagogy, focused on several other music-based curriculum instructional tools that relate to teacher pedagogy. While four teachers mentioned some music-based resources such as Dr. Jean and Heidi Songs a few times (see Table 2), the final resource that 80% of participants mentioned was Jack Hartmann. Jack Hartmann's materials are completely free and all online on YouTube. Teachers indicated they like the ease of searching for a specific Jack Hartmann music video. Jack Hartmann has music videos that relate directly to young children on almost any phonics standard for kindergarten. Six teachers indicated the use of Jack Hartmann videos on their lesson plans (Appendix G). I also observed six teachers using Jack Hartmann during whole group phonics instruction, and eight teachers mentioned using Jack Hartmann videos during one-on-one interviews.

Karen indicated the use of Jack Hartmann stating, "We use Jack Hartmann, his 'Word Families,' to sing and learn about our word families." During her classroom observation, Karen created an anchor chart using the "et" family and had students generate words that ended with the rime "et." She then showed the class a Jack Hartmann video about the "et" family and had students revisit the anchor chart to see if there were any words from the music video that they did not come up with. This was a very effective way to keep students engaged through the use of music during phonics. Melissa indicated:

> I use Jack Hartmann a lot. He's really great and kind of a quirky guy [laughter] that the kids really take well to. And he has a lot of really great videos with the letters, word

families, the digraphs, and… just really goes above and beyond, and they seem to really connect with him and have great visuals that go along with it.

All 10 cases indicated positive results that directly benefit pedagogical approaches from the utilization of music to teach phonics through the use of the above-mentioned music-based curriculum. I identified a total of six different music-based resources through interviews, classroom observations, and lesson plans. This is noted in Table 2. I also noted each case's perspective regarding the implementation of music within the phonics curriculum in theme three.

Table 2

Types of music-based phonics curriculum mentioned by participants

Participant	The Letter People	Jack Hartmann	Heidi Songs	Dr. Jean	Phonics Dance	Teacher-created resources
Abby	X					X
Adrienne	X	X			X	X
Debbie	X	X			X	X
Hadley		X	X		X	X
Karen		X	X		X	X
Katie					X	X
Mary	X			X		X
Melissa		X	X	X	X	X
Renee		X	X		X	X
Willow		X			X	X

Theme two: Perceptions. The most recurring theme throughout the entire data analysis was each teacher's perception on the utilization of music to teach phonics, which relates directly to research question three. Theme Two also has two sub-themes including benefits and challenges. Campbell (2015) stated, "Understanding early childhood educators' beliefs about phonics can provide insights into how educators are building the foundations of young children's literacy success prior to starting formal schooling" (p. 15). All cases indicated a beneficial correlation between using music to teach phonics and student retention of knowledge and recall throughout

the academic year. Each case also indicated perceptions of the use of music in the classroom in relationship to classroom management.

Benefits. The most substantial finding was that all 10 cases perceived music to have a positive effect on student learning as it relates to phonics. Through one-on-one interviews, I noted this sub-theme 86 times. Each participant made overt statements during their interviews. Adrienne noted:

> I love it for the movement part of phonics because most songs…. we get up and do little hand motions to it. So I think, for attention span, I think… remembering skills, like, the Hunks and Chunks, you know, "S, H, /sh/, /sh/, /sh/, S, H…" Kids will sing that. You will just hear them getting ready to go to busses, and they will be singing that. I remember when I was in school… What I remember from history are the little songs, or the little chants. Other than that, I can't tell you any dates.

As mentioned in Chapter Two, brain-based research supports the concept that music can be beneficial to student retention of knowledge. Sullivan (2016) concluded from his qualitative study on the effects of music within kindergarten that, "When music is used in kindergarten classrooms and included within activities, student engagement is enhanced significantly and the learning of those kindergarten children is positively affected" (p. 4).

Hadley mentioned the connection between brain-based learning and using music to teach phonics stating:

> I believe music helps students learn similar to a pneumonic device to help recall information. Often, in reading groups, when a student is stuck on a word (that is a sight word we've learned a song for...) if I begin the song/chant without even telling the word, the student is able to remember it and continue reading. Music, I believe, helps string

> ideas and concepts together as a whole much the same way we can remember song lyrics from decades ago! Another thing I always tell my students is that their brain learns best and fastest to build their brain power the more ways they practice a skill... so we can build our brain power by looking with our eyes, moving with our bodies, singing and saying with our mouths, and listening with our ears all at the same time with Phonics dance, sight word songs, and Hunks and Chunks.

Mary also discussed the benefits of music as it relates to the brain:

> Music opens pathways in your brain. It's a more creative-thinking way of thinking. And, for lack of a better way to say it… sometimes, it helps create those paths for the neurons to transmit that I would never open any other way.

This follows much of the brain-based research discussed in Chapter Two stating that music and reading transmit in the brain very similarly (Damasio, 1999; Schons, 2008; Tierney & Kraus, 2013).

Katie, Willow, and Melissa discussed how the benefits of using music to teach phonics can help struggling students, students on IEPs, or ESL students. Katie said her struggling students benefit even more than typical students by using music. "I think even more so, the lower kids… I mean, it gets that kinesthetic learning in there too, because we usually have hand motions or a dance move to it."

Willow mentioned the benefits for her ESL students by explaining:

> What I have especially found with my ESL students (I have three this year)… Anytime we do music, the rhythm of it, they catch on to it quicker, it's easier for them to be able to give back the information through song than it is through speaking, most of the time.

Finally, Melissa stated:

> I've found, really, that it's engaged most of them, even my ones with some severe IEPs or behavior issues. That's been something that's really helped, whether that's the dancing or the singing (a lot of times, they work hand in hand), but I've found that that is something that has really helped.

Renee identified her perception of using music to teach phonics. She perceived a benefit from connecting music in the classroom to knowledge and recollection at home. Students carry what they have learned home and parents are able to hear the songs they are singing in school at home when working on phonics skills. Renee discussed:

> Well, a lot of my parents in my classroom will, at conferences, say, "Oh my goodness, they just come home and they sing, 'Have you seen a frog?'," You know, like these sight word songs. So, I know they're carrying it home, and I know they're remembering it, and I know they're using these songs to help them in reading familiar words and things.

Karen and Katie also mentioned that parents and other teachers have noted the benefits of music within the classroom to learn phonics. Katie mentioned that, "Even when kids come back to see us, they'll be like, "Do you still do the Phonics Dance?"

Karen also explained:

> I definitely see benefits. We hear back from kids' parents, we hear them singing songs in [laughter] the lunchroom, or you know, at recess… So, I feel like, learning through song, or even if it's just a chant, or we're chanting it and moving, it definitely benefits them. We've heard from first grade teachers that our kids are singing the songs in the next year.

Challenges. Part of the participants' perceptions on the utilization of music to teach phonics was regarding challenges faced in order to effectively implement music. All 10 participants discussed in one-on-one interviews that there are challenges faced when trying to

add music into the curriculum. While teachers reflected some challenges, which I discuss in theme three: classroom management, teachers also mentioned additional challenges that fit more appropriately under theme two: perceptions.

Willow reflected on the challenges of fitting in all the necessary curriculum to meet the growing demands of kindergarten expectations and standards:

> Sometimes, finding the time to do it all, is a challenge because there's so much to teach. I feel like we have to just keep cutting out the fun stuff, which is an awful thing to happen in kindergarten, but there's so much to cover between where they start and where you need them to be for first grade.

During classroom observations, I noted that the teachers who were able to fit more music into their phonics curriculum were the teachers that were more prepared ahead of time. Therefore, one can assume that pre-planning phonics lessons can be beneficial to both classroom management and instructional methods.

Finally, in regard to teachers' perspectives on challenges, Adrienne, Melissa, Hadley, Abby, and Karen all mentioned that they struggle, at times, to find new music materials. Several teachers stated they have been using the same music materials to teach phonics for several years and they do not always take time or attend workshops to learn new ideas. Adrienne concluded:

> Well, I think just… You know, finding new resources. You know, you have your favorites that you use. And of course, I'm gonna continue to use all this, but I think it's sometimes hard, just, to come up, on your own.

Therefore, kindergarten teachers will need to actively seek out teacher workshops, training, or online resources to find new and creative ways to utilize music to teach phonics. It is especially

important for educators to continue to find new music-based phonics curriculum since all 10 cases believed using music to teach phonics has a positive effect on all learners.

Theme three: Classroom management. While every teacher mentioned the positive correlation between music and phonics, every participant also noted their perceptions on classroom management and music. Classroom management was noted 44 times throughout data coding. The results, however, were conflicting in that six teachers perceived a positive relationship between music and phonics and four teachers believed that music often caused students to become more off-task or become too active and excitable.

Teachers who perceived music to have a positive correlation to classroom management included Hadley, Adrienne, Renee, Karen, Abby, and Mary. These teachers shared specific ways they have seen music help students stay on-task and focused during instructional time. Abby expressed, "I feel that students can focus more when certain kinds of music are playing, and I find they remember things easier when they are learned along with music.

Hadley mentioned, "Music can help create a calm and peaceful environment that promotes more focused work time... we use 'relaxation radio' during our writer's workshop time to help us calm down, stay focused, and complete work." Adrienne also indicated that she uses music during phonics and classroom work time to benefit classroom management. Adrienne said:

> I just felt like the music helps excite kids, you know… keeps their attention for better management. It relaxes them too, because I also play relaxing music in the background, even when we're working, so that's a different way I use music.

Karen likewise stated:

> When we do writing, I'll play music. It's not so much to teach it as much as… just to activate parts of their brains while we're writing—although if I play a phonics song it can help them remember the letter and visualize it. Sometimes it's just to create a relaxed atmosphere. So, I usually play, like, instrumental music. And I find even that, sometimes, just sets a nice atmosphere. It just activates that part of the brain while they're writing.

Renee mentioned that she effectively uses music to manage her classroom during transitions. This was also evident during her classroom observation when students transitioned from phonics time back to their seats as noted in the observation protocol (Appendix F). Renee commented:

> So during transition time, like, February, they have the Jack Hartmann's "See It, Say It, Sign It" song, so we just did that yesterday and they are so excited to learn how to sign these letters now which is also a great review. We do it during transitions to get us re-focused.

Some teachers, however, mentioned that music could be detrimental to classroom management. Karen mentioned that while she enjoys using music in the classroom, "Sometimes, some days, when we're doing some of the chants, and that kind of thing, the kids… it will amp them up." I even noticed this while observing in Karen's classroom. The music excited students when teachers used it during phonics time and the students became off-task.

Debbie also mentioned that some students with specific diagnoses do not like the use of music in the classroom. "Some students, such as those with autism, do not like the music and others getting excited. They can get upset easily which can cause additional issues in the room." Debbie did, however, also mention that they offer students additional options such as headphones during music so that the rest of the class can still benefit from the implementation of music.

Overall, however, the majority of participants believed that music is beneficial in the classroom for instructional strategies, student retention of knowledge, and classroom management. The implementation of music within the classroom to add to a standards-based phonics curriculum was a common pedagogical practice amongst all 10 cases. Participants that perceived some negative impacts of using music within the classroom to teach phonics still believed the benefits of using music outweighed the detriments.

Theme four: Confidence. The fourth and final theme that emerged through multiple modes of data analysis was the theme of confidence. This theme included the codes comfort level, experiences, and pre-teaching courses. The results indicated that the more comfortable teachers are with music, the more experiences they have had using music, and the higher the level of knowledge of music resources, the more likely they are to incorporate music into the classroom.

Every case, except Renee, indicated that the specific university attended for undergraduate courses did not provide any additional instruction on using music within the classroom. Every teacher stated in some manner that they did not have any specific courses except for a general music overview that taught elementary education majors specific music skills such as playing the recorder and learning note names and rhythms.

Some teachers stated the only music and phonics training they have received is from various professional workshops they have sought out. Abby indicated:

> I don't remember any undergraduate courses that prepared me to incorporate music into my classroom. Most of what I've learned in this area has been from conferences and professional development courses I took after I was already teaching.

Renee, however, did have one course in her undergraduate geared specifically towards using music within the elementary classroom. Renee mentioned:

> I had a course called Arts and Education. We had to do projects with themes…any possible theme you could have in the winter like Groundhog's Day, Valentine's Day, Christmas…. We made files of each theme with poems and songs. The teacher also gave us more resources to use music in our teaching.

Additionally, most teachers who participated in this study did not have an extensive background in music. Adrienne was the only teacher who mentioned playing a musical instrument. Adrienne said, "I played the flute in high school so I am a little more comfortable looking at music and singing it." However, most teachers did not feel the same way about their comfort level. Most teachers shared that they do not consider themselves to be musical.

In comparison to Adrienne, Debbie, Renee, Mary, and Willow all stated they do not consider themselves to be good singers. Willow laughed, "I have no tune." Renee added:

> I, myself, am not a wonderful singer, so I really prefer [laughter] having some kind of, like… the Heidi Songs DVDs to sing with. I mean, I will sing and lead different songs. It doesn't bother me, but I definitely prefer having something to sing with.

Likewise, Debbie felt the same way as the others previously mentioned, especially when other adults are in the room. Debbie shyly said, "I can be a little more hesitant because I don't feel like I am a good enough singer to do it. Or, if an adult comes in the room, I'm less likely to use music."

As previously mentioned in Chapter Two, research shows that pre-service teachers who have not had adequate training in music are less likely to incorporate music into their classroom (Neokolus, 2014). Due to participants' responses, as well as recent research, it is evident that there is a need for additional course work to be added to the elementary education course requirements at many colleges. Abby confirmed this stating, "I feel like colleges and universities

should be encouraging students to learn to incorporate music into their teaching (if they are not already). I feel like more phonics programs and curriculums should have some type of music component as well."

Case Analysis Results

I considered each elementary teacher as a unique, individual case. However, for the purpose of within-case analysis and cross-case analysis, first, I put each participant into a category associated with her school system. Execution of each analysis developed using the theoretical framework of the schema theory, as well as the research questions that drove this study. Through the use of multiple forms of data collection including interviews with each participant, observations of each classroom, and physical artifacts, I created a thick description in order to thoroughly analyze each case identifying similarities and differences between each site, as well as between all participants (Creswell, 2013; Yin, 2014).

Within-Case Analysis

All 10 participants are current kindergarten teachers in the state of Ohio who use music to teach phonics on a weekly basis. The 10 participants are kindergarten teachers in four different school districts. For the purpose of analysis and organization, I first analyzed the participants by comparing and contrasting each teacher within her own school district. While most school districts use the same curriculum for all kindergarten teachers to teach phonics, there are still striking differences among each classroom. Each case, even within the same school district, is unique. The within-case analysis compared similarities and differences for each teacher and explored the variety of instructional strategies used to teach music through phonics. Each participant at each school district received the opportunity to read through the district's analysis as a means of member checking for accuracy of data.

Astros Elementary. Karen and Renee are the two kindergarten teachers at Astros Elementary. Karen has taught four years and Renee has taught five years. Karen and Renee have taught four years together at Astros Elementary. Karen's classroom was smaller in physical space and had more items in the room and more visuals around the room. Renee's classroom was more neat and tidy with more room for students to move freely. In addition, Karen's students were much more talkative than Renee's. However, both teachers took a similar approach to their phonics instruction time.

Both Karen and Renee used the Phonics Dance and Jack Hartmann during their phonics instruction. As stated by Renee:

> Well, it's not necessarily music. It's a lot of movement and rhythm and rhyme. So, I think that's a big part of it, because, I mean, a lot of these guys, if they're working at my table and they see a letter H, you could just start "/h/," or, you know… start part of the Phonics Dance and they know exactly what you're talking about, so I find that really helpful.

Karen also added more information about the curriculum used at Astros Elementary:

> Typically, we do our Phonics Dance every day. We introduce two letters or two Hunk and Chunks a week. We start off with just letters, obviously, and then, about mid-January, we start our Hunks and Chunks. And usually, it's just all verbal. And then, every day, we review everything.

While both Karen and Renee have taught for similar years, their level of confidence also played a role in how often they use music in their classroom to teach phonics. Renee stated:

> I, myself, am not a wonderful singer, as I said before so I really try to use pre-recorded music during class time. I'm just not confident in my own singing voice but also really like how music helps my students remember…remember their letters and sounds, word families…lots of things. But I'm really not confident to do it on my own.

Karen, on the other hand, did not mind singing in front her students. Karen stated, "I've never been hesitant, that's for sure. I don't mind singing to my students or in front of others."

The most striking similarity between both teachers at Astros Elementary is that both teachers perceived the connection of using music and phonics to teach early literacy skills as a very positive correlation. Karen discussed the benefits she has seen directly with previous students who have moved on to first grade:

> I really think that putting phonics to motion, putting it to song, putting it to a rhyme helps them remember, and I think actually it shows up more when they hit first grade… I think they feel more successful with what they know.

Renee agreed with Karen's perspective regarding the benefits of using music to teach phonics:

> My class is really active, but they love singing and they love songs and it sticks. So, I've really taken advantage of that a lot this year, because it clicks for this class and I know it's going home because the parents are telling me, "They can't stop singing!"

Freedom Elementary. Freedom Elementary is the only large city school used in this study. Debbie, Hadley, and Katie are the three teachers who agreed to participate in this study. The demographics previously addressed for Freedom Elementary indicate a large number of at-risk students. Katie indicated:

> Using music during phonics…I think it's the same for typical students and struggling students, but I think even more so, the lower kids. I mean, it gets that kinesthetic learning

> in there too, because we usually have hand motions or a dance move to it. So it really helps those struggling kiddos remember and we have a lot of struggling students.

All three classrooms within Freedom Elementary looked very different even though all three classrooms were located within the same hallway. Hadley's classroom used traditional seating with tables and chairs. Debbie's classroom had a mixture of tables that were low to the ground and flexible seating choices such as pillows, lap desks, and carpet squares. Katie's classroom did not have any typical seating for the children. Children only used flexible seating and sat on a large carpet during flexible seating time.

The three teachers at Freedom Elementary have a total of 39 years of teaching between them, which makes these teachers the most experienced out of all 10 participants. However, the three teachers at Freedom Elementary do not collaborate often and even used different curriculum to teach phonics. Hadley uses the Phonics Dance including the Phonics Dance alphabet and Hunks and Chunks and also incorporates Jack Hartman music videos. Hadley also uses Scholastic Word Family Tales books. Hadley stated:

> The Phonics Dance is the only published resource I regularly utilize... While it's not music-related, I also use the Word Family Tales to teach all the rimes. Most songs and chants I make up go to the tune of familiar songs like "Old MacDonald," "She'll Be Coming Around the Mountain," and "Where is Thumbkin."

In comparison, Debbie and Katie use the same curriculum in their classrooms since they co-teach their two classrooms. According to Debbie:

> We do our Phonics Dance, which we changed… We do our regular Phonics Dance the first half of the year and second half of the year we do our "original" where we focus on the tall and short letters, and then they sing the "Get Your Bottom Down, Down for the

> Tails." We do Hunks and Chunks, and we do a PWS, "Phonics and Word Study," from Fountas & Pinnell.

Katie continued with additional resources she and Debbie use within their classroom:

> Debbie and I also use Jack Hartmann videos… and the Harry Kindergarten videos. We use those on YouTube a lot… Dr. Jean we throw in, once in a while… The Letter People… The Phonics Dance program, our Fountas & Pinnell Program… and Handwriting Without Tears. It also has some songs.

However, although the teachers at Freedom Elementary use different resources for their phonics curriculum, all three teachers perceive music to have a positive effect on student's schema as it applies to phonics. Debbie sees that students use the knowledge they have previously learned in their phonics lesson and apply it to writing. She stated, "We see them use it in their writing often. We can see them kind of singing it as they're trying to figure it out." Katie also added, "Sometimes they can't figure out which one they're supposed to be putting, and I can see them go "/a/, /a/, /a/, Abby is sad," you know? You can tell that they're, "/a/, oh no, it's /e/."

Similarly to Debbie and Katie, Hadley also perceived music to have a positive effect on student's schema:

> I believe music helps students learn similar to a pneumonic device to help recall information. Often, in reading groups, when a student is stuck on a word (that is a sight word we've learned a song for...) if I begin the song or chant without even telling the word, the student is able to remember it and continue reading.

Rockets Elementary. Abby and Mary have been teaching for a total of 35 years. Abby and Mary's classrooms are both new within the last 10 years as the school district built a new K-12 building. Abby and Mary plan together each week and follow the same curriculum. They

have several components to their phonics curriculum. The curriculum includes Orton-Gillingham phonics, Letter People, and Handwriting Without Tears, which includes some phonics and music into the handwriting. Mary mentioned during her interview: "OG is writing and reading combined, with phonics, because you can't read or write if you don't know the sounds of the letters."

Abby also uses the OG program but did admit there are some drawbacks to a curriculum-based phonics. Abby expressed, "My only issue now is that because of our new OG phonics program, I no longer am able to use Phonics Dance. This is simply due to time, and due to the structure of the OG program in general."

While both Abby and Mary use the same phonics curriculum, each teacher had a very different approach to their whole group phonics instruction. Abby's classroom was very quiet and she had a very set routine that she follows (see lesson plan in Appendix G). Abby used some recorded music as well as some songs that she created on her own. One example from the classroom observation was singing sight words songs to the tune of "Row, Row, Row Your Boat." Abby stated she integrates music in the following ways:

> We sing our sight words every day to help students remember them as I show them the words on cards. I love using music in the classroom, and I would like to incorporate it even more in the future. Especially at the kindergarten age, students seem to enjoy singing and listening to songs and music. I think it creates a happy, upbeat environment in the classroom.

In comparison, Mary had a much more talkative classroom. Mary tends to mix up her weekly lessons in phonics to meet the needs of her students. Mary also did not use any singing in her classroom other than pre-recorded music. However, she did mention in her interview that she

has several songs about numbers, letters, and color words that she uses throughout the school year:

> If I'm teaching a skill, such as learning something as basic and boring as color words and number words… because I've seen them do this, and there's a color word song by Dr. Jean, and I've seen them, like, "two, T-W-O spells 'two.' T-W-O spells 'two.' I can spell and so can you. T-W-O spells 'two." I've seen them go through and figure that out! And I do "Color Farm," and they'll sing, "G-R-E-E-N, green. I know a farmer had a horse, his name was Green," and they'll sing it. And they'll go through and they'll know it.

Vikings Elementary. Vikings Elementary had three teachers, Adrienne, Melissa, and Willow who chose to participate in the research study. The three teachers have a total of 33 years of experience and those combined years are mostly in kindergarten. All three teachers use most of the same phonics curriculum within their classroom. All three teachers use the Phonics Dance as the main phonics instructional tool. Adrienne explained:

> We go through the sight words, we do the Phonics Dance quite often… almost every day. Now, after we've gotten through all the letters, I don't always do it every day, but we do the Phonics Dance. We do the blue book, the phonics book, by Heggerty. We do that every day, which I guess that's a little more chanting than all music.

Willow also talked about using The Phonics Dance in her classroom:

> The Phonics Dance makes it more fun, and I think it stays with them. So, when we get to an assessment piece, and I get to the letter "y," which always trips them up at the beginning of the year, and I say, "I will not yak today," all of a sudden, they know, "Oh, /y/," and they get it. So, I think it just helps trigger them to know the response.

However, in comparison to Adrienne and Melissa, Willow does not display the Phonics Dance on her classroom wall. She keeps the cards at her teacher seat because as the year progresses she mixes up the letters in the Phonics Dance to require a higher level of recall for the students. She does this to incorporate previous knowledge into a challenge for the students by asking them to recall letters and sounds out of order as they become more familiar with the Phonics Dance.

While all three teachers use the Phonics Dance as their main phonics curriculum, each teacher at Vikings Elementary also put her own spin on her class' whole group phonics instruction. Adrienne used songs for each letter of the alphabet. Some of these songs came from The Reading Roadmap course that she completed with Melissa for college credit:

> The Reading Roadmap… I have tried a few things. When I went through this course, I was really already past names, so I didn't go back and try every song with all the name ideas, but there are some other ones that I want to study a little bit more in here, because there are some little tunes, just, that go with the vowels. You know, just, easy little tunes, so I probably will use the Reading Roadmap ideas a little bit more next year, too.

Melissa also used some of her own songs during her whole group phonics instruction. She stated that she often makes up a little tune to help students with a new phonics concept:

> I've made up, like, silly… Like, I have name songs that kind of go with different ones… I know that's really, like, super phonics-based, but it teaches the kids how to spell each other's names. So, I have different ones that go along with each student's name.

Willow and Adrienne both used Jack Hartmann during her phonics instruction as well as a name song to the tune of "BINGO. " Willow tries to incorporate familiar tunes that the students are already familiar with in order to help them remember a new phonics idea. Adrienne also does

the same strategy of putting familiar tunes her class knows with a new skill or concept she wants her students to learn.

Regardless of the various approaches to using music within phonics instruction, all three teachers at Vikings Elementary did perceive music to have a positive effect on student learning. Adrienne emphasized this by saying:

> I think it keeps kids' attention, even when you have your wiggly ones. Most times, when we start singing, I have more of those wiggly ones' attention. You know, movement… I love it for the movement, because most songs, we get up and do little hand motions to it. So I think, for attention span, I think… remembering skills, like, the Hunks and Chunks, you know, "S, H, /sh/, /sh/, /sh/, S, H…" Kids will sing that. You will just hear them getting ready to go to busses, and they will be singing that. I remember when I was in school… What I remember from history are the little songs, or the little chants. Other than that, I can't tell you any dates.

Willow also agreed that music has a positive effect on student retention of knowledge:

> I think anything that's rhythmic helps. Anything that's kind of pattern-based, like all my "big books" for the alphabet… it really reinforces the letter and the sounds at the same time, but they don't even realize they're learning because it's fun. The songs are really fun.

Finally, Melissa stated:

> I've found, really, that it's engaged most of them, even my ones with some severe IEPs or behavior issues. That's been something that's really helped, whether that's the dancing or the singing (a lot of times, they work hand in hand), but I've found that that is something that has really helped.

Cross-Cases Analysis

Yin (2014), states that for a multiple case study, a cross-case analysis is also necessary. I performed the cross-case analysis using Stake's (2005) data analysis worksheets. The purpose in the cross-case analysis was to identify similar experiences amongst all of the participants including teachers' perceptions of the implementation of using music to teach phonics, curriculum implemented for such purpose, as well as challenges that participants face. I also analyzed each case to determine differences and similarities amongst their instructional teaching to utilize music to teach phonics (Appendix J). I conducted the cross-case analysis and focused specifically on the research questions stated below.

The purpose of the multiple case study was to explore the utilization of music to teach phonics in kindergarten. For the purpose of trustworthiness, I achieved data triangulation through collecting information from participant interviews, classroom observations, and physical artifacts of lesson plans and my personal journals. Through data collection, several recurring themes emerged and I reached data saturation because multiple participants presented the same information and no new information was gained. The following section discusses the similarities and differences noted between all 10 cases.

Similarities in Experiences. Several similarities were evident through a cross-case analysis between all 10 cases. I determined similarities based upon data analysis of codes and themes. Some specific themes were present amongst all participants, especially in dealing with the participants' perceptions of using music within the classroom.

All 10 participants stated in various ways that music plays a beneficial role in their students' learning outcomes. Below are the participants and the statements they made about perceptions of using music to teach phonics within the kindergarten classroom. It is noted that

all 10 statements demonstrate a positive correlation between the utilization of music to teach phonics and students' retention of those phonics skills.

- Adrienne: I think there's better learning that takes place, more memorization of skills, better attention spans, and just overall, just… fun for the students. I mean, they like to get up and sing and move. So, I try to think about that, like, when we're learning something new, because usually, if there's a song or a chant that goes with it… I mean, they can repeat all those vocabulary words back to me. But, if I just stick them on my pocket chart and we just read over them… Mm, you know, some of my good readers are gonna remember, but my lower readers are not gonna remember what's on the pocket chart.
- Abby: I love using music in the classroom, and I would like to incorporate it even more in the future. Especially at the Kindergarten age, students seem to enjoy singing and listening to songs and music. I think it creates a happy, upbeat environment in the classroom.
- Debbie: We use music all the time. It's engaging; it helps them to remember whatever you're trying to get them to do. We see them use it in their writing often. We can see them kind of singing it as they're trying to figure it out. We have parents that will come in for orientation every year. And when we tell them our curriculum, that it has Letter People in it, they'll start to sing "Mr. M's Munching Mouth" song.
- Hadley: My students are able to recall concepts more easily when music is involved. Also, as a song format, students can easily teach it to someone else which in turn gives them a deeper understanding and stronger grasp of the

knowledge. Also, it's just fun and engaging! Kids want to learn with me (and they often don't realize they are) because we are just having a good time.

- Katie: It helps all kids, but I think even more so, the lower kids. I mean, it gets that kinesthetic learning in there too, because we usually have hand motions or a dance move to it. I can't imagine doing phonics without music. I just feel like sometimes, the curriculum is so… regiment. By adding a song or two, it kind of helps soften it for kindergarteners. It's age appropriate.
- Karen: I definitely see benefits. We hear back from kids' parents, we hear them singing songs in [laughter] the lunchroom, or you know, at recess… So, I feel like, learning through song, or even if it's just a chant, or we're chanting it and moving, it definitely benefits them. Definitely. I really think that putting phonics to motion, putting it to song, putting it to a rhyme helps them remember, and I think actually it shows up more when they hit first grade… I think they feel more successful with what they know.
- Melissa: I think kiddos really learn well through multiple modalities, music being one of them that I think they can really take well to. Or, if you aren't reaching a specific learner through one technique, you can always… Having all of those different ones, that's how you can reach, hopefully, all your students in the classroom through your lessons, whether that be the visuals of the anchor charts, along with the songs that you're doing and singing loud, or the videos that you're watching, especially when you live in a world, now, of technology and everything. When they can hear and see it, I think that's a really big positive.

- Mary: Music opens pathways in your brain. It's a more creative-thinking way of thinking. And, for lack of a better way to say it… sometimes, it helps create those paths for the neurons to transmit that I would never open any other way.
- Renee: I mean, I think it's just another way to, especially when you incorporate movement too, um… It just cements that in their minds and engages them more, especially when there's pictures and stuff that go with it, they're seeing the letters, they're seeing the writing, they're singing it, they're moving to it… It just makes it so much more concrete.
- Willow: I'd say it's beneficial. It keeps their attention. Like, for example, we have a weather song that we sing each day when we do calendar, and they just… they enjoy it. They like to sing. Our music teacher… any song she's taught them, they come back and they sing it for the next two weeks, until they catch onto something new. What I have especially found with my ESL students (I have three this year)… Anytime we do music, the rhythm of it, they catch onto it quicker, it's easier for them to be able to give back the information through song than it is through speaking, most of the time. I think anything that's rhythmic helps. Anything that's kind of pattern-based, like all my "big books" for the alphabet… it really reinforces the letter and the sounds at the same time, but they don't even realize they're learning because it's fun. The songs are really fun.

Although all participants perceived the utilization of music to teach phonics as beneficial to students' academic success, all participants also believed that there are challenges associated with integrating music into the phonics curriculum. These challenges include finding time to locate and try new resources, fitting more activities into an already full kindergarten curriculum,

dealing with students who do not want to participate in a music-based activity, and maintaining classroom management, particularly with songs that are faster-paced or involve a lot of movement.

Six of ten teachers expressed challenges with finding time to locate and try new resources. Often times, teachers use only the resources they are comfortable with. Adrienne stated:

> You know, finding new resources is a challenge. You know, you have your favorites that you use. And of course, I'm gonna continue to use all this. I think it's sometimes hard, just, to come up, on your own and make up a song. I think, sometimes, just… taking the time to find the resources can be a big challenge.

Willow also struggles to find time to locate new resources, as well as fit more phonics curriculum into her instructional time. When asked about her greatest challenge, she stated:

> Sometimes, finding the time to do it all, because there's so much to teach. I feel like we have to just keep cutting out the fun stuff, which is an awful thing to happen in kindergarten, but there's so much to cover between where they start and where you need them to be for first grade.

Another challenge that several teachers mentioned specifically is trying to manage students who do not want to participate in the music activities. These include students who are too shy or students who think they are too mature to sing the fun little songs to help them remember specific phonics skills. Katie discussed some specific students that make incorporating music into phonics a challenge:

> There are some at the beginning that… I think there's just "too cool" to do it. But then, they usually end up chilling out. Once they see us be silly and do all kind of nonsense,

> they kind of loosen up and they'll at least sing along. I mean, even if they're not verbally singing along, you can tell, like, with their head nods and their…well they are still engaged.

Karen added:

> I usually have one, at least one, who… it's not their thing, singing and that kind of thing. And I tell them, "That's okay, you don't have to sing, but you do have to listen and you do have to be respectful." And usually, at least they're sitting there, hopefully absorbing it. They may not be participating, but… you know, it's not for every kid. It doesn't float their boat. And I get it, so I do allow them a "pass." And then, they just know they have to be respectful.

Finally, several teachers also discussed maintaining classroom management when students are engaged in a musical activity during phonics. Karen said, "Sometimes, we've seen where they just get too excited, or, you know, that kind of thing. And you're like, "[sigh] Settle down, settle down." [laughter] So, that, sometimes, can be the only thing. It just depends on your class, and the mix of the kid."

Differences in Experiences. Perhaps the biggest difference noted between all the cases was in my personal observations within each classroom. Eight of the 10 cases used the Phonics Dance as one of the primary resources to teach phonics. Two teachers used Orton-Gillingham explicitly for phonics instruction and all teachers used their own personal preferences for supplemental music resources to reiterate phonics skills.

However, despite the similar curriculum tools used in the classrooms, there were significant differences in classroom environments and classroom management. I noted in several reflections that, in four classrooms, several students were off-task throughout the phonics lesson

observed. In six classrooms the teacher had very effective classroom management and students were on-task and much more engaged in the classroom (Appendix H).

It was enlightening to see, as a researcher, the differences in the classroom environment from each individual case. Some teachers, such as Hadley, Abby, Willow, Adrienne, and Renee appeared in initial meetings to be very quiet and reserved. I noted this in the classroom observations (Appendix F). However, all five of these teachers managed their classrooms well and students were very engaged and on-task throughout the phonics lesson.

Abby mentioned, "I find it [music] to be calming and relaxing, particularly during independent workshop time." Additionally, Hadley stated, "Soft, quiet background music can help create a calm and peaceful environment that promotes more focused work time. We use 'relaxation radio' during our writer's workshop time to help us calm, focus, and work." This demonstrates how some teachers use music during both phonics and other instructional time to calm and focus their students.

In contrast, some cases, such as Debbie, Katie, Melissa, and Mary involved teachers who were more extroverted. However, I noted that their classrooms also appeared more extroverted and talkative (Appendix F). During Melissa's observation, I notated, "Melissa is very energetic with her class and is very encouraging. I often heard her give her class praise for their answers." I also mentioned during Mary's classroom, "Mary is a little more intense but also has a lot of energy. She relates well to the class and asked them a lot of questions relating to real-world experiences." The four teachers mentioned above tended to use a more outgoing and excitable approach during whole group phonics time. While this engaged the students, it also often caused the students to talk out more often or become extra excited.

The other notable difference amongst all 10 cases was the specific types of musical resources used within the classroom. Some individuals only used a few musical resources to teach phonics on a daily basis. In comparison other teachers used many different resources throughout phonics lessons, as well as throughout the entire day in their classroom. Some teachers, as noted in Table 2, used up to four different musical resources in one phonics lesson.

During classroom observations, the teacher who demonstrated the most variety of musical resources was Adrienne. Out of all 10 cases, Adrienne used the most resources during her observation. Adrienne used a combination of Jack Hartmann videos, the Phonics Dance, Star Fall website, and several teacher-created songs during her whole group phonics instruction time. Her class was very engaged with the variety of music she used to teach phonics.

While Adrienne used a large variety of music within her classroom, other teachers, such as Abby and Mary, only used one or two musical resources during their phonics instruction time. Abby used a song from the Letter People to teach her students about Mr. R. She also used a teacher-created song to review sight words. However, that is the only musical resources she said she used throughout her phonics instruction.

Mary only used one song during her phonics instruction. Mary also used the letter R song from the Letter People. During the rest of her 45 minute observation, I did not observe any other musical resources being used. Mary did report in her interview that she uses a few teacher-created songs and some additional YouTube videos to teach specific phonics skills using music.

Although all 10 cases believe music plays an important educational role in teaching explicit phonics, the approach taken to accomplish this was vastly different. The teachers' responses in interviews, however, indicated that many did not receive any undergraduate courses in how to effectively implement music into the early elementary classroom. Therefore, many

teachers are not as confident to use music within their own classrooms, or have had to take time outside of work hours to find their own musical resources to enhance student learning.

Research Question Responses

The purpose of this holistic, multiple case study was to explore the utilization of music to teach phonics within the kindergarten classroom. Through the data analysis, I analyzed each case individually based on data collected from one-on-one interviews, classroom observations, participant lesson plans, and photos of the classroom identifying specific musical components used. After analyzing each individual case, I also completed a cross-case analysis to compare and contrast patterns across all 10 cases in order to develop recurring themes.

The main source of data was the interview of each participant. Interview questions connected directly to the research questions. The first two interview questions, as well as the last question, were simply a level one question to get basic demographic information from the participants, including education level and years taught. The second question also provided some background information as to any courses teachers received in college that focused specifically on using music within the general education classroom. The final question was a summary opportunity for the participants to add any other additional information they might want to contribute to the interview that they had not already covered.

Question three, “Can you please walk me through a daily phonics lesson?” and question five, “What resources do you use to help you teach phonics?” all relate to research sub-question one. The purpose behind these questions was to identify specific curriculum teachers used within their classrooms to incorporate music into phonics, as well as to identify classroom management and lesson planning techniques that related directly to phonics instruction time.

Interview question four, "How do you use music during phonics/reading in your classroom?" related directly to research sub-question two. Question eight, "If applicable, why have you been hesitant to incorporate music into your kindergarten classroom to teach phonics?" also related to research sub-question two. The purpose of this question was to focus specifically on ways teachers integrated music directly into the phonics curriculum. This might be through a specific phonics curriculum, use of musical elements such as a guitar, musical instruments, etc., ideas teachers learned in their own collegiate coursework, or other ideas found through research or collaboration with other kindergarten teachers.

Question six asked, "What is your perception of using music within the classroom?" Question seven similarly asked, "What do you believe are the influences of music in the learning process within reading?" Question nine was, "What do you indicate are the results of the implementation of music in the teaching of phonics?" These three questions addressed research sub-question three which focused on the teacher's perception of the connection between music and phonics. The questions draw heavily on the schema theory in trying to determine if teachers perceived music integration to be helpful in students' previous knowledge and, in turn, helped students acquire new information based on knowing specific music songs or chants.

Central Question

I developed the research questions based upon extensive literature review with support focused the schema theory as it relates to reading. The Central Question (CQ) asked, "How do kindergarten teachers utilize music to teach phonics within the classroom?" This question was the foundation for this research in order to explore the use of music by kindergarten teachers to teach direct phonics instruction. The sub-questions asked more specific details to further

examine and explore the central question. The sub-questions also gave support to the four themes that materialized after data analysis.

Research Sub-Question One

Research question one was, "What types of instructional methods and techniques do teachers use to incorporate music in order to teach phonics?" The purpose of this question was to determine what specific curriculum tools each teacher used to effectively implement music within the classroom to teach phonics. Throughout the classroom observations, it was evident that each case had specific instructional methods and techniques to incorporate music into the phonics curriculum. While I heard many of the same curriculum elements across all cases, some cases provided new curriculum. Curriculum mentioned or observed through one-on-one interviews, classroom observations, and teacher lesson plans include the following (Table 3). I listed and compiled the curriculum used to determine how many teachers implemented these specific musical elements within their classrooms:

Table 3

Curriculum used to implement music and phonics

Participant	Fountas & Pinnell	Letter People	Jack Hartmann	Heidi Songs	Dr. Jean	Orton Gillingham	Phonics Dance	Teacher-created resources
Abby		X			X			X
Adrienne		X	X			X	X	X
Debbie	X	X	X		X		X	X
Hadley	X		X	X			X	X
Karen			X	X			X	X
Katie	X		X		X		X	X
Mary		X			X	X		X
Melissa			X	X	X		X	X
Renee			X	X			X	X
Willow			X	X			X	X

Karen mentioned several music curriculum pieces that she uses to teach phonics. These are also resources Melissa and Hadley used:

> Typically, we do our Phonics Dance every day. We introduce two letters or two Hunks and Chunks a week. We start off with just letters, obviously, and then, about mid-January, we start our hunk and chunks. And usually, it's just all verbal. And then, every day, we review everything. We have the "Sing & Spell" videos from Heidi Songs, and those are our sight words. And then, we use Jack Hartmann, his "Word Families," to sing about our word families.

Renee also identified the specific music tools she uses, "So basically I use the Phonics Dance (the alphabet and Hunks and Chunks), Jack Hartmann, Heidi Songs…." While Debbie discussed some other resources not as common to the rest of the schools. Debbie stated Freedom Elementary uses PSW, The Phonics Dance like most school systems in northwest Ohio, Harry Kindergarten, Jack Hartmann, and Handwriting Without Tears, which is a writing program but includes phonics and songs to help students remember letter formation.

It became clear after interviewing and observing all 10 participants that many teachers in northwest Ohio use the Phonics Dance (80% of participants) and Jack Hartman music videos to teach digraphs and word families (80% of participants). Forty percent of participants use Heidi Songs curriculum and forty percent use the Letter People curriculum.

However, one hundred percent of all participants use their own teacher-created songs in their classrooms to teach phonics. Some teachers have adapted songs from other teachers or in-services and training while other teachers stated they create their own songs completely on their own. Melissa stated:

> I often find some chants and songs that other people have made up or I make them up. I do use one that goes along with the vowels. It's along with the tune of "Bingo." So, let's see… "The letters in the alphabet, they have vowels I can name. Oh, 'a,' 'e,' 'i,' 'o,' 'u.' 'A,' 'e,' 'i,' 'o,' u.' 'A,' 'e,' 'i,' 'o,' 'u,' and those are the vowel of the alphabet.

Adrienne also shared about the various songs she uses in her classroom:

> Most of the songs go to the tune of something… and, you know, of course, I didn't think that up myself. I got that from different resources. But I think it does help kiddos because, right away, you even saw this morning, I said, "Okay, this one's gonna go to the tune of 'Mary Had a Little Lamb.'" Most kids, I would say, know some of those songs.

> That helps me because I have to hum that song [laughter] to make sure I'm on the right track.

The use of familiar tunes to teach phonics relates directly back to the theoretical framework supporting this research. The schema theory as it relates to reading focuses on accessing students' prior knowledge to help them expand and develop new skills. Many participants shared that they access students' previous musical knowledge and then add a new skill to help them remember a specific phonics component such as a letter and sound, digraph, or word family.

Karen provided an example of how putting new skills to music helps her students even in years to come:

> I really think that putting phonics to motion, putting it to a familiar song, putting it to a rhyme helps them remember, and I think actually it shows up more when they hit first grade… I think they feel more successful with what they know because they can put it to a familiar song they already know and that sticks with them for years.

Katie shared how students continue to use their music chants and songs in their writing:

> We see them use it in their writing often. We can see them kind of singing it as they're trying to figure it out. Sometimes they can't figure out which one they're supposed to be putting, and I can see them go "/a/, /a/, /a/, Abby is sad," you know? You can tell that they're, "/a/, oh no, it's /e/."

Research Question Two

How do teachers integrate music within the context of direct phonics instruction in the kindergarten classroom?

All 10 participants stated that they integrate music on a regular basis during phonics instruction. However, how they chose to integrate music within their class' direct phonics instruction time varied between teachers. While some teachers only use specific music components for a short amount of time each day, other teachers stated they use music throughout their day to reinforce phonics skills. This is evident in theme one which was pedagogy.

Hadley discussed how she integrates music directly to phonics:

> My students are able to recall concepts more easily when music is involved. Also, as a song format, students can easily teach it to someone else, which, in turn, gives them a deeper understanding or stronger grasp of the knowledge. Also, it's just fun and engaging! Kids want to learn with me (and they often don't realize they are) because we are just having a good time.

Willow also added:

> I think they pick up on the letters much quicker, they pick up on the sounds, they're able to have those phonics skills that would be, you know, boring to teach, just sitting there and saying the letter, saying the sound… And it makes it more fun, and I think it stays with them.

Overall, data analysis indicated that most teachers used a combination of explicit phonics instruction such as Orton-Gillingham, the Letter People, Fountas and Pinnell, or the Phonics Dance. Furthermore, all teachers also add in their own choice of musical resources that they have gathered through professional development training or independent teacher searching. These resources included Jack Hartmann, Dr. Jean, and Heidi Songs as well as several others. I noted evidence of these resources in the classroom photos take of each case (Appendix I).

The integration of additional musical resources allowed the teachers to provide additional instruction through a different learning modality for students. When discussing specific music resources such as Jack Hartmann videos on YouTube, Renee indicated:

> We do a lot of Jack Hartmann songs I find, like, with a word family. It's just more engaging. It's got music, and they like to sing the in-between parts that they know, because it's familiar for each word family, and then, they like to see what words he came up with that we didn't come up with, so it really gets them thinking beyond just what we've talked about.

Melissa specifically mentioned learning modalities when discussing how she integrates music within the direct context of phonics instruction:

> I think kiddos really learn well through multiple modalities, music being one of them that I think they can really take well to. Or, if you aren't reaching a specific learner through one technique, you can always… Having all of those different ones, that's how you can reach, hopefully, all your students in the classroom through your lessons, whether that be the visuals of the anchor charts, along with the songs that you're doing and singing loud, or the videos that you're watching, especially when you live in a world, now, of technology and everything. When they can hear and see it, I think that's a really big positive.

Research Question Three

How do teachers perceive the connection of using music and phonics to teach early literacy skills?

The final research question related directly to Theme Two: Perceptions. This theme had two sub-themes. The first sub-theme was the teachers' perceptions of the benefits of using music

within the classroom to teach phonics. The second sub-theme was the teachers' perceptions of the challenges faced in incorporating music into the phonics curriculum.

As discussed in Theme Two, all participants in all 10 cases stated that they believe there are substantial benefits of using music to incorporate phonics. Research shows that the most effective way to teach phonological awareness is through an emergent literacy approach (Flaugnacco, et al., 2015; Patel, 2003). In this approach, students learn both phonemic awareness and phonics. Students learn these specific phonological skills through play-based instruction including singing, rhymes, chants, dramatic play, and shared reading (Britto, Brooks-Gunn & Griffin, 2006; Campbell, 2015).

Hadley reiterated the benefits of using music to teach phonics to connect ideas. She stated, "Music, I believe, helps string ideas and concepts together as a whole, much the same way we can remember song lyrics from decades ago!" This also relate to the theoretical foundation of this research, the schema theory.

Most participants believe that using music to teach phonics helps students connect previous knowledge to current phonics skills. The previous schema might be a children's melodic tune they have learned in music class or in preschool. It might also be accessing prior knowledge about a specific letter to blend CVC words. Regardless, using music helps students access their schema to then learn new skills.

Hadley also stated, "My students are able to recall concepts more easily when music is involved. Also, as a song format, students can easily teach it to someone else, which, in turn, gives them a deeper understanding or stronger grasp of the knowledge." This emphasizes the benefits of using music to access students schema from lesson to lesson.

Likewise, Willow discussed how she has seen students use schema to learn new phonics skills using rhythmic chants from the Phonics Dance:

> I think it stays with them. So, when we get to an assessment piece, and I get to the letter "y," which always trips them up at the beginning of the year, and I say, "I will not yak today," all of a sudden, they know, "Oh, /y/," and they get it. So, I think it just helps trigger them to know the response.

The second component of this research question focuses on the teachers' perceptions of the challenges faced in order to incorporate music into the phonics curriculum. Many teachers mentioned it is difficult to find time to incorporate everything. Some participants also mentioned that it can be intimidating to try new things in the classroom, especially when not comfortable with one's own singing voice.

Willow touched on the difficulty of finding time to fit in all the required components of a phonics curriculum on top of adding music into the day:

> Sometimes, finding the time to do it all, because there's so much to teach. I feel like we have to just keep cutting out the fun stuff, which is an awful thing to happen in kindergarten, but there's so much to cover between where they start and where you need them to be for first grade.

Although it can be difficult to fit all the curriculum needs into a school day, it is important to add music as often as possible. As previously mentioned, The National Research Council concluded that decreasing the amount of time teachers provided musical experiences to their students within the school day deprived each student of kinesthetic, aural, oral, visual, and emotional experiences that allow music to bring written texts to life (Burns, Griffin & Snow, 1999).

While Willow addressed the challenges of fitting all the standards into the school day, Adrienne focused on the challenge of finding new ideas to continue to keep the students' interest. She discussed how she is not as comfortable making up her own songs and would rather find pre-made music songs that focus on phonics:

> Finding new resources is a challenge. You know, you have your favorites that you use. And of course, I'm gonna continue to use all this. But, just like where I found this Reading Roadmap course with some fresh ideas, I think it's sometimes hard, just, to come up, on your own.

However, in all teacher observations, I noticed that the use of music to teach phonics helped the students stay focused and engaged in the lesson. When music was playing either through a CD, the teacher singing on their own, or through a music video, the large majority of students were on-task and participating. Teachers can manage these challenges through pre-planning to try to fit all components into the academic day.

Summary

The purpose of Chapter Four was to analyze data collected from this multiple case study. The specific purpose of this study was to explore the kindergarten teachers' use of music to teach phonics within the classroom. I collected data from one-one-one, semi-structured, open-ended interviews with each participant, classroom observations, and physical artifacts. Physical artifacts included lesson plans from each participant indicating the use of music to teach phonics, classroom photos, and journal notes.

During data analysis, I analyzed each case individually and discussed from a within- case analysis perspective. I then compared each case to the other cases during a cross-case analysis to determine similarities and differences within and between cases. The analyses gave insights

from each participant as to how they use music within their classroom to teach phonics, as well as their peceptions of the use of music to teach phonics. I created theme-based assertions and multiple case assertions to determine specifically the teachers' perspectives on the use of music to teach phonics.

Using supporting data and quotes from each participant, I addressed each research question. The research questions, along with data analysis provided a total of four themes that emerged. These themes included pedagogy, specifically music-based curriculum and standard phonics curriculum, perceptions including benefts and challenges, classroom management, and confidence.

Chapter Five includes the conclusions to research of this study. A summary of the findings of this research, the theoretical, empirical, and practical implications as well as limitations and delimitations to the study are discussed at length. Recommendations for future studies are also addressed.

CHAPTER FIVE: CONCLUSION

Overview

Approximately one-third of kindergarten students are not reading at grade-level by the end of kindergarten (NCET, 2013). Reading scores across the nation have seen a decline from 2013 to 2015 (Jones-Gensel, 2016). Due to these recent statistics, as well as the Every Student Succeeds Act (ESSA) that replaced the No Child Left Behind (NCLB) act, there has been an increased demand for new and innovative ways to teach children reading skills, particularly phonics skills, to increase their reading ability and reading readiness scores (U.S. Department of Education, 2015).

The purpose of this qualitative, intrinsic, holistic, multiple case study is to explore the utilization of music to teach phonics within kindergarten classrooms in the state of Ohio. Chapter Five includes a brief summary of the findings from the research and data analysis and the implications of the findings in relation to current research-based literature and the schema theory. The conclusions are compared directly with the literature review in Chapter Two. Chapter Five also discusses the methodical and practical implications of the results, the delimitations and limitations identified within the study, and recommendations for future research.

Summary of Findings

This multiple case study focused on 10 cases. Each case included individual kindergarten teachers from four different school districts in northwest Ohio. Through classroom observation of each of the 10 teachers, as well as interviews and a review of lesson plans from each participant, four themes emerged from this study. These themes included (1) pedagogy, with

sub-themes of music-based curriculum and standard phonics curriculum, (2) perceptions, with sub-themes of benefits and challenges, (3) classroom management, and (4) confidence.

I conducted a within-case analysis and a cross-case analysis to compare and contrast all 10 cases to determine similarities and differences amongst all kindergarten teachers. Detailed findings provided specific information as to the benefits and challenges of using music within the kindergarten classroom to teach phonics. Each research question related directly to current, scholarly literature regarding music and phonics within the early elementary classroom.

The central question for this qualitative, multiple case study was, "How do kindergarten teachers utilize music to teach phonics within the classroom?" Participants in the study each had a different approach to using music within their own classroom. However, the majority of teachers used the Letter People, Fountas and Pinnell, or Orton-Gillingham for their standards-based phonics curriculum and then supplemented music-specific phonics resources such as Dr. Jean, Jack Hartmann, and the Phonics Dance.

All teachers, however, indicated through one-on-one interviews as well as through submission of a weekly lesson plans that they use teacher-created phonics songs weekly during whole group instruction. Each teacher mentioned specific songs learned at workshops, conferences, or created personally to help engage students and enable them to recall phonics skills more easily.

The first research question inquired, "What types of instructional methods and techniques do teachers use to incorporate music in order to teach phonics?" All 10 teachers used specific instructional methods to incorporate music in order to teach phonics within the kindergarten classroom. One specific skill noted is that 10 ten participants used music to teach phonics during explicit, whole group phonics instruction. Most teachers followed a similar pedagogy in that the

students would begin on the carpet and the teacher would introduce a specific phonics skill. In most cases, this was either a word family or a digraph. Students then generated words including that skill on an anchor chart. The teacher would then use musical resources mentioned above to reinforce the skill and revisit the anchor chart.

Teachers also often referred to specific songs or the Phonics Dance letter chants to help students recall previously-learned information and apply it to a new skill. This relates directly to the schema theory, which was the theory supporting this research. Teaches often used schema during classroom instructional time to first recall previously-learned knowledge and then introduce a new phonics skill for students.

All teachers also used technology within their classroom for visual tools to reinforce phonics skills through music. Every classroom had an interactive white board that each teacher used during whole group phonics instruction. Every teacher but two used the interactive white board to play a music video, usually Jack Hartmann, to focus on the specific phonics objective for the day. This also proved to be very effective in engaging students in the phonics lesson and keeping their attention.

Finally, teachers encouraged their students to get up and move during whole group phonics instruction. The music videos used within the classrooms to reinforce the specific phonics skills all included movement. The Phonics Dance, which eight of the 10 participants used, also includes movement with each chant. This proved to be very effective in allowing students brain-based movements to reinforce each song and phonics skill.

The second research question asked, “How do teachers integrate music within the context of direct phonics instruction in the kindergarten classroom?” The answer to this question is that each case integrated music into the classroom within the context of direct phonics instruction in

both similar and different ways. Teachers within the same school districts tended to use similar phonics curriculum and resources. However, each teacher used different pedagogy to reinforce phonics through music during direct phonics instruction.

It appeared through classroom observations that many of the more reserved, quieter teachers often had classes that reflected their mannerisms. Several of the participants discussed in Chapter Four approached music through a structured and planned lesson. These teachers used musical resources to introduce a new skill or to review a phonics skill previously taught. The students typically remained seated at their tables at their assigned spot in the room. The teachers then moved around the room during the musical portion of phonics time to add proximity to the students and thus use music to aid in classroom management and student engagement.

The other approach to using music during direct phonics instruction was from the more energetic and outgoing teachers. These participants used music to get the students up and moving, sometimes even around the classroom. Several of the energetic teachers believe it is important to use music not only to enable schema and provide better recall, but also to engage the students' bodies and minds. Students would watch a music video and sing and move along while the teachers also participated with the students.

It is important to note, however, that all teachers used music daily within the classroom to reinforce phonics skills. Each teacher provided a one-week phonics lesson plan for data analysis and all 10 teachers noted the use of music to teach phonics within the classrooms on a daily basis. The participants all believed in the benefits that music can have within the classroom for pedagogy, student retention of knowledge, and classroom management.

The final research question explored the question, "How do teachers perceive the connection of using music and phonics to teach early literacy skills?" The teachers unanimously

believed that music had a direct benefit to the students in providing success with phonics. All 10 participants stated during one-on-one interviews that they use music within their own classroom because they have personally seen the benefits of using music to help students recall information later on. Some teachers discussed that parents of current students remember specific phonics songs or chants that they learned in kindergarten.

Additionally, some participants shared that there are challenges faced when getting students to participate in phonics through singing, chants, and movement. This includes trying to fit extra curriculum into an already full school day. Using music can also be a challenge to manage students who become extra excited due to the movement and singing, or in the opposite way, it can be a challenge to get students who do not like to sing to still participate and learn through the use of musical resources during phonics. However, despite some challenges that teachers face by implementing music into the phonics curriculum, all teachers believed the benefits far outweigh the challenges.

Discussion

This holistic, analytic, explanatory multiple case study focused on the kindergarten teacher's utilization of music to teach phonics within the classroom. The schema theory as it relates to reading was the driving theory in this study. The results from the research and data collected confirm that students can more easily learn new material when they are able to relate it back to previous knowledge. Teachers stated that this is effectively done through the use of musical elements. This study directly adds to both empirical and theoretical literature discussed in Chapter Two.

Empirical Foundations

Researchers have conducted several recent quantitative studies on the use of music to teach phonics and/or reading (Betteney & Brooks, 2015; Flaugnacco, Lopez, Terribili, Montico, Zoia, & Schön, 2015; Slater, Strait, Skoe, O'Connell, Thompson, & Kraus, 2014). I previously discussed these studies in Chapter One and Chapter Two. Additional examples include a quantitative causal-comparative study by Moradi and Shahrokhi (2014) that concluded music has a statistically significant positive effect on children's pronunciation, intonation, and stress patterns in reading. Another experimental research design study by Bhide, Power, and Goswami (2013) concluded that providing children with rhythmic training within language has a positive effect on children's literacy and phonological skills. However, no studies until this research study focused on an in-depth, qualitative study of how kindergarten teachers utilize music within the classroom to teach phonics.

The purpose of this study was to provide an in-depth, qualitative, multiple case study on how teachers use music to teach phonics and the results of such utilization. The intent was to help fill the current empirical gap in research. This study is beneficial for all stakeholders including curriculum coordinators, administrators, and early childhood education teachers to find additional ways to increase student learning in regard to reading success.

Through in-depth qualitative analysis, I observed ten kindergarten classroom teachers teaching whole group phonics. Each observation lasted approximately 45-minutes and each participant used music to teach phonics during the observation. Through direct observations, I identified specific instructional methods teachers used to effectively utilize music within the classroom to teach phonics. Instructional methods included the use of whole group, direct phonics instruction time daily to review phonics skills previously taught. Teachers then used that

acquired knowledge and apply it to new information. The methods for instruction included standards-based phonics curriculum and music-based phonics curriculum. Each type of standards-based phonics curriculum and music-based phonics curriculum was noted individual in Chapter Four. The intent of this curriculum is to provide students with a well-rounded, direct, instructional approach that uses multiple modalities to enhance students' retention of phonics skills.

Teachers' confidence level also played an important role within classroom observations. Some teachers stated they do not feel adequately prepared to use music within the classroom. It was discovered through one-on-one interviews that only one of ten participants had a course in undergraduate studies that focused on using music to teach reading in early childhood education. Since participants had received little formal education or training, some were less confident to use music. This is in spite of a study by Sullivan that concluded that when music is used within the kindergarten classroom student engagement in the learning process is significantly higher compared to when music was not used.

The study also determined that teachers perceive music instruction within the classroom to teach phonics as a beneficial tool to help with student retention and activate schema. Teachers believe that, although there are challenges, the benefits far outweigh the challenges that teachers may perceive. The analysis indicated challenges to include fitting music into an already full phonics curriculum, finding time to locate and learn addition music resources, and the lack of opportunity to collaborate with other teachers or attend workshops to gain ideas on more effective ways to incorporate music into the phonics curriculum. The results of this research may help to provide additional insight into beneficial ways to raise reading scores through phonics instruction.

Theoretical Foundations

The schema theory, as it relates to reading, was the basis for the theoretical foundation for this research study. The underlying idea of the schema theory is that readers impose patterns stored in the mind onto the text, which helps them understand the process of written language (Little & Box, 2011). Schemata is necessary for a reader to remember what they have learned thus far and apply that knowledge to the current text to be able to read each word (An, 2013).

As previously mentioned, "schema" means "an active organization of past reactions or experiences (An, 2013, p. 130). The schema theory focuses on the concept that individuals read and understand text based on their background knowledge, or prior knowledge, and their previously acquired knowledge, or schemata. Reading requires an active process where the reader is fully engaged. The schema theory helps guide readers with the belief that readers will use schema to make sense of new materials read and then make predictions about what they are reading within a text.

In education, teachers implement the schema theory, as it relates to reading, to evoke prior knowledge from students to help them understand new knowledge. This theory was observed directly within almost every case and noted in the classroom observation protocol (Appendix F) and also noted in the field notes (Appendix H). Teachers often used previous knowledge, such as students' knowledge a specific letters and sounds, to apply to a new concept, such as a word family or rime.

This study determined that many teachers activate students' schema through the use of music. According to Nassaji (2007), each new experience incorporates more and more information into an individual's schema. Therefore, I discovered through this multiple case

study that teachers often use schema to build upon students' previous knowledge including tunes previously learned in order to introduce new information in a more meaningful way.

Curtis (2007) stated that in order to be successful in academics, students must be able to receive information, remember it, and store it to be recalled at a later time. This process was evident throughout all ten cases. Through classroom observations and participant interviews, teachers indicated using music to help students recall specific phonics skills previously learned. This was apparent in the use of the Phonics Dance and the Letter People as teachers would use specific chants or songs to help students recall a specific letter-sound relationship previously learned in the school year.

Another example in which teachers activated students' schema was when several of the teachers used a familiar tune, such as "Old McDonald," "Mary Had a Little Lamb," or "Row, Row, Row Your Boat," and then put that familiar tune to new information to help students remember specific phonics skills. This was a simple, yet highly effective way of using schema through multiple learning modalities including aural and kinesthetic (because motions were often added) to enhance students' learning and ultimately provide students with a richer, more meaningful and memorable experience within a daily phonics lesson.

In addition, teachers perceived that incorporating music into the classroom engaged students more effectively than only speaking to the class. Teachers used music to actively help students make sense of new information. The use of the schema theory to enhance student learning during direct phonics instruction will be useful to teachers, administration, and curriculum developers to establish how incorporating the experience of music into the teaching of phonics will enhance student learning.

Implications

The purpose of this holistic, analytic, explanatory, multiple case study was to explore the utilization of music to teach phonics within the kindergarten classroom. Administrators can use findings from this multiple case study to create additional training for early childhood educators at the pre-service, collegiate level. Implications from this study may also provide insights for current kindergarten teachers, curriculum coordinators, and administrators who wish to improve early literacy reading levels for kindergarten students.

There are three categories of implications from this study: theoretical, empirical, and practical. I based the theoretical implications on the schema theory as it relates directly to reading and I researched the schema theory extensively in Chapter Two. The basis of the empirical implications was triangulation of data including data from one-on-one participant interviews, direct observation of each participant, and physical artifacts including lesson plans that each participant provided and photos of each classroom. Finally, practical implications provide suggestions for administrators, teachers, and collegiate personnel to provide more effective ways to incorporate music to teach phonics within the kindergarten classroom.

Theoretical Implications

The schema theory, which British psychologist Sir Frederic Bartlett first introduced in 1932 (Rumelhart, 1980) is the basis for the theoretical foundation. This theory has also been discussed by Kant, who claimed that new information and new ideas have meaning only when one can relate those ideas to something that the individual already knows, or to one's schema (Carrell, 1984). The schema theory accepts that text does not carry meaning by itself but rather it provides direction for the reader. The schema theory recognizes the process in which some textual stimuli signal the reader to look for and evoke the relevant schema (the organization of

data) from memory into the present reading task and focus (An, 2013; McVee et al., 2005). In this multiple case study, the focus was the kindergarten classroom.

As part of this theory, the reader must then use their previous knowledge (schema) to construct their own meaning of the text. In education, this is also called the reader's background knowledge (Carrell, 1984). This theory was evidenced multiple times throughout classroom observations and teacher interviews. Most of the cases used students' prior knowledge to allow them to construct new words and meanings of texts. Teachers encouraged students to build upon the knowledge they already knew, such as letters and sounds learned through the Letter People or the Phonics Dance. Teachers then took that schema and had students create word families or words using digraphs to construct new words and thus new meaning.

Based on these theoretical implications, I recommend that administrators and early childhood educators create meaningful ways for students to construct new knowledge by first activating schema. Studies have shown that music can trigger responses in the brain, specifically related to reading (John, 2002). Implementing music into phonics curriculum can allow students easier ways to remember specific phonics skills previously learned, especially letter-sound correspondence. Setting information to a melodic tune can also help individuals remember a specific skill more long-term than simply memorizing the words without music.

Both schema and a child's musical experiences may have a direct influence on his or her own learning due to the way the human brain processes perceptions, movements, and skill acquisition (John, 2002). Therefore, theoretical implications include using "scaffolding" to activate schema through the use of music. This may, in fact, become a highly effective way to help early readers have more success throughout the reading process.

Empirical Implications

This multiple case research study explored the utilization of music to teach phonics in kindergarten. Studies have shown that phonics plays an important role in early reading development and an emergent literacy approach is the most effective way to teach early literacy skills (Flaugnacco et al., 2015; Patel, 2003). As mentioned in Chapter Two, in an emergent literacy approach students learn phonological awareness, which includes phonemic awareness as well as phonics. Students learn these skills through play-based instruction incorporating singing, rhymes, chants, dramatic play, and shared reading (Britto, Brooks-Gunn & Griffin, 2006; Campbell, 2015).

This multiple case study determined through classroom observations, one-on-one interviews, and collection of physical artifacts that, in order for teachers to provide effective pedagogy to use music to teach phonics within the classroom, teachers must have more effective training at the pre-teaching, collegiate level. The majority of participants indicated that they did not receive any collegiate courses to provide teachers with ideas, resources, and knowledge to incorporate music into the early literacy process. A study by Neokleous (2014) suggested that pre-service music teachers tend to avoid using music as a teaching strategy due to their own insecurities about singing. Therefore, an empirical implication from the results is that to help teachers overcome potential challenges within the classroom in regard to using music to teach reading, they must first be well educated in effective strategies as well as musical resources that are available to aid students in learning phonological skills.

Empirical implications also suggest that administration should give teachers time to collaborate with other teachers within kindergarten and attend early literacy and music specific workshops to provide ideas on resources. Several teachers indicated that it is difficult to find

time to fit everything into an already demanding curriculum. However, as a kindergarten teacher, I was personally able to learn a great deal from each teacher I observed as a part of this research. Allowing teachers time to collaborate with one another and attend additional training while teaching within the kindergarten classroom would prove to be very beneficial. This would provide both professional training and also allow teachers time to collaborate with colleagues in order to provide a more successful phonics curriculum for kindergarten students that would include musical elements.

Practical Implications

This research relates directly to teacher pedagogy, particularly for teachers in early childhood education. Studies by Reschly, Busch, Betts, Deno, and Long (2009) and Kaplan and Bhide, Power & Goswami (2013) determined that a student's ability to master early reading skills by the end of kindergarten predicts their success in word recognition and reading comprehension in upper grade levels. There is a strong correlation between a student's phonological awareness, which includes phonemic awareness and phonics in kindergarten and their success in reading fluency later in their academic career (Ehri & Roberts, 2006; Thompson & Sonnenschein, 2016).

In addition to the correlation between a student's phonological awareness and reading success, studies also show the similarities between the process of learning music and learning phonics (Hall & Robinson, 2012; O'Keefe, Dearden & West, 2013). These include the ability to hear and manipulate sound, the use of symbols to communicate information, and the use of encoding and encoding to process and construct meaning (Cabanac et al., 2013; Haning, 2016). All ten cases within this multiple case study indicated the benefits of using music to teach

phonics due the increased success in helping students process auditory skills and use encoding and decoding skills.

These particular skills were evidenced in the music-based phonics curriculum used by the kindergarten teachers. The Phonics Dance helped students manipulate sounds and use symbols (picture cards for each letter of the alphabet or the hunks and chunks) to recall each letter-sound relationship. Jack Hartmann, Dr. Jean, and HeidiSongs videos helped students encode and decode specific word families to construct further meaning of words.

Effective early literacy programs must combine skill-based reading models with child-centered instruction (Morrow & Dougherty, 2011; Jones-Gensel, 2009). In early education, child-centered instruction includes activities that engage the children through movement, singing, play, and other hands-on approaches. Suggested practical strategies for improving literacy skills in early childhood education focus specifically on reaching a variety of learning modalities, including kinesthetic, aural, and verbal (Betteney & Brooks, 2015; Walton, 2014). All ten cases within this study implemented kinesthetic learning through adding body movement to the Phonics Dance, various music videos, or teacher-created songs. In addition, teachers used aural and verbal instruction during whole group phonics instruction and often encouraged students to listen and watch a music video about a specific phonics skill.

Practical implications indicate that the utilization of music to teach phonics can have the benefit of improved classroom management. Several participants within this multiple case study indicated a positive well-managed learning environment when using music within whole group phonics curriculum. Most participants believed that music calmed students and provided them with an engaging, yet manageable way to learn phonics through the use of movement, singing, and chant. While some teachers indicated that a few outlying students were not engaged or on-

task when the teachers used music within phonics curriculum, all cases still indicated the overall benefits of music used during direct phonics instruction was worth the challenges that might be faced.

Practical implications from this study also indicate that one way to incorporate a variety of learning modalities is to include music into the daily phonics curriculum. All 10 cases indicated a positive correlation between the use of music to teach phonics and students' retention of early literacy skills, particularly letter-sound correlations. Incorporating music into phonics provides an opportunity for teachers to adapt instruction for all three learning modalities previously mentioned. This can be beneficial for administration, curriculum coordinators, and early elementary educators who desire to improve kindergarten students' early literacy skills and test scores.

Delimitations and Limitations

I made a purposeful decision to impose two delimitations on this study. The first delimitation was to limit this study to kindergarten teachers in Ohio. I also purposefully chose to focus only on phonics within the kindergarten classroom and not include other components of effective reading. I made this decision in order to intentionally limit and define the focus of the study. Kindergarten curriculum deals specifically with early literacy and phonics. Therefore, I used this delimitation to provide a more narrow scope to this study. This will provide stakeholders a specific view on the utilization and approaches to teaching music through phonics within the kindergarten classroom.

There were several limitations during the study, which I could not control. This multiple case study occurred in northwest Ohio in small school districts. The student population within the four pre-determined school districts ranged between 226 students and 496 students (Ohio

Department of Education, 2017). In addition, all four school districts had a high percentage of students being White, Non-Hispanic. The results of this study may not be reflective of schools in other geographic settings with high populations or different percentages of race.

I used convenience sampling therefore limiting participation to four school districts in northwest Ohio. In addition, all participants were Caucasian females because all kindergarten teachers I contacted within the four pre-selected school districts were Caucasian females. There are no male teachers or teachers of another race at any of the four school districts selected to be a part of this study. This poses an external threat to trustworthiness that I could not eliminate due to the nature of the study and availability of participants. Gender was not a pre-determined factor and should not have substantial effects on the results. Due to the inability to control this external threat, there is a need for replication of this study to include both male and female teachers, a variety of ethnicities, as well as replicating the study in school districts in other locations across the United States.

An additional limitation to the study was the small period of time used to conduct the study. The researcher spent approximately 45 minutes to one hour in each classroom observing each kindergarten teacher, or case, and approximately 45-minutes interviewing each participant. Longer exposure over multiple days in the classroom observing each teacher may have produced different results.

Recommendations for Future Research

Researchers have conducted many studies on the effects of using music to benefit academic success (Curtis & Fallin, 2014; Kolinsky et al., 2009; Vitale, 2011). In addition, several studies have focused specifically on the benefits of music to enhance the learning of reading skills (Moreno, et al., 2009; St. Clair, 2014; Vaughn & Winner,2000). However, few

studies have focused specifically on the utilization of music to teach phonics and no studies have focused on the use of music to teach phonics within the kindergarten classroom.

Over the past several years, there has been an increased focus on using a variety of strategies to increase student success in early reading. Phonics plays an important role in successful reading (Walpole, 2005). Therefore, the purpose of this study was to explore the utilization of music to teach phonics within the kindergarten classroom.

Recommendations for future research include the following:

- I conducted this multiple-case study within the state of Ohio and particularly in northwest Ohio. A variety of locations with different student-population statistics would likely produce different results and confirm or refute the findings from this study.
- The time frame of the study only allowed for one observation within each classroom, as well as one interview with each participant. More prolonged time within the field with each participant may change the results or provide additional insights for the researcher.
- One could conduct a qualitative study determining the positive effects of using music to teach phonics within the kindergarten class.
- Researchers could conduct a more in-depth single case study focusing on one large school district. Additional support staff including teachers, paraprofessionals, curriculum coordinators, parents, and administrators would be beneficial to gain additional perspectives from all stakeholders.
- I limited this study the kindergarten classroom. However, early childhood educators typically teach phonics through second grade. Researchers could

conduct further studies to explore the use of music to teach phonics in first and second grade.

Summary

The purpose of this qualitative multiple case study was to explore the utilization of music to teach phonics in kindergarten. This study focused on 10 kindergarten teachers and I considered each participant to be their own case. This chapter explained the results of the qualitative analysis and how those results related to the theoretical, empirical, and practical foundations discussed at length in Chapter Two. This chapter also provided an overview of the summary of findings related to each research question defined in Chapter One and Chapter Three. I explained theoretical, empirical, and practical implications along with delimitations and limitations. Finally, I provided suggestions for future research.

Through qualitative data analysis, I discovered four themes that related directly to the research questions and theoretical foundation. Themes included: (1) pedagogy, including standard phonics curriculum and music-based curriculum, (2) perceptions, including benefits and challenges, (3) classroom management, and (4) confidence. After a within-case and cross-case analysis, results indicated that incorporating music into the phonics curriculum has a positive effect on students' retention of knowledge and also provides additional benefits in regard to classroom management. The implementation of using music within the classroom, however, depends on the individual teacher's confidence level. Collegiate administrators and curriculum developers need to provide additional pre-service courses to more effectively educate teachers on instructional strategies and resources to use to incorporate music into the phonics curriculum.

As with any pedagogical approach, there are also challenges that teachers face when incorporating music into the classroom. The end results ideally will be for kindergarten teachers,

curriculum coordinators, and administrators to incorporate new strategies within the classroom to effectively utilize music to teach phonics and thus increase students' early literacy skills.

REFERENCES

Adams, M.J. (1990). *Beginning to Read: Thinking and Learning About Print.* Cambridge, MA: MIT Press.

Adelson, J. L., Dickinson, E. R., & Cunningham, B. C. (2016). A multigrade, multiyear statewide examination of reading achievement: Examining variability between districts, schools, and students. *Educational Researcher, 45*(4), 258-262.

Alba, J. W., & Hasher, L. (1983). Is memory schematic? *Psychological Bulletin*, 93, 203–231.

Amankwaa, L. (2016). Creating protocols for trustworthiness in qualitative research, *Journal of Cultural Diversity, 23*(3), 121-127.

An, S. (2013). Schema theory in reading. *Theory and Practice in Language Studies, 3*(1), 130+.

Annie E. Casey Foundation (2015). Early reading proficiency in the United States. Retrieved from Kids Count National Data Snapshot Report.

Bastian, H.G. (2000). Music education and it's effects. *British Journal of Development Psychology, 27,* 365-383.

Betteney, M., & Brooks, G. (2015). Can reading skills which are developed through the reading of music be transferred to benefit the early decoding of text? *International Journal of Multidisciplinary Comparative Studies, 2*(1), 57-72.

Bhide, A., Power, A., & Goswami, U. (2013). A rhythmic musical intervention for poor readers: A comparison of efficacy with a Letter-Based intervention. *Mind, Brain, and Education, 7*(2), 113-123. doi:10.1111/mbe.12016

Blissett, S., Goldszmidt, M., & Sibbald, M. (2015). Do research findings on schema-based instruction translate to the classroom? *Perspectives on Medical Education, 4*(6), 334-338. 10.1007/s40037-015-0225-5

Bolduc, J. (2009). Effects of a music programme on kindergarteners' phonological awareness skills. *International Journal of Music Education, 27*(1), 37-47.

Britto, P.R., Brooks-Gunn, J., & Griffin, T.M. (2006). Maternal reading and teaching patterns: Associations with school readiness in low-income African American families. *Reading Research Quarterly, 41*(1). 68-89.

Bryan, C., Dykstra, L., Van Dam, D., & Worley, M. (2017). Learning communities' and doctoral students' persistence: An exploratory case study (PowerPoint slides).

Buriss, K. G. (2001). Whole language vs. isolated phonics instruction: A longitudinal study in kindergarten with reading and writing tasks. *Childhood Education, 77*(3), 187.

Burns, M.S., Griffin, P., & Snow, C.E. (1999). Starting out right: A guide to promoting Children's reading success. *Committee on the Prevention of Reading Difficulties in Young Children, National Research Council, 2,* Washington, D.C. National Academy Press.

Burton, S. L. (2015). Making music mine: The development of rhythmic literacy. *Music Education Research, 19*(2), 133-10. 10.1080/14613808.2015.1095720

Cabanac, A., Perlovsky, L., Bonniot-Cabanac, M., & Cabanac, M. (2013). Music and academic performance. *Behavioural Brain Research, 256,* 257.

Campbell, J.E.P (2014). *Elementary classroom teachers' use of and comfort level teaching music.* ProQuest Dissertation Publishing, 2014.

Campbell, P. (2010). Songs in their heads: Music and its meaning in children's lives (2nd ed.). New York, NY: Oxford University Press.

Campbell, S. (2015). Feeling the pressure: Early childhood educators' reported views about learning and teaching phonics in Australian prior-to-school settings. *The Australian Journal of Language and Literacy, 38*(1), 12-26.

Carbo, M. (1997). *What every principal should know about teaching reading: How to raise test scores and nurture a love of reading.* Long Island, NY: National Reading Styles Institute.

Carrell, P. L. (1984). Schema theory and ESL reading: Classroom implications and applications. *The Modern Language Journal, 68*(4), 332-343. doi:10.1111/j.1540-4781.1984.tb02509

Carter, C. L. (2000). A tribute to Nelson Goodman. *The Journal of Aesthetics and Art Criticism, 58*(3), 251-253.

Chan, A.S., Ho, Y. C., & Cheung, M.C. (1998). Music training improves verbal memory. *Nature*. 396, p. 128+.

Chetty, R., Friedman, J.N., Hilger, N., Saez, E., Schanzenbach, D., & Yagan, D. (2010). *How does your kindergarten classroom affect your earnings? Evidence from the Project Start* (NBER Working Paper 16381). Cambridge, MA: National Bureau for Economic Research.

Child Trends Data Bank. (2015). Full-day kindergarten. Retrieved from http://www.childtrends.org//indicators-full-day-kindergarten

Clay, M.M. (2002). *An observation survey of early literacy achievement.* New York, NY*:* Person Education.

Colucci, D. A. (2014). The Mozart effect: Music exercises the brain. *The Hearing Journal, 67*(10), 56-56. doi:10.1097/01.HJ.0000455834.42735.51

Connelly, L. M. (2016). Trustworthiness in qualitative research. *Medsurg Nursing, 25*(6), 435-436.

Cooper, T. H. (2008). *The impact of the relationship between early literacy levels and the combination of the nine chosen reading strategies in kindergarten students.* ProQuest Dissertations Publishing; 2008.

Cooper, H., Allen, A. B., Patall, E. A., & Dent, A. L. (2010). Effects of full-day kindergarten on academic achievement and social development. *Review of Educational Research, 80*(1), 34-70. doi:10.3102/0034654309359185

Cornett, C. E. (2011). Creating meaning through literature and the arts (4th ed.). Retrieved from The University of Phoenix eBook Collections.

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

Cryan, J. R., Sheehan, R., Wiechel, J. & Bandy-Hedden, I. G. (1992). Success outcomes of full-day kindergarten: More positive behavior and increased achievement in the years after. *Early Childhood Research Quarterly*. *7*(2): 187–203.

Curtis, L. J. (2007). *The role of music in early literacy learning: A kindergarten case study* (Order No. 3274536). Available from ProQuest Dissertations & Theses Global. (304843730).

Damasio, A. (1995). Toward a neurobiology of emotion and feeling: Operational concepts and hypotheses. *The Neuroscientist*. *1*. 19-25.

Data for Ohio Cities (2016). Retrieved from https://datausa.io/profile/geo/findlay-oh/

de Graaff, S., Bosman, A. M. T., Hasselman, F., & Verhoeven, L. (2009). Benefits of systematic

phonics instruction. *Scientific Studies of Reading, 13*(4), 318-333. 10.1080/10888430903001308

Dhuey, E. (2011). Who benefits from kindergarten? Evidence from the introduction of state subsidization. *Educational Evaluation and Policy Analysis, 33*(1), 3-22. doi:10.3102/0162373711398125

DiCicco-Bloom., & Crabtree, B.F. (2006). The qualitative research interview. *Medical Education, 40*(4). 314-321.

Doty, S. J., Hixson, M. D., Decker, D. M., Reynolds, J. L., & Drevon, D. D. (2015). Reliability and validity of advanced phonics measures. *Journal of Psychoeducational Assessment, 33*(6), 503-521. 10.1177/0734282914567870

Ehri, L.C. (2005). Learning to read words: Theory, findings and issues. *Scientific Studies of Reading, 9*(2), 167-188.

Ehri, L. C., & Flugman, B. (2018). Mentoring teachers in systematic phonics instruction: Effectiveness of an intensive year-long program for kindergarten through 3rd grade teachers and their students. *Reading and Writing, 31*(2), 425-456. doi:10.1007/s11145-017-9792-7.

Ehri, L. C., Nunes, S. R., Stahl, S. A., & Willows, D. M. (2001). Systematic phonics instruction helps students learn to read: Evidence from the national reading panel's meta-analysis. *Review of Educational Research, 71*(3), 393-447.

Ehri, L.C., & Roberts, T. (2006). The roots of learning to read and write: Acquisition of letters and phonemic awareness. *Early Literacy and Research, 2,* 113-131.

Elicker, J., & Mathur, S. (1997). What do they do all day? Comprehensive evaluation of a full-day kindergarten. *Early Childhood Research Quarterly*. *12*(4): 459–480.

Fahriany, F. (2015). Scheme theory in reading class. *IJEE (Idonesian Journal of English Education, 1*(1), 17-28.

Farangi, M. R., & Kheradmand Saadi, Z. (2017). Dynamic assessment or schema theory: The case of listening comprehension. *Cogent Education, 4*(1). doi:10.1080/2331186X.2017.1312078

Fisher, P. (2008). Learning about literacy: From theories to trends. *Teacher Librarian, 35*(3), 8.

Fountas, I. C. & Pinnell, G. S. (2012). Guided reading: The romance and reality. *The Reading Teacher, 66*(4), 268-284.

Flaugnacco, E., Lopez, L., Terribili, C., Montico, M., Zoia, S., & Schön, D. (2015). Music training increases phonological awareness and reading skills in developmental dyslexia: A randomized control trial. *Plos ONE*, *10*(9), 1-17.

Fox, D. B. (2000). Music and the baby's brain early experiences: Do young children benefit from early childhood music instruction? here is a research-based answer. *Music Educators Journal, 87*(2), 23-50. 10.2307/3399644

Gadberry, D. (2010). Music participation and academic success. *Kodaly Envoy, 36*(4), 13-14.

Gangwar, B. P., & Savita, S. (2017). Constructivist approach in teaching learning. *Deliberative Research, 34*(1), 71-74.

Goldstein, H., Olszewski, A., Haring, C., Greenwood, C. R., McCune, L., Carta, J., & Kelley, E. S. (2017). Efficacy of a supplemental phonemic awareness curriculum to instruct preschoolers with delays in early literacy development. *Journal of Speech, Language, and Hearing Research, 60*(1), 89. doi:10.1044/2016_JSLHR-L-15-0451

Gordan, R.L., Fehd, H.M., & McCandliss, B. D. (2015). Does music training enhance literacy skills? A meta-analysis. *Frontiers in Psychology, 6*, 1777, 1-16.

Gray, C., Ferguson, J., Behan, S., Dunbar, C., Dunn, J., & Mitchell, D. (2007). Developing Young readers through the linguistic phonics approach. *International Journal of Early Years Education, 15*(1), 15-33.

Green, B. A. (2010). Understand schema, understand difference. *Journal of Instructional Psychology, 37*(2). 133-145.

Green, C. D. (2001). *A comparative study of literacy achievement of kindergarten children in contrasting programs of decoding instruction.* ProQuest Dissertations Publishing; 2001.

Gunn, B., Biglan, A., Smolkowski, K., & Ary, D. (2000). The efficacy of supplemental instruction in decoding skills for Hispanic and non-Hispanic students in early elementary school. The Journal of Special Education, *34*(2), 90-103.

Haning, M. (2016). The association between music training, background music, and adult reading comprehension. *Contributions to Music Education, 41,* 131-143.

Hansen, D., & Bernstorf, E. (2002). Linking music learning to reading instruction: Tracking the relationship between reading skills and the skills used in music-text and score reading reveals that music education enhances reading abilities. *Music Educators Journal, 88*(5), 17+.

Hall, S. N. & Robinson, N. R. (2012). Music and reading: Finding connections from within. *General Music Today, 26*(1), 11-18

Hallam, S. (2010). The power of music: Its impact on the intellectual, social and personal development of children and young people. *International Journal of Music Education, 28*(3), 269–289.

Hanneford, C. (1995). Smart moves; Why learning is not all in your head. Marshall, NC: Great Ocean Publishers.

Harris, P. & Smith, L. (2007). Using puppets as story props for read-alouds: Addressing reading/learning styles. *Reading Improvement, 54(1), 6.*

Hauserman, J. (1998). Chiles okays requiring reading, classical music. St. Petersburg Times, published May 22, 1998.

Heller, G. N. (1998). Historical research in music education: Definitions and defenses. *Philosophy of Music Education Review, 6*(2), 77-89.

Henk, J. K., Morrison, J. W., Thornburg, K. R., & Raya-Carton, P. (2007). The efficacy of HeadsUp! Reading in Missouri on teachers' knowledge of emergent literacy: A satellite-based literacy development training course. *NHSA Dialog, 10*(1), 20-35. http://dx.doi.org/10.1080/15240750701301738

Hindman, A. H. & Wasik, B. A. (2008). Head Start teachers' beliefs about language and literacy instruction. *Early Childhood Research Quarterly, 23*(4), 479–492.

Hogenes, M., van Oers, B., & Diekstra, R. F. W. (2014). The impact of music on child functioning. *The European Journal of Social & Behavioural Sciences, 10*(3), 1507-1526.

Holmberg, S. D. (2010). *Music teachers' perceptions: The role of music education in early literacy* (Order No. 3419577). Available from ProQuest Central; ProQuest Dissertations & Theses Global; Social Science Premium Collection. (753916976).

Holochwost, S. J., Propper, C. B., Wolf, D. P., Willoughby, M. T., Fisher, K. R., Kolacz, J., & Jaffee, S. R. (2017). Music education, academic achievement, and executive functions.*Psychology of Aesthetics, Creativity, and the Arts, 11*(2), 147-166. doi:10.1037/aca0000112

Hornsby, D., & Wilson, L. (2009). Early literacy and phonics. *Practically Primary, 14*(3), 4-8.

Hudson, W. (1998). Schema in reading readiness. *Theory, Culture & Society, 5*(4), 735-738.

Iwasaki, B., Rasinski, T., Yildirim, K., & Zimmerman, B. S. (2013). Let's bring back the magic of song for teaching reading. *The Reading Teacher, 67*(2), 137-141.

Irwin, J. W. (1986). Teaching reading comprehension processes. Englewood Cliffs N. J.: Prentice-Hall.

Jarkarta, S. H. (2014). Schema theory in reading class. *IJEE, 1*(1). 17-28.

Jerger, M. A. (1996). Phoneme awareness and the role of the educator. *Intervention in School and Clinic, 32*(1), 5-13.

John, B. A. (2002). *Music in early childhood and consciousness: A philosophical analysis of intersections* (Order No. NQ74744). Available from ProQuest Dissertations & Theses Global. (305452126).

Jones-Gensel, D. M. (2016). *Facilitating literacy acquisition in at-risk second-grade students Using a rhythmic intervention: A case study.* (Order No. 10111234). Available from ProQuest Dissertations & Theses Global. (1797949527).

Kaplan, D., & Walpole, S. (2005). A stage-sequential model of reading transitions: Evidence From the early childhood longitudinal study. *Journal of Educational Psychology, 97*(4), 551-563.

Kolinsky, R., Cuvelier, H., Goetry, V., Peretz, SmI., & Morais, J. (2009). Music training facilitates lexical stress processing. *Music Percept, 26,* 233-246.

Laman, T. T. (2015). Learning for real: Teaching content and literacy across the curriculum. *Language Arts, 92*(6), 444-445,451.

Lee, J., & Kim, J. (2017). Early childhood teachers' concepts of constructivist teaching and learning. *International Information Institute (Tokyo).Information, 20*(11), 75-79.

Lesaux, N., & Siegel, L. (2003). The development of reading in children who speak English as a second language. *Developmental Psychology, 39*(6), 1005-1019.

Levintin, D. J. (2006). This is your brain on music; The science of a human obsession. New York: NY. Penguin Group.

Li, Q. (2014). Schema theory and the teaching of college English news listening. *Theory and Practice in Language Studies, 4*(7), 1469. doi:10.4304/tpls.4.7.1469-1475

Liao, M., & Campbell, P.S. (2016). Teaching children's songs: A Taiwan-US comparison of approaches by kindergarten teachers. *Music Education Research, 18*(1), 20-38.

Little, D. C., & Box, J. A. (2011). The use of a specific schema theory strategy-semantic mapping-to facilitate vocabulary development and comprehension for at-risk readers. *Reading Improvement, 48*(1), 24.

Liu, Y. (2015). An empirical study of schema theory and its role in reading comprehension *Journal of Language Teaching and Research, 6*(6), 1349-1356.

Loughlin-Presnal, J. E., & Bierman, K. L. (2017). Promoting parent academic expectations Predicts improved school outcomes for low-income children entering kindergarten. *Journal of School Psychology, 62,* 67-80.

Mandler, J.M. (1984). *The foundations of mind: The origins of conceptual thought.* New York: Oxford University Press.

Manning, M., Manning, G., & Kamii, C. (1988). Early phonics instruction: Its effect on literacy development. *Young Children, 44*(1), 4+

Marshall, M. (2005). *The Peabody sisters: Three woman who ignited American Romanticism.* Boston, MA: Mariner Books.

Maxwell, J. A. (1996). *Qualitative research design. An interactive approach*. Thousand Oaks, CA: Sage.

McVee, M. B., Dunsmore, K., & Gavelek, J. R. (2005). Schema theory revisited. *Review of Educational Research, 75*(4), 531-566. doi:10.3102/00346543075004531

Merriam, S. B. (1988). *Case study research in education: a qualitative approach*. San Francisco: Jossey-Bass Publishers.

Mesmer, H. A. E., & Griffith, P. L. (2006). Everybody's selling it-but just what is explicit, systematic phonics instruction? *The Reading Teacher, 59*(4), 366-376.

Meurer, J. L. (2008). Schemata and reading comprehension schemata and reading comprehension. *Ilha do Desterro,* (13), 031-046.

Miller, D. (2013). *Implementing a culturally and linguistically responsive phonics curriculum That incorporates music to meet the needs of English Language Learners in the Response To Intervention process* (Doctoral Dissertation). Available from Dissertations & Theses @ Liberty University; ProQuest Dissertations & Theses Global (672).

Minami, Y., & Nito, H. (1998). Vocal pitch matching in infants. Respecting the child in earlv childhood learning. *Earlv Childhood Commission of the International Society for Music Education, 17.*

Moradi, F., & Shahrokhi, M. (2014). The effect of listening to music on Iranian children's Segmental and suprasegmental pronunciation. *English Language Teaching, 7*(6), 34-42.

Moreno, S., Friesen, D., & Bialystok, E. (2013). Effects of music training on promoting pre-literacy skills: Preliminary causal evidence. *Music Perception: An Interdisciplinary Journal, 29*(2), 165-172.

Moreno, S., Marques, C., Santos, A., Santos, M., & Castro, S. I. (2009). Musical training

influences linguistic abilities in 8-year-old children: More evidence for brain Plasticity. *Cereb Cortex, 19,* 712-723.

Morrow, L. M. & Dougherty, S. (2011). Early literacy development: Merging perspectives that influence practice. *Journal of Reading Education, 36*(3), 5-11.

Mullins, A. K. (2013). *An analysis of the Phonics Dance in a semi-rural Midwestern elementary school*(2013).Theses and Dissertations. 158.

Nassaji, H. (2007). Schema theory and Knowledge-Based processes in second language reading comprehension: A need for alternative perspectives. *Language Learning, 57*(1), 79-113. doi:10.1111/j.1467-9922.2007.00413.x

National Center for Education Statistics (2013). *The Nation's Report Card: A First Look: 2013 Mathematics and reading,* http://nces.ed.gov/nationsreportcard/

National Center for Education Statistics (2017). *The Condition of Education 2017.* https://nces.ed.gov/pubs2017/2017144

National Reading Panel (2000). Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction. (National Institute of Health Pub. No. 00-4769). Washington, DC: National Institute of Child Health and Human Development.

Nelson, C. (2015). Schemas. *Children's Literature Association Quarterly, 40*(3), 215-216.

Neokleous, R. (2015). Aiming for the singing teacher: An applied study on preservice kindergarten teachers' singing skills development within a music methods course. *International Journal of Music Education, 33*(2), 163-180.

Newland, C. M. (2013). *Music and phonemic awareness: The kindergarten connection* Available from Social Science Premium Collection. (1773215157; ED559523).

Nunley, K. F. (2003). A student's brain: The parent/teacher manual. South Jordan, UT: Nunley Associates.

Ohio Department of Education. School Report Cards (2017). https://reportcard.education.ohio.gov

O'Keefe, K., Dearden, K. N., & West, R. (2016). A survey of the music integration practices of North Dakota elementary classroom teachers. *Applications of Research in Music Education, 35*(1), 13-22.

O'Reilly, M., & Parker, N. (2013). 'Unsatisfactory saturation.' A critical exploration of the notion of saturated sample sizes in qualitative research. *Qualitative Research, 13*(2), 190-197.

Passee, A. S. (2010). A brief history of kindergarten. *Early Childhood Today, 13,* 42.

Patel, A. D. (2003). Language, music, syntax and the brain. *Nature Neuroscience, 6*(7), 664-681.

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed). Thousand Oaks, CA: Sage Publications.

Peercy, M. M., & Troyan, F.J. (2017). Making transparent the challenges of developing a practice-based pedagogy of teacher education. *Teaching and Teacher Education, 61, 26-36.*

Pinto, G., Bigozzi, L., Tarchi, C., Accorti Gamannossi, B., & Canneti, L. (2015). Cross-lag analysis of longitudinal associations between primary school students' writing and reading skills. *Reading and Writing, 28*(8), 1233-1255. doi:10.1007/s11145-015-9569-9

Polit, D.F., & Beck, C.T. (2014). *Essentials of nursing research: Appraising evidence for nursing practice* (8th ed.). Baltimore, MD: Lippincott Williams & Wilkins.

Price, S. M. (2015). *The teaching of explicit phonics effects on kindergarten reading readiness*

scores (Order No. 3704516). Available from Dissertations & Theses @ Liberty University; ProQuest Dissertations & Theses Global. (1690898851)

Raphael, T. E., Florio-Ruane, S., Kehus, M. J., George, M., Hasty, N. L., & Highfield, K. (2001). Thinking for ourselves: Literacy learning in a diverse teacher inquiry network. *The Reading Teacher, 54*(6), 596-607.

Rasinski, T., Rupley, W. H., & Nichols, W. D. (2008). Synergistic phonics and fluency instruction: The magic of rhyming poetry. *New England Reading Association Journal, 44*(1), 9.

Register, D. (2001). The effects of an early intervention music curriculum and pre-reading/writing. *The Journal of Music Therapy, 38*, 239-248.

Reschly, A. L., Busch T. W., Betts, J., Deno, S. L., & Long, J. D. (2009). Curriculum-based Measurement oral reading as an indicator of reading achievement: A meta-analysis of The correlational evidence. *Journal of School Psychology, 47*(6), 427-469.

Rumelhart, D. E. (1980). Schemata: The building blocks of cognition. In R.J. Spiro, B.C. Bruce, & W.F. Brewer (Eds). *Theoretical issues in reading comprehension,* 33-58. Hillsdale, NJ: Erlbaum.

Russell, J. (1996). Musical knowledge, musical identity, and the generalist teacher: Vicki's story. *McGill Journal of Education, 31*(3), 247–260.

Sadoski, M., Paivio, A., & Goetz, E. T. (1991). A critique of schema theory in reading and a dual coding alternative. *Reading Research Quarterly, 26*(4), 463-484.

Salmon, A. (2010). Using music to promote children's thinking and enhance their literacy development. *Early Child Development and Care*, *180*(7), 937-945. http://dx.doi.org/10.1080/03004430802550755

Samuels, C. A. (2016). Law adds to pre-k's stature as federal-state priority. *Education Week, 35*(15), 20.

Sanacore, J. (2010). Connecting rimes to meaningful contexts. *Childhood Education, 86*(4).

Schatzberg-Smith, K. (1988). The reading-writing connection III: Schema theory and reading. *Research and Teaching in Developmental Education, 4*(2), 66-71.

Schons, S. (2008). What's going on in there? How students learn. *Keyboard Companion, 19*(1), 32-35.

Schwandt, T. A. (2015). *The Sage Dictionary of Qualitative Inquiry* (4th ed). Thousand Oaks, CA: Sage Publications.

Shea, C. H., & Wulf, G. (2005). Schema theory: A critical appraisal and reevaluation. *Journal of Motor Behavior, 37*(2), 85-102.

Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information, 22,* 63-75.

Sheriston, L. Critten, S., & Jones, E. (2016). Routes to reading and spelling: Testing the Predictions of Dual-Route theory. *Reading Research Quarterly, 51*(4), 403-417.

Siegel, D. (2000). Perception and cognition. *Kaplan and Sadock's Comprehensive Textbook of Psychiatry*. Philadelphia: Lippincott, Williams & Wilkins, 386-402.

Slater, J., Strait, D. L., Skoe, E., O'Connell, S., Thompson, E., & Kraus, N. (2014). Longitudinal effects of group music instruction on literacy skills in low-income children. *PLoS One*, *9*(11), 1-9.

Snow, C. E., and Matthews, T. J. (2016). Reading and language in the early grades. *The Future of Children*, Fall 2016, p. 57-65.

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

Soderman, A. K., Gregory, K. M., & McCarty, L.T. (2005). Scaffolding emergent literacy: A child-centered approach for preschool through grade 5 (2nd ed.). Boston: Allyn & Bacon.

Sousa, D. A. (2001). *How the brain learns*. Thousand Oaks, CA: Corwin Press.

Spencer, M., Quinn, J. M., & Wagner, R. K. (2014). Specific reading comprehension disability: Major problem, myth, or misnomer?: *Learning Disabilities Research & Practice, 29*(1), 3-9. doi:10.1111/ldrp.12024

Stahl, S. A., Duffy-Hester, A., & Dougherty-Stahl, K. A. (1998). Everything you wanted to know about phonics (but were afraid to ask). *Reading Research Quarterly, 33*(3), 338.

Stice, C., & Bertrand, N. (1990). Whole language and the emergent literacy of at risk children: A two year comparative study. Nashville, TN Center of Excellence Basic Skills, Tennessee State University.

Stake, R. E. (1995). *The art of case study research.* Thousand Oakes, CA: SAGE Publications.

Standley, J. M. (2008). Does music instruction help children learn to read?: Evidence of a meta-analysis. *Update - Applications of Research in Music Education, 27*(1), 17-32.

St. Clair, T. (2014). *The effect of an integrated music curriculum on reading achievement outcomes of kindergarten students* (Order No. 3668159). Available from ProQuest Dissertations & Theses Global. (1647766117).

Suggate, S. P. (2016). A meta-analysis of the long-term effects of phonemic awareness, phonics, fluency, and reading comprehension interventions. *Journal of Learning Disabilities, 49*(1), 77-96. doi:10.1177/0022219414528540

Sullivan, P.M. (2016). *The effects of music in kindergarten lessons on student engagement and student learning.* (Order No. 10168291). Available from ProQuest Dissertations and Theses Global.

Tahan, S., Cline, T., & Messaoud-Galusi, S. (2011). The relationship between language dominance and pre-reading skills in young bilingual children in Egypt. *Reading and Writing, 24*(9), 1061-1087. doi:10.1007/s11145-011-9301-3

Taylor, J. M., & Rowe, B. J. (2012). The "Mozart effect" and the mathematical connection. *Journal of College Reading and Learning, 42*(2), 51-66. doi:10.1080/10790195.2012.10850354

Telesco, P. J. (2010). Music and early literacy. *Forum on Public Policy Online, 2010*(5).

Thompson, J. A., & Sonnenschein, S. (2016). Full-day kindergarten and children's later reading: The role of early word reading. *Journal of Applied Developmental Psychology, 42,* 58-70. doi:10.1016/j.appdev.2015.11.005

Tierney, A., & Kraus, N. (2013). Music training for the development of reading skills. *Progress in Brain Research, 207*, 209-220.

Tomlinson, M. M. (2013). Literacy and music in early childhood: Multimodal learning and design. *SAGE Open, 3*(3), 1-10.

Tracey, D. H. (2017). Understanding the reading process: One path to strengthening classroom Instruction. *Education and Urban Society, 49*(9), 814-831.

U.S. Department of Education. (2005). *Reading first.* Retrieved from https://www2.ed.gov/programs/readingfirst/index.html

U.S. Department of Education. (2009). *Earobics.* Retrieved from http://ies.ed.gov/ncee/wwc/interventionreport.aspx?sid=158

U.S. Department of Education. (2011). No Child Left Behind Act of 2001. (Online Website). Retrieved from http://www2.ed.gov/policy/elsec/leg/esea02/index.html

U.S. Department of Education. (2015). Kindergarten approaches to learning behaviors and

academic outcomes. Retrieved from https://nces.ed.gov/programs/coe/indicator_tga.asp

Vadasy, P. F., & Sanders, E.A. (2012). Follow-up of a kindergarten phonics intervention for English speakers: Contextualizing treatment impacts by classroom literacy instruction. *Journal of Educational Psychology, 104*(4), 987-1005.

Vaughn, K., & Winner, E. (2000). SAT scores of students who study the arts: What we can and cannot conclude about the association. *Journal of Aesthetic Education, 34*, 77–89.

Venezky, R. L. (1999). *American way of spelling: The structure and origins of American English orthography*. New York: Guilford.

Vijaya, K. S. N. (2014). Constructivist approach to teacher education: An integrative model for reflective teaching. *Journal on Educational Psychology, 7*(4), 31-40.

Vitale, J. L. (2011). Music makes you smarter: A new paradigm for music education? perceptions and perspectives from four groups of elementary education stakeholders. *Canadian Journal of Education, 34*(3), 317-343.

Vygotsky, L. S. (1997). *Educational Psychology*. Port St. Lucie, FL: St. Lucie Press.

Walton, P. (2014). Using singing and movement to teach pre-reading skills and word reading to kindergarten children: An exploratory study. *Language and Literacy, 16*(3), 54-63.

Weber, E.W., Spychiger, M., & Patry, J. L. (1993). Music makes the school. *British Journal of Psychology, 34,* 284-288.

Weinberger, N. M. (2000). "The Mozart Effect:" A small part of the big picture. *Journal for Music Educaton, 17*(1).

Weiss, R. S. (1994). *Learning from strangers: The art and method of qualitative interview Studies*. New York: Free Press.

Wolf, M. (2007). *Proust and the squid: The story and science of the reading brain*. New York, NY: Harper.

Xing, Y., Xia, Y., Kendrick, K., Liu, X., Wang, M., Wu, D., & Yao, D. (2016). Mozart, Mozart rhythm and retrograde Mozart effects: Evidences from behaviors and neurobiology bases. *Scientific Reports, 6*, 18744. doi:10.1038/srep18744

Xue, Y., & Meisels, S. J. (2004). Early literacy instruction and learning in kindergarten: Evidence from the early childhood longitudinal study: Kindergarten class of 1998-1999. *American Educational Research Journal, 41*(1), 191-229.

Yin, R. K. (2014). *Case study research design and methods.* Sage Publications. Thousand Oaks, CA.

Yopp, H. K. (1992). Developing phonemic awareness in young children. *The Reading Teacher, 45*(9), 696-703.

APPENDICES

APPENDIX A: Participant Questionnaire

1. What is your name?
2. What is the name and location of your school district?
3. Are you a licensed, practicing teacher in the State of Ohio?
4. Are you currently teaching Kindergarten in Ohio?
5. How long have you been teaching?
6. Do you use music (including song, rhythms or chant) to teach phonics (including identification of written letters and their sounds)?
7. Do you regularly document your use of music to teach phonics via lesson plans?
8. Do you have support staff that is in your classroom on a daily basis?
9. Do you have administration that visit your classroom on a regular basis (at least once per month) and do a formal observation of you at least once a year?
10. Would you be willing to participate in a research project to explore your use of music to teach phonics within your classroom specifically?

APPENDIX B: Standardized Open-Ended Kindergarten Teacher Interview Questions

1. Please introduce yourself to me, as if we just met one another.
2. What undergraduate courses, if any, did you take to help prepare you to use music within the general education class?
3. Please walk me through a typical daily phonics lesson.
4. How do you use music during phonics/reading in your classroom?
5. What resources (music/songs/chants) do you use to help you teach phonics?
6. What is your perception of using music within the classroom?
7. What do you believe are the influences of music in the learning process within reading?
8. If applicable, why have you been hesitant to incorporate music into your kindergarten classroom to teach phonics?
    a. What has been your greatest challenge, if any, in incorporating music to teach phonics?
9. What do you indicate are the results of the implementation of music in the teaching of phonics?
10. We've covered a lot of ground in our conversation, and I so appreciate the time you've given to this. One final question… What else do you think would be important for me to know about the utilization of music to teach phonics?

APPENDIX C: IRB Approval Letter

LIBERTY UNIVERSITY.
INSTITUTIONAL REVIEW BOARD

January 16, 2019

Cherie Hocanson
IRB Approval 3616.011619: The Utilization of Music to Teach Phonics in Kindergarten: A Multiple-Case Study

Dear Cherie Hocanson,

We are pleased to inform you that your study has been approved by the Liberty University IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Your study falls under the expedited review category (45 CFR 46.110), which is applicable to specific, minimal risk studies and minor changes to approved studies for the following reason(s):

1. Collection of data from voice, video, digital, or image recordings made for research purposes.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,

[redacted]
The Graduate School
LIBERTY UNIVERSITY.
Liberty University | Training Champions for Christ since 1971

APPENDIX D: Participant Consent Form

The Liberty University Institutional Review Board has approved this document for use from 1/16/2019 to 1/15/2020
Protocol # 3616.011619

The Utilization of Music to Teach Phonics in Kindergarten: A Multiple-Case Study

Cherie D. Hocanson
Liberty University
School of Education

You are invited to be in a research study of using music to teach phonics in kindergarten. You were selected as a possible participant because you are a full-time, licensed kindergarten teacher in Ohio, have taught kindergarten at least one year, use music in your classroom on a weekly basis to teach phonics, and teach at one of the pre-determined research sites. Please read this form and ask any questions you may have before agreeing to be in the study.

Cherie Hocanson, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information: The purpose of this study is to explore how kindergarten teachers in the Midwestern United States utilize music to teach phonics within the classroom.

Procedures: If you agree to be in this study, I would ask you to do the following things:

1. Complete a brief 15-minute survey via e-mail to ensure eligibility to participate.
2. Allow approximately a 45-minute observation in your classroom where I will be able to observe you providing direct phonics instruction to your students while implementing music. This will be audio recorded.
3. Allow me to take photos of your classroom (no individuals will be in the photos).
4. Complete approximately a one-hour interview after the observation has occurred. The interview will be audio-recorded and will be one-on-one, semi-structured, and open ended.
5. Provide a copy of your lesson plan(s) where the types of music you use to teach phonics are indicated.
6. You will also be given the opportunity to review the data collected, as well as the data analysis, once completed to ensure accuracy.

Risks: The risks involved in this study are minimal, which means they are equal to the risks you would encounter in everyday life.

Benefits: Participants should not expect to receive a direct benefit from taking part in this study.

Compensation: Participants will be compensated for participating in this study. Each participant will receive a $25 gift card to TeachersPayTeachers.com for their complete participation. Participants will be given the gift card after the interview.

Confidentiality: The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify a subject. Research records will be stored securely, and only the researcher will have access to the records. I may share the data collected from you for use in future research studies or with other researchers; if I share the data that I collect about you, I will remove any information that could identify you, if applicable, before I share the data.

- In order to protect individual privacy, participants will be assigned a pseudonym. I will conduct the interviews in a location where others will not easily overhear the conversation.
- Data will be stored on a password locked computer and may be used in future presentations. After three years, all electronic records will be deleted.
- Interviews and classroom observations will be audio recorded and transcribed by the researcher and/or a professional transcriber. Recordings will be stored on a password locked computer for three years and then erased. Only the researcher will have access to these recordings.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

How to Withdraw from the Study: If you choose to withdraw from the study, please contact the researcher at the email address/phone number included in the next paragraph. Should you choose to withdraw, data collected from you will be destroyed immediately and will not be included in this study.

Contacts and Questions: The researcher conducting this study is Cherie D. Hocanson. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at [redacted] You may also contact the researcher's faculty chair, Dr. Meredith J. Park at [redacted]

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd., Green Hall Ste. 2845, Lynchburg, VA 24515 or email at irb@liberty.edu.

Please notify the researcher if you would like a copy of this information for your records.

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

The researcher has my permission to audio-record me as part of my participation in this study.

_____

Signature of Participant Date

_____

Signature of Investigator Date

APPENDIX E: School District Consent Form

November 13, 2018

[Recipient]
[Title]
[Company]
[Address 1]
[Address 2]
[Address 3]

Dear Cherie Hocanson:

After careful review of your research proposal entitled The Utilization of Music to Teach Phonics in Kindergarten: A Multiple-Case Study, we have decided to grant you permission to conduct your study at school.

We understand the following (check all):

☐ The requested data WILL NOT BE STRIPPED of identifying information before it is provided to the researcher. However, all teachers' names as well as the school district will be given pseudonyms in all printed data of the study to protect privacy.

☐ The researcher will be observing and interviewing the teacher only. No children will be included in any recordings, photos, or interviews.

☐ We will be provided a copy of the results upon study completion and/or publication.

Sincerely,

_____
Printed Name AND Title of District Representative

_____
Signature of District Representative

APPENDIX F: Observation Protocol

Astros Elementary

Name of Teacher: **Karen**	**Elementary School:** **Astros Elementary**
Date of Observation: February 7, 2019	**Length of Observation: 45 minutes**
Descriptive Notes:	**Reflective Notes:**
Physical Setting: The classroom is located in a small room at the end of a hallway. Karen's students are arranged at desks put into rectangular pods. There are 24 students in the classroom. The classroom is well lit but probably the smallest room I have been in. There is a trampoline at the front of the room near the Smart Board for students to take some brain breaks. The room was very neat and tidy with very few papers and clutter **Use of language:** Word Family **Physical characteristics of teacher:** Karen is very kind to her students. When I arrived it was morning time, which is always chaotic. She seemed very distracted in her interactions with me, but I also understand this with my own morning routines in my classroom. She was, however, pretty laid back with her students' behaviors. Her class is very talkative but she was patient with them in reminding them to be quiet. **Order of events:** Students started with a morning greeting/chant- "1,2,3,4, Hit the floor ____ (student name).	**Small classroom that was added as an extra classroom a few years ago.** **Karen's classroom is much smaller than Renee's and I was surprised they are not closer in proximity.** **Classroom Management**

We're so glad you're here today, hooray, hooray, hooray." Students were then allowed to go up and jump on the trampoline.	**Students were very talkative today! Many students were off-task during calendar.**
Students sat at the front of the room and began their morning calendar. A student chose days of the week. Teacher said a day of the week incorrectly and students corrected the teacher. Teacher: "Today is Bursday." Students: "Not Bursday, Thursday." The same repeated for month. T "It is Bebrurary." Ss: "Not Bebruary, February!	
Karen read a morning message to the class and students looked for hunks and chunks.	**Whole Group Phonics Instruction**
Karen then did the weather. The teacher played a song about the months of the year while a student graphed the weather. All the songs are put into safeyoutube.net to avoid ads.	**Played a song but students did NOT sing along or really pay attention. This may relate to behavior.**
Students went over the rules together as a class with hand motions. Karen then read the class' mission together.	
The teacher read a "Chicken Soup with Rice" poem.	**Students were not engaged much during this entire time- a lot of talking. This seemed to be almost too routine for the students and they were bored.**
The teacher reviewed the class goal, which was 14 days with great behavior on a clip chart. Astros Elementary school also does "The Leader in Me" program.	**Whole Group Phonics**
Students then did a break with Baby Shark on Go noodle.	
The teacher stopped to acknowledge students that were on-task.	
Phonics Lesson- Word Family "et" Ss created words with "et" on an anchor chart. Ss came up with "wet, bet pet, het, cet" Teacher would ask "What do you know?" to get a response from students.	**Students were much more engaged during this. When the music video began every student except one was very on-task. Students started singing a long with the words.**

The teacher reviewed if it was a real or nonsense word- "Thumbs up if it's a real word, thumbs down if it is not." Karen played a Jack Hartmann video on the "et" family. Students looked on the anchor chart to see if their words matched what the music video said. The teacher added words to the anchor chart with the class after watching the video. Karen explained individual words and making a word family house. Then said "off you go" and class went back to their seats to begin independent work.	**Phonics Curriculum** **Music-based phonics curriculum** **Management of the classroom**

Name of Teacher: **Renee**	**Elementary School:** **Astros Elementary**
Date of Observation: February 7, 2019	**Length of Observation: 45 minutes**
Descriptive Notes: **Physical Setting:** Renee's class is very welcoming with bright colors. Her classroom was down the hall from Karen. The students sit at desks arranged in rectangular pods. The teacher also had a desk and reading table at the back of the room. The classroom was also neat and tidy. There were 21 students present today but the teacher usually has 24 students. There was one paraprofessional in the room who worked with students at a side table on interventions. **Use of language:** Word family Get your mirrors ready Hunks and Chunks	**Reflective Notes:** **Neat and tidy classroom and very well organized** **Phonics Dance**

Physical characteristics of teacher: The teacher has very good classroom management. She is very well planned and moved quickly from one activity to another in order to keep students' attention. The teacher has many things in her classroom that show she spends time getting to know her students including "All About Me" posters with students' pictures. The teacher was quieter than others I have observed but had a great command of her classroom. Renee often encouraged her classroom and gave compliments. She had to correct her students very little. Teacher also used proximity for students that were off-task	**Classroom management**
Order of events:	
Students learned a new sight word and spelled it using body parts. Students then did a music video using HeidiSongs.	**Classroom was very engaging.**
Students came up with a sentence using the sight word. Teacher said, "Get your mirrors." Student would do a few hand motions and others would follow and then stop with hands in front of them. A student gave the class a sentence. Students used hand motions to put a "capital" at the beginning (made a "deep" motion) and then a period at the end (student put up a stop sign and made a screeching sound).	**Moved around room and put herself near students that were off-task.** **Students were extremely engaged during this time. I really like the use of hand motions (mirror) to get students attention before giving a sentence. I also like hand motions for sentences (capital and period).**
Teacher then moved on to "an" word family. The teacher reviewed the ending of several rhyming "an" words and then played Jack Hartmann video of the "an" word family. Students had to read the words on their own during this video. Teacher has SmartBoard files with all of her music videos on them for quick access to them.	**Students were very engaged with this. The video was introduced first and then Renee had students read on their own.**
The teacher then called on a student to come up to the board and write a word with "an"	**Quick transition from word family to hunks and chunks so there was no time for**

family. That student called on a student to answer. The teacher repeated this several times. Renee then moved right into hunk and chunks. It was clear the students knew the routine very well. Renee then introduced the new Hunk and Chunk "Wh." The class came up with "wh" words and then the teacher taught the students the new hunks and chunks dance. The students then stood and did the Phonics Dance alphabet. Students moved quickly through the alphabet dance and all were participating (a few in back were off-task some). Then, the class went straight to phonics dance hunks and chunks and reviewed "th", "sh", and "ch." The students then did a go noodle before recess break.	**chatting from class (classroom management).** **Phonics Dance**

Freedom Elementary

Name of Teacher: **Debbie**	**Elementary School:** **Freedom Elementary**
Date of Observation: February 6, 2019	**Length of Observation: 40 minutes**

Descriptive Notes:	**Reflective Notes:**

Physical Setting: The classroom was very small with MANY students in the classroom. There were a total of 46 students. Two teachers combine classrooms and co-teach during whole-group phonics time. There were also three other staff members in the room as helpers. Two were student teachers and one was a university student who does work study. The classroom was bright with many things on the walls. The letter people were very visible when I walked into Debbie's classroom. All of the windows were high up which avoided unnecessary distractions for the students. There were a few tables close to the ground for students but no chairs. Students used flexible seating to sit on the carpet or the floor. There was one small guided reading table at the back of the room near the teacher's desk. **Use of language:** Phonics dance PWS- Phonics, Spelling and Word Study Letter People- Phonics curriculum using one letter "person" each day to introduce a new letter and sound **Physical characteristics of teacher:** Debbie was friendly upon our meeting and a little more outgoing than Katie. She is also outgoing with her students and not afraid to do something "silly" to keep their attention. While doing the Phonics Dance, Debbie walked around the room and interacted with students who were not on–task or were not participating. **Order of events:** Students were all gathered on the carpet and began with the Phonics Dance. Students sang "get your bottoms down down" when the lowercase letters go below the line. The teacher stated later that this helps them with their writing. (The teacher stated the class does regular Phonics Dance until Christmas. Sometimes they will go backwards to make sure they are paying attention).	**Many students in a small room yet all engaged in the lesson and well behaved. Students were allowed to sit wherever they could make a good choice.** **Phonics Dance is also used at Vikings Elementary.** **Letter People was revised in 2017 but Katie and Debbie still use older system.** **Debbie stated she doesn't mind singing in front of her classroom or in front of a large group of people.** **Students really enjoyed this version of the Phonics Dance.**

Students sang "A,E,I,O,U-to the tune of "Here We Go Loopty Loo" to review their vowels. The class then did the Phonics Dance Hunks and Chunks. Students stood and completed the Phonics Dance with motions. Including Sh, Ch, Th, ING and AR. Katie then sang – go to the carpet and sit down to the tune of "If You're Happy and You Know It." Student teacher read students a story. The story focused on onset blend "bl." Students then worked on creating a list of "bl" blending words on an anchor chart. Class then worked on sight words. The students sang a song or did a chant with each sight word. "G-O- go G-O go, Go Trojans!" Teacher said aside to me that they also use the following: Letter People at the beginning of the year. ABC Bootcamp at beginning of the year. Letter of the day at beginning of year and sing a song with each letter. Handwriting Without Tears, which includes songs with each letter is also used during writing. Freedom Elementary has no Title for Kindergarten. The teachers then had students get their writing folders and break up into their writing groups. Half of the class went with Debbie to her room and the other half remained in Katie's room to work.	**Katie and Debbie created this on their own to be able to use it in student writing as well.** **The AEIOU song is one that was made up by the teachers to help students remember their vowels.** **While not related to phonics, teachers transitioned students usually with music.** **This is from Fountas and Pinnell PWS- Phonics, Spelling and Word Study** **Incorporate rhyme and chant with all sight words.** **A lot of the curriculum used have pre-made songs for teachers to use. Some songs teachers have created songs on their own.**

Name of Teacher: Hadley	Elementary School: Freedom Elementary
Date of Observation: Friday, February 8, 2019	Length of Observation: 45 minutes

Descriptive Notes:	Reflective Notes:
Physical Setting: The classroom was colorful with many windows. The teacher had a theme of Pete the Cat in her classroom and had a cute reading nook in her class with many books, a reading table, and puppets. The class also had a large carpet on which to sit for morning time. The students sat at large rectangular tables with 10 students at a table. There were 21 students in the room with no extra adult helpers. The class knew the hunks and chunks well. Teacher was very animated. She used a variety of voice levels- whisper voices, loud voice, etc. to keep students' attention. **Use of language:** Hunks and Chunks Sight words- lets sing it Show me an expert sitter Let's segment **Physical characteristics of teacher:** Upon first meeting of Hadley, I thought she would be a very quiet and rigid teacher. However, when she stepped in front of class for whole group phonics time, she was very outgoing and encouraging with the students. She is younger but also seems very experienced in the classroom. She is patient but firm with her students. She moved around the room as needed to deal with behaviors without verbal prompting.	**Class knew hunks and chunks very well and applied them to text.**

Order of events:	
Teacher was finishing up going over students individual goals and coaching. Then, she read her morning message with missing hunks and chunks. The class then went over their hunks and chunks chants. These included sh, ch, ing, oo sweeties, oo bullies, er, ee ea, ow, ar. The teacher had all the hunks and chunks on a page at front of the room.	**Phonics Dance**
Hadley called a mystery student up to try to fill in missing hunks and chunks from the morning message. The class was pretty excitable but also engaged in the lesson (with the exception of one student at the back of the room who did not want to participate)	**Good application of Phonics Dance chants to apply this to their learning and reading.**
The teacher then went back to the morning message and found sight words in the morning message. Students had little songs and chants for each sight word. The students then reviewed each song/chant as they found the sight word.	**Called students for random assessment of knowledge**
One student often jumped out of his spot ad rolled on floor but teacher did a good job of just ignoring and moving on. Teacher commented "G_____ can you show me how to be an expert sitter or would you like to practice later?"	
Students then read the morning message with all hunks and chunks and sight words that they have discussed.	
Students stood up on the carpet and did the Phonics Dance together as a class. One student helper was allowed to be the pointer friend who led the Phonics Dance. Hadley had students march the entire time for phonics dance to keep them moving and engaged.	**Phonics Dance** **Marching to include more movement in Phonics Dance.**
The students had quite a bit of chatting on carpet. The teacher reminded them to "show me an expert" but this did not always work with the students.	
Teacher then went back to anchor chart and wrote down letter names. Students named them and "surprised" teacher because they remembered those letters were "vowels." They remembered this because of the song. Students and teacher sang "Old McDonald had some sounds, a,e,i,o,u. and on this farm he had some vowels, a,e,i,o,u with an /a/ here and an /a/ here…"	**Great use of easy song to teach vowels.**

Hadley stated, "Today we will work on some vowels but we will only work on "a."' She went over student supplies of what they needed for the vowel lesson. Students went and got small white board and pencil pouch. Students sat back on carpet. I found it interesting that the misbehaved students were also the ones that struggled to find their needed supplies. Class made big circle at the top and then lines to make a big "can." Hadley asked, "Does a "can" have a short a in it? Lets segment to find out. "c-a-n" Now let's write it." Teacher then read story with short "a" words. Hadley stated, "Students you are talking so I'll wait…(waiting)… Who do I read to? Expert listeners only. I will only read to expert learners so you can listen and learn!" Teacher read "Jan and Stan" to look for short a words. This is from the Fontas and Pinnell series. Students then created short a words and the teacher discussed what words were changed from "can." Students came up with can, van, ran, fan, tan and then circled rimes ending with "an."	**Teacher walked students through making a can- focused on shapes they already knew.** **Drew on "an" word family based upon what they had just learned. This was general phonics curriculum with no music.**

Name of Teacher: **Katie**	**Elementary School:** **Freedom Elementary**
Date of Observation: February 6, 2019	**Length of Observation: 40 minutes**

Descriptive Notes:	**Reflective Notes:**
Physical Setting: The classroom was very small with many students in the classroom. There were a total of 46 students. Two teachers combine classrooms and co-teach during whole-group	**Many students in a small room yet all engaged in the lesson and well behaved. Students**

phonics time. There were also three other staff members in the room as helpers. Two were student teachers and one was a university student who does work study. The first classroom, Katie's classroom, was bright with many things on the walls. All of the windows were high up which avoided unnecessary distractions for the students. There were no tables and chairs for the students. Students used flexible seating to sit on the carpet. There was one small guided reading table at the back of the room near the teacher's desk. **Use of language:** Phonics dance PWS- Phonics, Spelling and Word Study Letter People- Phonics curriculum using one letter "person" each day to introduce a new letter and sound. **Physical characteristics of teacher:** Katie was friendly upon our meeting. She is outgoing with her students and not afraid to do something "silly" to keep their attention. While doing the Phonics Dance, Katie interacted with the students and did the motions with them, moving around the room. She appeared very confident in the classroom and was flexible in dealing with misbehaviors and/or interruptions. **Order of events:** Students were all gathered on the carpet and began with the Phonics Dance. Students sang "get your bottoms down down" when the lowercase letters go below the line. The teacher stated later that this helps them with their writing. (The teacher stated the class does regular Phonics Dance until Christmas. Sometimes they will go backwards to make sure they are paying attention). Students sang "A,E,I,O,U-to the tune of "Here We Go Loopty Loo" to review their vowels. The class then did the Phonics Dance Hunks and Chunks. Students stood and completed the Phonics Dance with motions. Including Sh, Ch, Th, ING and AR.	**were allowed to sit wherever they could make a good choice.** **Phonics Dance is also used at Vikings Elementary.** **Letter People was revised in 2017 but Katie and Debbie still use older system.** **Katie stated she isn't a great singer but doesn't mind singing with 5 & 6 year olds. However she would not want to do this in front of adults as much.** **Students really enjoyed this version of the Phonics Dance. Katie and Debbie created this on their own to be able to use it in student writing as well.** **The AEIOU song is one that was made up by the teachers to help students remember their vowels.**

Katie then sang – go to the carpet and sit down to the tune of "If You're Happy and You Know It." A Student teacher then read students a story. The story focused on onset blend "bl." Students then worked on creating a list of "bl" blending words on an anchor chart. The class then worked on sight words. They would sing a song or do a chant with each sight word. "G-O- go G-O go, Go Trojans!" Teacher said aside to me that they also use the following: Letter People at the beginning of the year. ABC Bootcamp at beginning of the year. Letter of the day at beginning of year and sing a song with each letter. The class also uses Handwriting Without Tears to sing songs with each letter. There is no Title for Kindergarten. The teachers then had students get their writing folders and break up into their writing groups. Half of the class went with Debbie to her room and the other half remained in Katie's room to work.	**While not related to phonics, teachers transitioned students usually with music.** **This is from Fountas and Pinnell PWS- Phonics, Spelling and Word Study** **Incorporate rhyme and chant with all sight words.** **A lot of the curriculum used have pre-made songs for teachers to use. Some songs teachers have created on their own.**

Rockets Elementary

Name of Teacher: Abby	**Elementary School:** Rockets Elementary
Date of Observation: February 19, 2019	**Length of Observation:** 40 minutes

Descriptive Notes:	**Reflective Notes:**
Physical Setting: The school is the newest one I have been to for observations. The school had wide hallways and a large central office. The classroom had many cupboards for storage and a lot of	**This classroom was welcoming and inviting. It was very noticeable that the facilities**

visuals for students. This was also the largest classroom I have been in. There was not a Phonics Dance posted as most schools have but there was an alphabet of The Letter People down low to the ground for students to have easy access to. Students also had their own small lockers/cubbies located in the classroom.	**were much nicer than any of the other schools I have observed in.**
Use of language: Hunk and chunk Mr R Letter Person CVC words Nonsense word	
Physical characteristics of teacher:	
The teacher was very energetic and inviting. She is probably in her mid-thirties. The teacher has very good control of her class. It is clear she has been teaching for several years.	**Abby was very prepared with things already typed up for me.**
Order of events:	
When I arrived the students were on the carpet. Students sat in rows on the carpet. There were 19 students in the room. The teacher introduced herself to me and then went over to the carpet. She told me that they use Orton-Gillingham's approach to phonics. This week's letter is letter "r". Teacher showed students a letter "r" card and talked about the sound. The students then created words that started with "r". She put the words on a circle web. These circle webs are then added under each letter of the alphabet as the students learn them. The teacher then passed out mirrors for students to look at their mouths saying the letter "r." Students stood up to do calendar. Abby pulled a mystery student and gave them clues: My special helper as an "A" in their name." My helper only has 4 letters in their name…etc. Students then sang months of the year song to the tune of the "Macarena" as the helper pointed to the months. Students talked about what day it was. "It is Tuesday with a	**Students were very well behaved. I did not see any students off-task the entire lesson time.** **The teacher kept students moving seamlessly through each activity so there was little time to be off-task.**

T not a hunk and chunk." Students sang days of the week song to the tune of "The Adams Family." Students stated what day it was. Students then sang "Today is ___" to the tune of "Are You Sleeping?" The teacher then got Mr. R puppet, which has rainbow hair. The students listened to the Mr. R song as he sang about his rainbow hair, refrigerator, and rocking chair. Students then discussed the other letter R words they heard. The teacher then played a CD of *Pete the Cat*: *Rockin' in my School Shoes* and showed the class the book. Pete sang a song along with the book about Rockin' in his school shoes. The teacher showed students a variety of phonics letter cards and students would say "D says /d/." If it was a vowel, students made a hand motion to show how their mouth should be formed for the vowel. Students then went back and just said the sound of the letter or digraph. Vowels are all yellow cards. The teacher reminded the class that vowels go in the middle of all CVC words. Teacher then put together CVC words on her blending board to have students work on sounding out words. Students segmented the sounds and then blended them together. The teacher gave students six seconds to find a letter. She passed out the sand trays to her students and reviewed how to pass them out. Two students took top tray and passed it around the circle. The teacher gave them a sound and they would say "/u/…U says /u/" and then write the letter in the sand tray. Before lining up for gym the teacher had students sing their "red words," which is their sight words. Students sang the song to the tune of "Row, Row, Row Your Boat."	**The teacher has several familiar songs that she puts to phonics skills. The teacher accesses the students' schema to help them remember phonics skills based off a familiar tune.** **Non-music phonics curriculum** **Music-based phonics curriculum**

Name of Teacher: Mary	**Elementary School:** Rocket Elementary
Date of Observation: February 19, 2019	**Length of Observation:**

Descriptive Notes:	Reflective Notes:
Physical Setting: Mary's classroom is next door to Abby's classroom. Her room was a little more cluttered than Abby's room. Her classroom also had kidney shaped tables for students to sit. There are 19 kids in the classroom and one on a speech IEP. **Use of language:** Read Aloud Sky Writing Letter People **Physical characteristics of teacher:** Mary is a little more intense but also has a lot of energy. She relates well to the class and asks them a lot of questions relating to real-world experiences. Mary is an older teacher who is probably in her mid 40s. She was dressed casually in jeans but looked professional. The teacher used a lot of technology. The classroom was much more talkative than the previous class I observed. **Order of events:** Teacher called the students to the carpet area. They had to close their eyes and not peak! She pulled out the Mr. R Letter People puppet and had the puppet sing the Letter R song. The teacher played this The teacher then asked the students comprehension questions about the Letter People song. The teacher interacted with the puppet and the students really enjoyed this. The Letter R puppet asked if the class would like to hear his big book. The teacher played a CD and the CD read a big book to the class as the teacher showed the big book and turned the pages. The Read Aloud also had music with it. The last page talks about the rainbow and the teacher took a moment to relate the book to real-world experiences by talking about who has seen rainbows in the sky. The teacher said she brought the students something that starts with the letter R. The teacher brought the students	**Letter People** **Use of music with The Letter People.** **The students really liked the visual of the Letter R puppet.** **Teacher connected learning to students' schema.**

raisins. Students then quickly went through their Orton-Gillingham letter cards. They said " a says /a/." For the vowels, students gave a hand sign to help identify the specific sound their vowel makes. For example, for letter "u," students nicely punched their gut. For letter "I" students wiggled their pinky. Teacher gave the students a raisin and a paper and had them go to back to their seats. Teacher sang, "name on your paper, first name." Teacher mentioned that they also use Handwriting without tears for the first time this year. Teacher passed out letter R paper and green screens for some tactile work. Students used a green crayon. For the letter R students said, "Big line down, frog jump up, little curve, little line, R says "r"." Then they held their crayon up. Then repeated it. Teacher used a document camera for the class to see what she was doing also. Before the last line the teacher asked students to hold up their crayon in the air. Students did "sky writing." Then they wrote the letters back on their papers. Every time they wrote a letter they said, '"r" says /r/." The students turned their papers over and wrote one big capital black R and one lower case r. Then the class put the paper under the bumpy screen. Teacher had on-task students clip up on the behavior chart. Teacher had students trace the letter with their finger and continue to say "r" says /r/. Then, teacher called students to the front and passed out their phonics folders. The students opened up to the R page. First, the class brainstormed words that start with the letter R. Students the completed their letter R pages in their phonics folder and the teacher played the letter R song from The Letter People on "loop." By the 3rd time through the students starting singing a long. The students received a Letter People sticker when they completed their letter R page. As the class finished up, the teacher passed up The Letter People book called "I Have Fun." Each student had his or her own copy. The teacher had the students put their finger on the title and read it together. The class then turned the page and point to	**Standard Phonics curriculum** **Students did this very quickly!** **Great use of tactile learning!** **The teacher did this step by step to be sure all students were participating and not rushing through.** **Classroom Management** **Great way to reinforce the music and help students with time management.**

each word. The teacher worked through the pages with the class as they all read. Many of the students seemed to struggle with this portion of the lesson. The students keep these books in their book bag for several weeks and then take them home. The teacher stated this is only for whole group reading. This is not what she uses for reading groups. "If your name is on it Kiss Your Brain." The class then re-read the book. This went much better the second time. Teacher then immediately called them to the carpet. "If your name is Veronica, turn on the light." The teacher then did her morning message information and was going to move into a read aloud on the carpet.	**Whole group phonics- this was a struggle for the lower ones but teacher stated she uses her more abled ones to help pull up the struggling readers.** **This is from Dr. Jean** **Good classroom management**

Vikings Elementary

Name of Teacher: **Adrienne**	**Elementary School:** **Vikings Elementary**
Date of Observation: February 6, 2019	**Length of Observation: 45 minutes**

Descriptive Notes:	**Reflective Notes:**
Physical Setting: There are 17 students in the classroom. The classroom is large and inviting with a lot of different activities in the classroom. Many items on the walls for visual representations. There are also many play items for center time. The teacher also has a reading table at the back of the room for guided reading groups. Carpet time is at the front of the room with many visual tools for the classroom. The	

teacher uses every space available in the room. **Use of language:** Students were well aware of the tools the teacher used and new the routines well. Phonics Dance, rhyming bag time, center time, etc. Turn and face my pocket chart. **Physical characteristics of teacher:** The teacher was very enthusiastic and inviting to the students. Adrienne had excellent classroom management as students were very quiet and respectful throughout the lesson. The teacher clearly has many years of classroom experience. The pace moved quickly but not too quickly for student retention/acquisition. The teacher was well prepared and never had to stop and think about what came next. **Order of events:** Adrienne started reviewing sight words. Students would tap alternating shoulders as they spelled the word. Heggerty Phonemic Awareness book- students reviewed the short vowel "e" doing a variety of activities using call/response with the teacher. They did a "rollercoaster" with their hands with CVC (short e) words to emphasize the middle sound. Focus was on blending and decoding sounds in CVC (short e words) Adrienne sang a song to focus on rhyming words. The teacher gave a word and a student came up with a rhyming word. Students sang the tune, "If You're Happy and You Know it" and put the two rhyming words together. Students sang rhyming song, "Have you ever seen a pen and a ten? (clap clap) Have you ever seen a pen and a ten? (clap clap) Have you ever seen a pen, have you ever seen pen, have you ever seen a pen and a ten (clap clap)." Adrienne introduced new vowel with a short "I" song. She has a "short vowel" folder for each vowel. The teacher had 4 short "I" words on a large anchor chart. "It," "Is," "in," and	**I liked the use of body and crossing the midline** **Students were very engaged in this activity with the use of hand motions and repeating each word/letter sound with the teacher.** **Great way to work on rhyming words in a fun, easy way with a song.** **Teacher often used tunes students already know (schema) to then incorporating**

"if". The students also sang a song to the tune of "London Bridge is Falling Down" The lyrics are: It is spelled I-T, I-T, It and so on. Then, Adrienne introduced the long "I" folder. She sang a song to the tune of "Mary Had a Little Lamb." Adrienne then reviewed pictures on the song sheet to review long "I" words like "iceberg, ice cream, and "icicle." Adrienne went over a rhyming bag activity in which students take a bag home and put an item in the bag. The bag was a pillow case with a drawstring on it. Students write down "I have an item I want you to see. It's an item that rhymes with ____." This particular student brought in an LOL Pearl tool and said it rhymes with "girl." The next student had a sharing bag in which the student gave three clues for students to guess what was in the bag. "It has a yellow face, it's not alive, I made it at Funday Sunday." The item was a Lego. Next, the class did the Phonics Dance. The teacher kept the pace moving. Students seemed to know the phonics dance well and could relate it to beginning sounds in words. The Phonics Dance has rhyming and some singing as well as chant. The teacher incorporated hand motions/actions with each letter of the Phonics Dance also. Adrienne then taught a new hunks and chunks, "Sh." She had a blank anchor chart readily available to write down things as needed. The class brainstormed a few words that had "sh" in it. Adrienne taught the students a new chant for "sh" hunks and chunks with motions. Next, the class completed a quick exercise pulled out of a bucket. The students did a cross over the knees then touched elbows to opposite knees. Adrienne had the girls- rub their head and pat their belly on the way back to their seats. All the students went back to their seats and did a Jack Hartmann music video of long and short vowels exercises. Next, the class did a Starfall activity with letter "I." The class sang a song about little "I" with a Starfall video. The observation ended phonics time with GoNoodle AlpahGroove.	**current learning standard.** **Great way for students to work on rhyming at home with parents while also being able to create a classroom community- students always enjoy sharing things about themselves. Good use of chant, rhyme and singing.** **Students were actively engaged in this phonics activity with hand motions.** **Students quickly caught on to the new chant because they were familiar with the format from the full Phonics Dance.** **Quick brain break and transition to seats.** **The teacher combined a music videos with motions and singing. The teacher stated she found these by clicking on the ELA section in Go Noodle.**

Name of Teacher: Melissa	**Elementary School: Vikings Elementary**
Date of Observation: February 13, 2019	**Length of Observation: 30 minutes**

Descriptive Notes:	**Reflective Notes:**
Physical Setting: Melissa's room was very quaint and eye-catching. She has a reading nook in her classroom with a loft area for students to do writing. Melissa's students sit at rectangular tables with supply stations between each table. The colors in her room are very bright. She has a guided reading table at the back of her room and a few play centers around the room. There were 14 students in the classroom during the whole group phonics lesson as some had been called out for intervention. Two came back in towards the end for a total of 16. **Use of language:** Hunks and chunks **Physical characteristics of teacher:** Melissa was friendly and welcoming. I have heard excellent things about her from other staff members. She has several students with very specific needs in her classroom and the office staff told me she has had a tough group of students but has done an excellent job meeting their needs. Melissa is very energetic with her class and is very encouraging. I often heard her give her class praise for their answers. Melissa had a child with autism who had some very specific needs and she was very patient and kind with the student. **Order of events:** Students started on the carpet and the teacher introduced the "ch" hunk and chunk. Melissa taught the studenta the dance and chant for "ch" and then wrote "ch" on the Smart Board. Students then came up with words that had the "ch" hunk and chunk in the word. Students came up with many words with "ch" at either the beginning or the end of the word. The students were chatty on the carpet but also gave many good ideas and words about the "ch" hunk and chunk.	**Classroom environment made room very welcoming and student-centered.** **Classroom Management** **Phonics instruction** **Schema- reflecting on words they already know but putting new knowledge to it.**

Students watched a Jack Hartmann video about the digraph "ch." Melissa asked students to look for "ch" words they had not listed yet. Students then added "ch" words from the video to their list. Students stood up and a student got to choose a brain break with GoNoodle. The teacher then stated, "With your walking feet you can return to what you were doing before."	**Use of music-Jack Hartman** **Compare/Contrast words from the list**

Name of Teacher: Willow	**Elementary School: Vikings Elementary**
Date of Observation: February 13, 2019	**Length of Observation: 35 minutes**

Descriptive Notes:	**Reflective Notes:**
Physical Setting: Willow's classroom is large and bright. There are many visuals around the room. Willow does not have the Phonics Dance visible in her room like most of the other classrooms I have been in. She instead has them up by her teacher chair and mixes up the letters. There are 17 students in Willow's classroom and she told me that three of them are ESL students. Willow's students sat on a carpet at the front of the room. There were a few play centers in the room and a guided reading table as well. **Use of language:** Get your singing voices ready Phonics Dance Word family **Physical characteristics of teacher:** Willow wasn't feeling well so her voice was quiet. However, she is also very calm and low-key with her students. This works well in her room as her students were very well behaved. There was very little talking in her room. Willow is tall, thin and an experienced teacher. She has clear	**No Phonics Dance posters like every other classroom thus far because teacher shows them at random to the class.** **Good classroom managements with use of dojos. Students gave themselves dojos independently.**

routines and expectations in her room and I could tell her classroom management was very good. **Order of events:** Willow started with the Phonics Dance. She mixed up the cards and kept the cards at her teacher chair. This was very effective as students had to identify the letters out of order. She stopped and complimented a few students on their good participation and gave them a "Dojo" from classdojo.com. The students took the initiative to go up to the board and give themselves a dojo. Students were all engaged in this activity. One student, "Peter" had just moved in from another country and speaks little English. Willow told me ahead of time he has really done well learning the Phonics Dance and other songs in English. It has played a big difference in his learning. "Peter" came up to be "king of the day" and sit in the teacher's chair. The teacher asked "Peter" to spell his name in English. "Peter's" first language is Portuguese. The class then counted the letters in his name and counted the syllables. The class then cheered the letters in Peter's name and cheered for him. Next, the class sang song to the tune "BINGO." There is a boy we like a lot and "Peter" is his name-o. P-E-T-ER, P-E,T-ER and so on. Teacher asked: "Does anyone else's name in here start with the letter P? No? Wow Peter is the first one!" The class then went to their Daily 5 stations to begin center work.	**Great use of schema and scaffolding- students had to reflect on prior knowledge and then it became harder as the cards were mixed up.** **Great classroom management for the students to be responsible for their own behavior.** **Music integration and phonics curriculum** **Use of music and set to a familiar tune (Bingo).**

APPENDIX G: Participant Lesson Plans

Abby

Monday:
-Introduce new letter/sound concept
-Brainstorm words that begin with letter/sound
-Reintroduce Letter Person (play song)
-Read story w/ letter of the week
-Orton-Gillingham 3-part Drill: Sound cards, Blending Board, Sand Trays

Tuesday:
-Red Word introduction
-Arm-tapping/spelling
-Orton-Gillingham method: Red crayons and screens
-Red Word review (flashcards – sing/say words)

Wednesday:
-Review letter/sound concept
-Orton-Gillingham 3-part Drill: Sound Cards, Blending Board, Sand Trays
-Orton-Gillingham Sentence Dictation
-Red Word review (flashcards – sing/say words)

Thursday:
-Red Word review (flashcards – sing/say words)

Friday:
-Review letter/sound concept
-Orton-Gillingham 3-part Drill: Sound Cards, Blending Board, Sand Trays
-Letter/sound of the week "special gift"

*Each day, students will practice either sound cards or red word flashcards with a teacher, HS helper, parent or classmate during Workshop (in afternoon). They all have their own sets of both flashcards.

Adrienne

Vowel Ii Review

Music & Phonics

Rug Time- Monday

Objective: The kindergarten students will practice and review the vowel Ii.

Procedure:

1. **Phonics Dance**
2. **Rhyming Song**
3. **Folder Songs- Vowel Ii**
4. **Letter Ii Word Game**
5. **Blue Phonics Book**
6. **Exercise**
7. **Phonics Dance- Hunks and Chunks**

Language Arts Time-

Objective: The kindergarten students will practice and review the vowel Ii.

Procedure:

1. **Jack Hartman- you tube- Vowel Sound Workout**
2. **Starfall website- practice activities about the letter Ii**
3. **Go Noodle website- Alphagroove**

Rug Time – Tuesday

Objective: The kindergarten students will practice and review the vowel Ii.

Procedure:

1. **Phonics Dance**
2. **Rhyming Song**
3. **Blue Phonics Book**
4. **Folder Songs- Vowel Ii**
5. **Phonics Dance Book- Hunks and Chunks**

Language Arts Time –

Objective : The students will practice and review the vowel Ii sound.

Procedure:

1. **Jack Hartman – you tube- vowel workout**
2. **Starfall – website – letter vowel Ii review**
3. **Go Noodle – website – Alphagroove**

Rug Time – Wednesday

Objective : The students will review the vowel Oo.

Procedure:

1. **Phonics Dance**
2. **Rhyming Song**
3. **Folder Songs – Vowel Oo**
4. **Letter Oo Word Game**
5. **Phonics Dance – Hunks and Chunks**
6. **Exercise**

Language Arts Time –

Objective: The kindergarten students will practice and review the vowel Oo.

Procedure:

1. **Jack Hartman – you tube- Vowel Sound Workout**
2. **Starfall website – practice activities about the letter Oo**
3. **Go Noodle website – Alphagroove**

Rug Time – Thursday

Objective: The kindergarten students will practice and review the vowel Oo.

Procedure:

1. **Phonics Dance**
2. **Rhyming Song**
3. **Folder Songs – Vowel Oo**
4. **Letter Oo Word Game**
5. **Blue Phonics Book**
6. **Phonics Dance – Hunks and Chunks**
7. **Exercise**

Language Arts Time –

Objective: The kindergarten students will practice and review the vowel Oo.

Procedure:

1. **Jack Hartman – you tube- Vowel Sound Workout**
2. **Starfall website – practice activities about the letter Oo**
3. **Go Noodle website – Alphagroove**

Rug Time – Friday

Objective: The kindergarten students will practice and review the vowel Ii and Oo.

Procedure:

1. **Phonics Dance**
2. **Rhyming Song**
3. **Folder Songs – Vowel Ii and Oo**
4. **Letter Ii and Oo Word Games**
5. **Blue Phonics Book**
6. **Phonics Dance – Hunks and Chunks**
7. **Exercise**

Language Arts Time –

Objective: The kindergarten students will practice and review the vowel Ii and Oo.

Procedure:

1. **Jack Hartman – you tube- Vowel Sound Workout**
2. **Starfall website- practice activities about the letters Ii and Oo**
3. **Go Noodle website – Alphagroove**

***At the beginning of the year I also use chants and songs to practice first and last names.**

Debbie

Monday:
Objective: Students will learn word family –at
Students will learn sight words “with” and “go”

Phonics Dance

PWS (Phonics, Word Study, and Spelling): Day 1 lesson
Jack Hartmann video on –at family

Tuesday:
Objective: Students will review word family –at
Students will review Hunk and Chunks

PWS: onset sound and –at rime Day 2

Wednesday:
Obj: Students will review word family –at
Students will review sight words

PWS: onset sound and –at rime Day 3

Thursday:
Obj: Students will write words with –at family

PWS: write words with –at rime in a sentence

Friday:
Obj: Students will read books with –at family
Students will review All Phonics Dance
Students will review sight words “with” and “go”

Review with Jack Hartmann

Hadley

Phonics lessons...
Daily --- morning message noticing and practicing hunk and chunks (phonics dance)
Sing ABC phonics dance, sing/chant sight words

Mondays --- introduce new sight words for the week with song/chants & practice them (rainbow writing, cut apart puzzles, etc.)

Tuesday through Friday --- F & P (Fountas & Pinnell) phonics lessons (following pacing guide and adding own games and or songs/chants as relevant).
Magnet work
Picture cards/pocket chart
Cut & glue two column charts with pictures
White boards

Note:
F & P lessons cover....early literacy concepts, phonological awareness, letter knowledge, letter sound relationships, spelling patterns, high frequency words, word meaning/vocabulary, word structure, and word solving actions

Word Families

Mrs. Karen

UbD Template 2.0

Stage 1 Desired Results

ESTABLISHED GOALS

RF.K.3.D : Distinguish between similarly spelled words by identifying the sounds of the letters that differ.

Transfer

Students will be able to independently use their learning to...

build word using their knowledge of word families orally and in text

Meaning

UNDERSTANDINGS	ESSENTIAL QUESTIONS
Students will understand... short vowel word families have different initial letters (onset) and have the same letters at the end (rime).	If I can read and spell the word "can", what other words with –an can I read and spell?

Acquisition

Students will know...	***Students will be skilled at...***
how to read and spell the studied word family.	using acquired word family knowledge to read and spell new words based on the word family studied.

Stage 2 - Evidence

Evaluative Criteria	Assessment Evidence
Create a class list of short vowel words using word family knowledge.	PERFORMANCE TASK(S): Teacher will write a list or thinking map of words of the studied word family using student's suggestions.
Build short vowel words using word family knowledge.	OTHER EVIDENCE: word family worksheet

Stage 3 – Learning Plan

Summary of Key Learning Events and Instruction

1. Reflect on our study of word families
   a. sound the same at the end of the word.
   b. beginning sound changes
   c. short vowels
2. Introduce new family
   a. create a list of words students know
   b. sing word family song (Jack Hartmann via youtube)
   c. compare list of known words to words used in song
3. Assign worksheet (remind students the vowel will always be in the middle spot in the house)

Karen

2/7/2019

Katie

Day:	Objective:	Procedure:	Materials:
Monday	Ss will learn hunk & chunk "sh" Ss will learn sight word "here"	Intro "sh" H & C. Create words on anchor chart. Jack Hartmann video on digraph Double check words and add to anchor chart Introduce "here" using Heidi Songs video	**Anchor Chart** **Jack Hartmann video- YouTube** **HeidiSongs video**
Tuesday	Ss will learn "ch" hunk and chunk	Intro "ch" H & C. Create words on anchor chart. Jack Hartmann video on digraph Double check words and add to anchor chart PWS lesson with worksheet	**Anchor Chart** **Jack Hartmann video- YouTube** **PWS hunk & chunk worksheet**
Wednesday	Ss will learn "th" hunk and chunk Ss will learn sight word "here"	Intro "th" H & C. Create words on anchor chart. Jack Hartmann video on digraph Double check words and add to anchor chart PWS lesson with worksheet	**Anchor Chart** **Jack Hartmann video- YouTube** **PWS hunk & chunk worksheet**
Thursday	Ss will learn "wh" hunk & chunk	Intro "wh" H & C. Create words on anchor chart. Jack Hartmann video on digraph Double check words and add to anchor chart PWS lesson with worksheet	**Anchor Chart** **Jack Hartmann video- YouTube** **PWS hunk & chunk worksheet**
Friday	Ss will review all digraphs from week Ss will review sight word "here"	Review all hunk and chunks. Read Digraph poem and find hunk & chunks Sing "here" song from HeidiSongs	**Digraph poem** **Heidi Songs video**

Mary

Mary's Phonics Lesson Plans:

Monday - introduce new letter, use Letter People puppet, big book, OG card(s), sensory writing(with the green screen), alphabet book, & of course a really good book

Tuesday- read Letter People big book & story for target letter, introduce our red words (aka sight words) - show the word, tell the word in a sentence, trace the word on a red screen - see attachment, flip over and write the word, stand up and tap the word on our arm.

Wednesday -read Letter People big book & story for target letter, 3 part drill - sound cards, write the letter that makes the sound I say in sand, blending board - place letters on tray and blend into cvc words - say segmented sounds, then blend.

Thursday - read Letter People big book & story for target letter, 3 part drill - sound cards, write the letter that makes the sound I say in sand, blending board - place letters on tray and blend into cvc words - say segmented sounds, then blend, application of new concept - OG word and sentence dictation.

Friday - read Letter People big book & story for target letter, 3 part drill - sound cards, write the letter that makes the sound I say in sand, blending board - place letters on tray and blend into cvc words - say segmented sounds, then blend, Letter People review book.

Letter People songs get played some weeks more than others, especially more at the beginning of the year as compared to the end of the year.

Also - daily try to squeeze in reading little Letter People take home book(s)

I also do flashcards for letters, sight words, math facts, Dibels skills as much as I can BUT it is tough to find the time for this especially when we have had such chaotic attendance as this month.

Melissa

Day 1:
Objective: Students will learn the CH hunk and chunk.
Procedure:
1. Introduce CH- sing "The CH phonics dance song.
2. Begin anchor chart of words that have the CH sound
3. Watch Jack Hartmann CH video

Day 2:
Objective: Students will learn the SH hunk and chunk.
Procedure:
1. Introduce SH- sing "The SH phonics dance song.
2. Begin anchor chart of words that have the SH sound
3. Watch Jack Hartmann SH video

Day 3:
Objective: Students will learn the TH hunk and chunk.
Procedure:
1. Introduce TH- sing "The TH phonics dance song.
2. Begin anchor chart of words that have the TH sound
3. Watch Jack Hartmann TH video

Day 4:
Objective: Students will learn the ING hunk and chunk.
Procedure:
1. Introduce ING- sing "The ING phonics dance song.
2. Begin anchor chart of words that have the ING sound
3. Watch Jack Hartmann ING word family video

Day 5:
Objective: Students will use hunk and chunks that they have learned and find them in a given text.
Procedure:
1. Introduce review and sing The phonics dance hunk and chunks song (what we have learned so far).
2. Read the given phonics dance poem and highlight the hunk and chunks found
3. Watch Jack Hartmann word family video

Renee

Sight Word: have - Heidi songs volume 1 -Enter in word wall book Phonics: Review Hunk and chunk ch -picture sort Word Family: ub -Jack Hartman Song
Sight Word: have - Heidi songs volume 1 -find and color wkst. Phonics: Teach th hunk and chunk -phonics dance -Preschool Prep Video Word Family Review: ub -word family puzzle practice
Sight Word: from -Heidi songs volume 4 -Enter in word wall book Phonics: Review: th hunk and chunk -Jack Hartman Song -Picture sort Word Family Introduction: an -Jack Hartman song
Sight Word: from -Heidi songs volume 4 -find and color wkst Phonics: Teach wh hunk and chunk -phonics dance - Preschool Prep video Word Family Review: an -song -puzzle paper
Sight Word: Review Word Families: Review Hunk and Chunks: Review

Willow

Phonics lessons: At the beginning of the school year I teach 2-3 letters per week.

8:20-8:45 – Daily

8:20 – 8:30 - Review the letters and the phonics dance chants

8:35-8:40 - Student of the day – say it, make it, count it, clap it,

Sing – There is a boy we like a lot and Pedro is his name oh! P-E-D-R-O, P-E-D-R-O, P-E-D-R-O and Pedro is his name OH! – sing twice through

8:40-8:45 - Write name on sentence strip and hang on wall under the letter of the day. Count the number of names. Which letter has the most? Is everyone on the wall?

I repeat this lesson until we are all the way through the alphabet.

Technology/Youtube options:

Jack Hartmann – See it, Say it, Sign it to reinforce letter recognition

The Letter Factory

Word Factory

ABC's with Usher

Smartboard – Lakeshore – Letter of the Day Interactive Activities

APPENDIX H: Journal/Field Notes

Observation- Vikings Elementary School, February 6, 2019 (Adrienne)

Reflection

I was anxious to see Adrienne today at Vikings Elementary. She has been the most organized and helpful participant thus far and from her classroom observation, I can tell that she is organized and well planned. Adrienne has 17 students total in her classroom but a few students were pulled at various times during the lesson for some one-on-one interventions.

I arrived just in time for phonics. Adrienne called the students to the carpet time and did several activities including the Phonics Dance, rhyme bags, and sang several songs about long and short "i." Adrienne's classroom was inviting and it is obvious she uses music a great deal in her classroom. Her students were well versed in all of the songs she sang with them as well as the videos she played.

Adrienne mentioned several times during the interview time that she felt like adding music to phonics (and all subject areas) really helped students with recall. She stated she often heard students singing a particular song when working on writing, or sounding out CVC words, etc. This relates directly to Schema Theory and encourages students to use their previous knowledge to continue to build on new knowledge.

Adrienne also noted that she often uses the same songs time after time and feels her biggest challenge is just finding the time to create or research more resources that she can use in her classroom. Overall, this classroom was an extremely positive environment. The students were well behaved and quickly joined in on many songs used throughout the phonics lesson.

Descriptive Notes:

Adrienne had the Phonics Dance very visible in her classroom, up high for all students to see. She used many songs throughout all components of her phonics Lesson. I noted specifically the following musical elements that were used:

- Phonics Dance- chant and motions
- Singing a rhyming song- a mystery student chose a word that rhymes with a word presented by the teacher, then the class sang the song together.
- Singing two songs relating to the vowel of the day- the class sang a song about short "I" words and a song about long "I" words.
- Jack Hartmann vowels music video with motions
- Starfall short "I" video with song and motions.
- Reading Roadmap- this is a program that Adrienne took with Melissa online. Adrienne stated this program incorporates a great deal of music into the phonics curriculum. Adrienne has a set routine that she does each week for phonics. This is shown in her lesson plans submitted for data analysis as well. She keeps a set routine and implements songs and chants to help students recall letters and sounds, onsets, blends, etc. She also uses a variety of musical elements including music videos on the Smart Board, chants, and songs either from a curriculum or that she created herself.

Observation- Freedom Elementary School, February 6, 2019 (Debbie and Katie)

Reflection

Debbie's classroom definitely had a different feel than Adrienne's room. Debbie and Katie co-teach in the same classroom during whole group language arts, phonics, and math.

Therefore, there were 46 students in the classroom. This is a large group in a small room but the students seemed to be well adjusted to this environment.

I arrived right after their morning Language Arts Lesson. The students completed the Phonics Dance, which is also used at Vikings Elementary. However, the teachers a Freedom Elementary do a very different version, which is shorter. The two teachers do a shortened version to save time by this point in the year, which is now the third nine weeks. The teachers adjusted the Phonics Dance to their own liking to include students identifying lowercase letters that go below the line for writing purposes. I thought it was creative how the teachers re-structured the Phonics Dance to meet the needs of their current students and to also extend the use of the Phonics Dance into writing.

The students also did the Phonics Dance Hunks and Chunks. I noticed that Freedom Elementary is further in their Hunks and Chunks than Vikings Elementary. Freedom students have learned five Hunks and Chunks and Vikings students are just learning their first one this week. The teachers stated the students use the Hunks and Chunks often in their writing.

Both Debbie and Katie also noted that they believe their students retain information better when they put things to rhymes, chants or songs. Adrienne also mentioned this earlier today. Debbie and Katie said they often make up their only chants to help students remember various things such as, "Every sentence in the whole wide world begins with a capital letter and ends with a period."

Descriptive Notes

Debbie and Katie's classrooms were very different environments than Adrienne's. There were 46 students compared to 17 from Adrienne's room. However, even with 46 students, the

Phonics Dance time did actively engage all students in the classroom. All students were participating and actively doing the motions along with each chant.

Debbie and Katie also use music to transition students from one area of the classroom to another. This proved to be very effective for students as well in keeping them quiet as they moved around the room. During the observation, I saw the use of music through rhyme, chant, music video or song in the following ways:

- Phonics Dance Letters Chant
- Phonics Dance Hunks and Chunks
- The Letter People (these were in Debbie's room- while I did not see the students sing the Letter People songs, I did see students looking at the Letter People while working on their writing to help with recall).
- Jack Hartmann video on onset sounds/blends

Debbie and Katie do not have a set routine that they do each week. However, they use the Fountas and Pinnell phonics curriculum including PSW (Phonics, Spelling, and Word Study) to guide their weekly Phonics curriculum and then use other extra tools such as Jack Hartmann to supplement the curriculum. PSW does not include and musical elements and they believe that is an important concept to include in teaching phonics.

Observation- Astros Elementary School, February 7, 2019 (Karen and Renee)

Reflection

I arrived at Astros Elementary before school began and signed in at the elementary office. I worked for this school district many years ago and actually still knew a few familiar faces. The secretary called down to Renee and she came up to get me.

I first interviewed Renee and she showed me a few things in her classroom relating to music and phonics. She was more reserved than the other teachers I have interviewed thus far but still friendly and inviting. When the students arrived I actually then walked down the hallway to Karen's classroom to observe her phonics lesson first.

Karen's classroom is quite some distance from Renee's room, which surprised me since they are the only two kindergarten teachers in the building. Karen's room is much smaller than Renee's room. She stated they had to create a room when their school moved to full day kindergarten five years ago. Karen had a paraprofessional in the room and 24 students.

Karen's students were active and very talkative. She greeted the students warmly and they made morning choices for lunch and unpacked their items. Then, they all went to the carpet for morning calendar time. However, many students did not pay attention during this time, even when music was being played. Karen went on with the tasks and reminded the class several times to stop talking. The class did engage more during the word family portion of the phonics lesson.

Renee's students were very quiet when I entered her room. Renee moved quickly from each transition so as to not lose the student's attention. She was well-prepared for her lessons. Renee said her class was a very difficult class this year, but I did not see that in their behavior. Renee had a paraprofessional in the room and 24 students, but 3 were absent on the day of observation.

Renee covered several components of phonics. Her class participated in a fast version of the Phonics Dance. The class also did the "an" word family and watched a Jack Hartmann video on the word family. She also used HeidiSongs for teaching the new sight word "from." Renee's classroom was very engaging and I was impressed with how much she accomplished with her

students in a brief amount of time. I also liked that she had all her music videos on a screen with images. She would click on an image and it would bring up the YouTube video for her lessons.

Descriptive Notes

In looking at phonics and music specifically, Karen did a short ten minute lesson on the "et" family. She created an anchor chart and students came up with 5 words ending in "et." Then, she showed a Jack Hartmann music video of the "et" family where first Jack Hartmann gave students words with "et." Then students had to give the onset, followed by the rime and finally read the entire word during the video. Afterwards the class revisited their anchor chart and came up with many more "et" words than the first attempt. Karen also then had students go back to their seats and complete a word family house worksheet.

In comparison, Renee also did a short word family lesson but did not have students use their schema to create words they already knew. She instead showed the video first with a very short introduction to the word family. However, Renee spent time on the sight word for the week, "From." She has several activities the students knew well such as "show me your mirrors" to make sure students were listening and engaged in the lessons.

Renee also made it a point to incorporate other language arts components into her phonics time. An example was during the sight word portion, students would share a sentence using the sight word. However, the teacher also had students think about capital letters and punctuation at the end of the sentence by using hand motions to show a capital and a stop sign for the ending.

I also noted that Renee's paraprofessional in the room pulled students the entire time I was there. The students were working on teen numbers. In Karen's room, her paraprofessional

sat with a student who did not want to participate but did not pull other students during the morning phonics lesson.

I am also beginning to see a few codes emerging as I enter transcriptions into NVivo. Several teachers have discussed the benefits of using music to teach phonics. In addition, several teachers have mentioned they have faced some challenges when trying to incorporate music into the classroom during phonics instruction. I have also noticed after Renee's observation that confidence played a key role in how often music is used within the classroom.

Observation- Freedom Elementary School, February 6, 2019 (Hadley)

Reflection

I came to Hadley's room at Freedom Elementary around 9:30am. Here class was working at their desks quietly. When I arrived, Hadley called her students to the carpet. Her demeanor was calm and kind with the students. She had several students that began off-task and Hadley re-directed them by asking them to show her how to be an expert.

The classroom was very well set-up with large work tables, many windows for natural light and a large rug area. I also liked her reading center with a Pete the Cat theme. The teacher was very well organized and her desk was very tidy.

The class worked on the Phonics Dance and Hunks and chunks and then applied these skills to a written morning message. The teacher moved through this lesson quickly and efficiently. The students also then discussed vowels and sang a short vowel song to the tune of "Old McDonald had some sounds." The students really liked this activity and it was a good way to remind them of their vowels.

The students then used a small white board and marker and created "an" words from the word family. After creating an initial list, the teacher then read the class a book called "Jan and

Stan." The class then added more "an" words to their list. This was a very effective way to teach the "an" word family.

Descriptive Notes

Hadley did a great job of moving the students through many components of phonics in a short period of time. She used the Phonics Dance and Hunks and Chunks sang a song about vowels, reviewed sight words using a song, and wrote and read about the "an" word family within about 30 minutes. She honed in on the students schema by first reviewing what they knew about vowels. She then focused in on the short "a" vowel and then took it to a more difficult level by having the students create words in the "an" family.

Hadley almost became a different person in front of her students. She came across as very timid and quiet. However, when she stepped in front of the class she was engaging and energetic. I enjoyed watching her teach phonics through several different methods.

Observation- Vikings Elementary School, February 13, 2019 (Willow and Melissa)

Reflection

I arrived at Vikings Elementary School shortly after school had started. I first went to Willow's classroom. Willow's class was on the carpet doing a whole-group calendar lesson. When I arrived, Willow wrapped up her lesson and started her phonics lesson. Willow was quieter than most teachers and has a pleasant calming effect about her. This was very evident in her classroom management skills as well as her class we very well behaved and quiet during whole group instruction.

Willow had a cold and told the class she would need their help today completing their phonics lesson. Willow first had the class do their Phonics Dance. She had the students sit on the carpet. What I found the most interesting is that Willow held the Phonics Dance cards up in

front of the students. She did not have them in order on her wall. Willow had the students say/sing each letter chant as she held up various cards. The students identified letters at random.

Willow's class also had a "king of the day" for one of their new students. She said this is usually done towards the beginning of the year but "Peter" had just recently moved to the school. The students discussed the new student's name and the letters in his name. This was a great way for students to get to know each other's names and encourage one another. The class also used the child's name, "Peter" and sang his name to the tune of "BINGO."

Willow also had her students give themselves dojos on the board for good behavior. Her students were very independent and took responsibility for their own behaviors. Willow also discussed Daily 5 centers with students for the day.

I then went to Melissa's classroom. Melissa's classroom was the most welcoming classroom I have seen so far. She had bright colors in her room with cute decorations hanging from the ceiling. I could tell just looking around her classroom that Melissa is neat and organized. She was very friendly when I walked in the room.

Melissa has several specific needs in her classroom including a student with a one-on-one paraprofessional. Melissa's class was currently working in centers so the volume was louder than Willow's classroom. Melissa called her class to the carpet, but this did take the students some time to clean up and then get to their designated spots.

Melissa started her whole group phonics lesson with the Phonics Dance hunk and chunk (or digraph) "ch." Her class had previously learned the "sh" and "th" hunk and chunk. Melissa taught the students that chant for the "ch" hunk and chunk and then had them try to think of words that begin with the "ch" hunk and chunk. The students then watched a Jack Hartmann video about the "ch" digraph and the reviewed words on the class list and words from the video.

The students then stood up an did a GoNoodle as a brain break. Melissa told the students they could go back to their centers once the brain break was completed. The students quickly went back to their spots and got to work.

Descriptive Notes

One thing that stood out to me the most in Willow's room is that her students completed the Phonics Dance in random order. She is the only teacher to do this thus far. At this point in kindergarten, I found this to be a very effective technique as students could not simply recall a letter based on where it is in the alphabet, but rather had to identify the letters as the teacher held them up. The students also did very well with this.

Willow used music in her classroom through the Phonics Dance chants as well as singing a new students' name. Willow discussed that she has a few songs that she sings for students' names depending on the number of letters in their name. For a student with five letters in their name, they sing the student's name to the tune of BINGO.

Melissa's classroom, which was across the hall from Willow, was extremely well organized. She even had a loft built in her classroom and the top floor was her writing center and the bottom floor was her library nook. Melissa had many bright colors in her room and I immediately felt at home in her room.

Melissa is a younger teacher and has only been teaching for four years. She was extremely enthusiastic and her students seem to enjoy her classroom. Melissa had clear expectations and her class did a good job of following her directions after only a reminder to two students.

Melissa did a lesson similar to other teachers I have seen through classroom observations. Her lesson was on the digraph "ch" and she began by introducing the dance, then made a list of

"ch" words with the class, and then ended with a video to compare the class' list with the video. However, there was no independent practice for the students for this portion of the lesson.

Observation- Rockets Elementary School, February 19, 2019 (Abby and Mary)

Reflection

I arrived at Rockets Elementary shortly after school had started. Rockets Elementary is the most rural school district I had observed and took me about 40 minutes to travel to from my home. However, despite this school being the most rural, it was the newest and nicest in regards to accommodations within the building.

Rockets Elementary is actually located in a K-12 building, but each building has separate wings. The K-2 classes have their own wing just as you enter the building to the left. The four kindergarten teachers are all located at the very end of the K-2 wing with two on each side of the hallway. The classrooms were very large and had many nice features including bathrooms in the classrooms, small lockers for each student, and sinks in the classroom.

I started in Abby's classroom. When I arrived, I didn't even realize her students were in the room as they were extremely quiet. Abby had her students sit on the carpet and began her morning calendar and then went directly into her phonics. She did not spend any time off-task and moved the students quickly and effectively from task to task. There were no students off-task during this entire 40 minute lesson as she kept the pace moving. It was very clear that the students have a set routine that they do each morning for phonics.

Abby had 19 students total in her classroom. She used several phonics curriculum components during her lesson including some Phonics Dance, Orton Gillingham and a few of her own songs that she has made up over time. Abby provided me with her weekly phonics routine

and stressed how important it is to follow a routine with Orton Gillingham (OG). The OG program is new this year to Rockets Elementary.

After observing an entire morning calendar and phonics lesson in Abby's room, I then walked next door to Mary's room. Mary has been my point of contact for this school and has been very helpful. Mary had mentioned to me when scheduling her observation that she had several years of experience in kindergarten and it was evident in her teaching.

Perhaps the things the stuck out to me most with Mary is that she was very relaxed in the classroom. I could tell within just a few minutes that her class had some more behavior issues than did Abby's. However, Mary was patient and rolled with various disruptions without pausing long in her teaching.

Mary was finishing her morning calendar when I arrive and was nice enough to provide me with a copy of her morning calendar. This was a very effective calendar, which included some Language Arts pieces as well as math and music. The students were sitting at their kidney-shaped tables and all on-task for this activity.

After finishing their calendar, the class was called over to the carpet. Mary then began her phonics lesson by introducing Mr. R. Mr. R is the Letter People puppet with rainbow hair. She played the letter R song from her phone through her class speakers and the puppet sang along.

Students then went back to their desks and worked on writing the letter R on green screens to provide some tactile experiences. I liked that Mary had the students saying the sound for the letter R even as they wrote it. This provided constant reinforcement of the letter name and its sound. The students also liked the writing screens.

Mary finished her phonics lesson with a phonics folder that students complete on a weekly basis. I liked the routine she had set up for her students. Mary also incorporated music during this time. She played the letter R song on "loop" while the students worked. By the 4th time the song played, most of them were singing along.

Descriptive Notes

I noticed several new pieces of evidence in both Abby and Mary's classes that I have not seen in the other school districts. Although both teachers said they have used the Phonics Dance exclusively until this year, neither of them had the Phonics Dance chant cards in their classrooms. However, they did both say they still use pieces from the Phonics Dance.

This was the fist school that used the Orton Gillingham approach to phonics. I have heard of this program but have never seen it used within the classroom. The OG program is very scripted but it also ensures that all components of phonics are being covered. While this is the fist year that Rockets Elementary is using the OG program, both Abby and Mary stated the do like the program.

Rockets Elementary uses some components of the Phonics Dance, the Orton Gillingham Phonics curriculum, the Letter People, and Handwriting Without Tears. Mary stated that it is difficult to balance all the various curriculum components to phonics to be sure she is fitting it all into the day. Both teachers were well organized, but I can see how this could be difficult to balance.

Perhaps the biggest thing that stuck out to me in Abby's class is her use of singing phonics skills to familiar tunes. Abby used very little technology or recorded music. She sang most of the songs with her class directly. The students were very engaged in these activities.

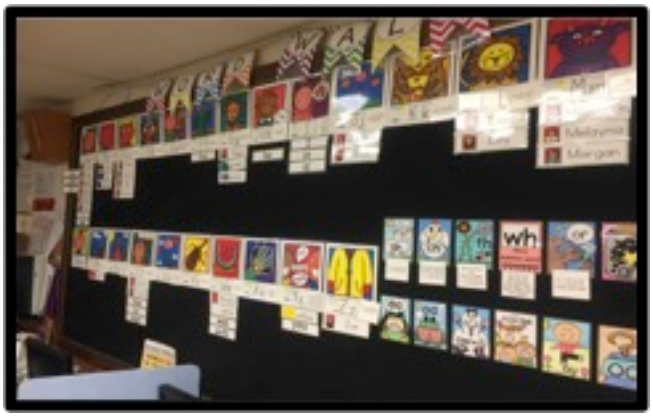
Mary, in comparison, used a lot of technology and only sang one time with her students without recorded music. However, Mary did a great job of using students' schema to relate to current curriculum. Mary asked the students about rainbows when talking about Mr. R and even had them sample a new kind of raisin. She related things directly to real-world experiences and this worked very well in her classroom.

Several themes continue to emerge from transcriptions of the previous interviews and classroom observations. I have noted the classroom management seems to improve when teachers use music to teach phonics. However, some teachers continue to note the benefits and challenges of using music to teach phonics. It was beneficial to observe Rockets Elementary teachers as both teachers used a different standards-based curriculum compared to the other local kindergarten classrooms in which I have observed.

As I have wrapped up my observations, I have made some notes in the observation protocol as well as the reflective notes about the curriculum I have seen in each classroom. I also couldn't help but notice the effect that music has on the classroom management in each classroom. Another surprising finding discovered through these observations was that although each school district had the same curriculum for teachers to use, the way each teacher chose to implement that curriculum was, at times, vastly different. In addition, most of the required curriculum did not include music, yet all ten teachers stated they use music on a daily basis within their classroom to improve student learning. I have already seen a few themes developing throughout the observation process and look forward to finishing coding in NVivo.

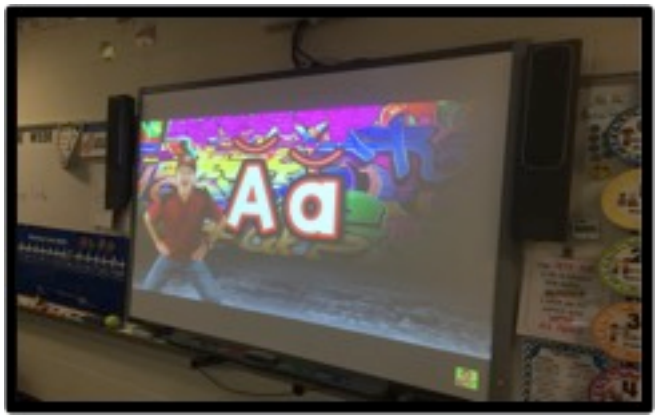
APPENDIX I: Classroom Photos

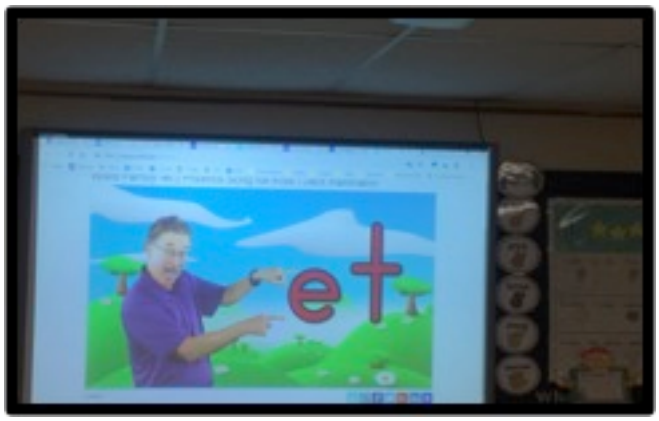
Phonics Dance:



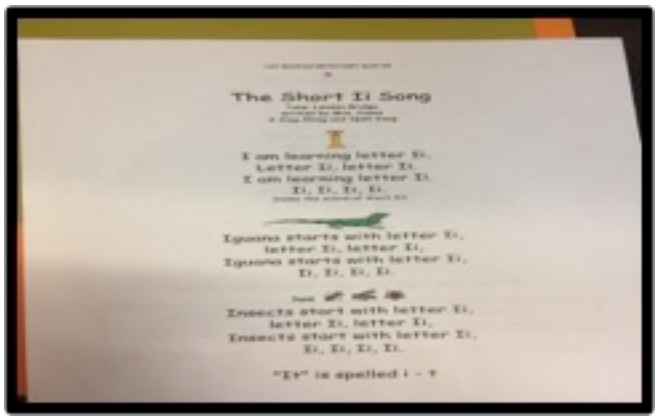
The Letter People:

Jack Hartmann:





Teacher-created songs:



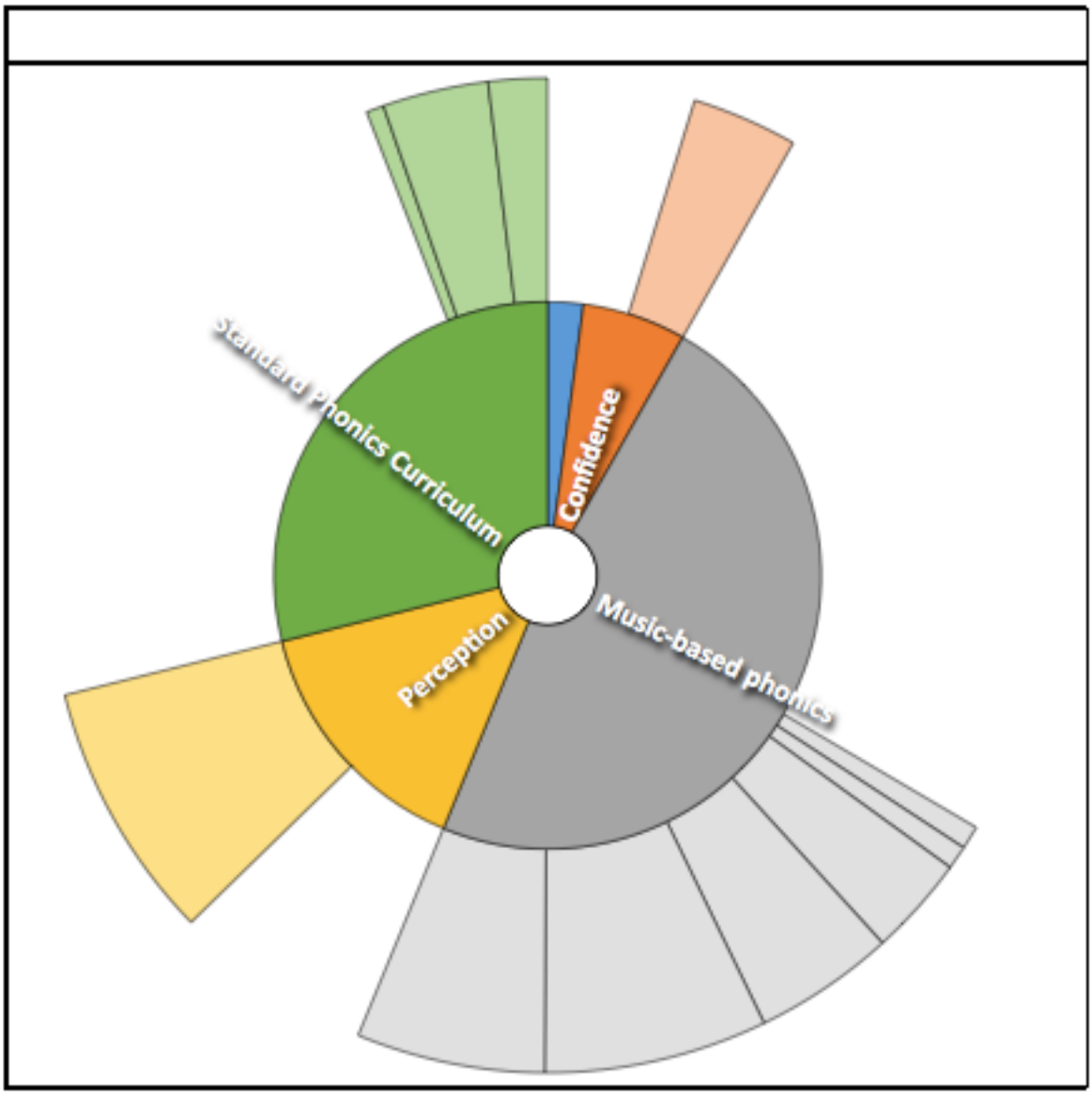
APPENDIX J: Frequency of Themes

Comparison of Frequency of Themes

Comparison of Frequency of Themes		
Codes	Themes	Definition
Phonics methods, Fountas & Pinnell, Orton Gillingham, Word Families	Standard Phonics Curriculum	Standard, research-based phonics curriculum purchased by teacher or school district that does not include a musical component.
Dr. Jean, Heidi Songs, Jack Hartmann, Letter People, Phonics Dance, Teacher-created songs	Music-Based Phonics Curriculum	Musical resources used within the classroom to enhance phonics instruction.
Classroom Management, Benefits, Detriments, Student retention of knowledge	Perceptions	Teacher's impressions on the utilization of music within the classroom as it relates directly to phonics.
Comfort Level, Teacher's musical experiences, Music courses	Confidence	Teacher's own opinion of how comfortable they are using music within the classroom based on musicianship and previous experiences/training
Teacher challenges, Challenges with students, Curriculum Management	Challenges	Obstacles teachers face with classroom management, fitting music and phonics into the curriculum and/or their own personal challenges with using music to teach phonics

APPENDIX K: Comparison of Frequency of Themes

Chart



APPENDIX L: Analysis Code Book

Analysis Code Book		
I- Interview; O-Observation; L- Lesson Plan, P- Photos in classroom		
Code/Node	**# of times evident**	**Data Source**
Benefits	86	I, O, L
Challenges	11	I, O, L
Classroom Management	44	I, O, L
Comfort Level	18	I, O
Confidence	24	I, O
Dr. Jean	4	I, L
Fountas and Pinnell	6	I, O, L
Heidi Songs	4	I, L
Jack Hartmann	17	I, O, L, P
Letter People	24	I, O, L, P
Music-Based Phonics	132	I. O, L, P
Orton-Gillingham	18	I, O, L, P
Pedagogy	278	I, O, L, P
Perceptions	74	I, O
Phonics Dance	38	I, O, L, P
Standard Phonics Curriculum	120	I, O, L, P
Teacher-created songs	32	I, O, L, P

APPENDIX M: Audit Trail/Timeline

Audit Trail/Timeline

Date:	**Event:**
December 9, 2018	Proposal Defense
December 10, 2018	IRB proposal submitted
December 28, 2018	IRB initial review returned to participant with edits
January 4, 2019	IRB revisions submitted back to IRB
January 16, 2019	IRB full approval received
January 18, 2019	Initial survey sent to potential participants with questionnaire
January 19- January 30, 2019	Selection of participants based on predetermined criteria
February 6- February 20, 2019	Interviews and classroom observations of 10 kindergarten teachers
February 20- March 7, 2019	Data analysis using NVivo. Writing of Chapter Four and Chapter Five
March 8, 2019-March 15, 2019	Preliminary data analysis presented to participants for member checking
March 16-March 25, 2019	Full review by dissertation committee, full review by qualitative chair, full review by professional editor
March 27, 2019	Dissertation Defense and submission for publication