Implementation of the Michael Heggerty Model to Increase Student Achievement of At-risk Readers in Kindergarten

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IMPROVING PHONEMIC AWARENESS: AN APPLIED RESEARCH STUDY TO HELP AT-RISK READERS IN KINDERGARTEN BY IMPLEMENTING THE MICHAEL HEGGERTY PHONEMIC AWARENESS MODEL

A Dissertation
presented in partial fulfillment of requirements
for the degree of Doctor of Education
in the Department of Leadership and Counselor Education
The University of Mississippi

MICHELLE WHITE NOWELL
May 2021
ABSTRACT

This applied research study seeks to help at-risk readers improve phonemic awareness in kindergarten at Mayberry Elementary by implementing the Michael Heggerty Phonemic Awareness Model so the students can become successful readers. The goal in this study was to improve educators’ capacity to address a problem of practice within the school which included setting goals, developing an action plan for improvement, implementing the plan, and evaluating processes and outcomes for further improvement. Using three action plan elements, professional development, teacher PLCs, and data talk meetings with peer teachers in kindergarten throughout the year, the researcher sought to build teacher capacity in implementing the Michael Heggerty Phonemic Awareness Model to improve student achievement. A program evaluation was completed to provide both formative and summative assessments about the program elements. The researcher utilized qualitative data from observations, focus groups, and interviews as well as quantitative data from surveys and student assessments in the evaluation process. The findings revealed improvement in teacher collaboration with peers and in capacity to teach phonemic awareness as well as an increase in identified at-risk kindergarten readers’ phonemic awareness.
DEDICATION

This dissertation is dedicated to my supportive family. A special feeling of unbelievable gratitude to my parents, John and Melba White for teaching me the importance of an education, while setting the examples of what hard work truly means throughout my life. To my family, my husband Glennis, and my children, I am forever grateful for the love and support which made this life-long goal a reality.

I also dedicate this dissertation to my work family and the 473 children of Lower Elementary.

You are truly the heartbeat of this research.
ACKNOWLEDGEMENTS

To Dr. Cabrera-Davis: Thank you for the encouragement, support, and grace provided throughout this journey. You are a true educator.

To Dr. Bunch and Dr. Davis: Thank you both for continuing to push me to be my best, while providing the foundation needed to complete this journey.

To Dr. Cormack: Thank you for encouraging me to start this journey before it became a reality.

To my friends: Thank you for all your support and encouragement.

To my husband, Glennis: You have encouraged, supported, and endured my efforts to accomplish this goal, and I am forever grateful.
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CHAPTER I
INTRODUCTION

Statement of the Problem

Effective daily instructional practices are more important than ever due to increased testing and accountability in education (Gulek, 2003). These effective instructional practices are imperative in reading instruction. According to National Assessment of Educational Progress (NAEP) scores, roughly one-third of students in the United States read at or above the proficient level, one-third read at the basic level, and one-third read at the below basic level (Rampey, Dion, & Donahue, 2009). To clarify, two of every three students in schools in the United States have reading proficiencies below the level needed to adequately do grade-level work.

Having literate and well-educated children is crucial to the future of the nation and Mississippi as well as, each individual child. Literacy is defined by The National Institute for Literacy as “all the activities involved in speaking, listening, reading, writing, and appreciating both spoken and written language” (2009, p. 6). It entails the ability of a person to succeed in school, interact with others, understand and solve problems, perform on the job and as a part of society, and achieve one’s goals for the future. Literacy is part of a range of skills and abilities which impact children’s future and must be acquired at the earliest age possible.

Literacy must be a specific concern to the state of Mississippi. According to the Nation’s Report Card, in Mississippi 65% of fourth graders performed at or above the basic level, with only 32% reaching proficient or above (2019). Building literacy begins in infancy with the
exposure of babies and toddlers to sounds, speech, text, and words. A literacy foundation is crucial to their future reading, writing, and comprehension success. Children who are poor readers at the end of first grade are likely to remain behind their peers through at least the end of fourth grade (Juel, 2006). The importance of reading, writing, phonetic, and other literary skills must be considered from the very beginning and throughout childhood.

A student’s ability to read influences more than grades and test scores (Bharuthram, 2012). The ability to read can be directly linked to the quality of life because it impacts daily interactions, especially those dealing with types of writing (Ghorbani, Gangeraj, & Alavi, 2013). Reading is a life skill required to function in today’s society. According to the National Center for Education Statistics (2003), 93 million adults in the United States read at or below the basic level needed to contribute successfully to society. Reading road signs, filling out job applications, understanding instructions on a medicine bottle, and following a map are just a few examples of everyday activities which involve reading.

Through simply interacting with the world and experiencing life, children are constantly reading the world (Freire & Slover, 1983). The foundation for reading has been established by the time they enter school. Many understand environmental print by the age of four, and learning to read is the next step. Many is the key word. Not every child has been exposed to a foundation for reading. Educators must teach every child to read fluently and on grade level. A student’s ability to read is one of the most important skills acquired in elementary school. As found by Ergul (2012), students who are struggling or at-risk readers in first grade are often struggling readers in the eleventh grade. Reading is a requirement for developmental goals connected to attention, memory, language, and motivation.
Presently, a multitude of reading programs, intervention strategies, and curricula available claim to meet the needs for teaching every student to read on grade level. At Mayberry Elementary, we have utilized and experienced some success with Saxon Phonics, Abeka Reading, and Reading Horizons. Despite these efforts, we still have 11 in the bottom 10% in reading which need to be able to reach success. These 11 were identified using the Mississippi Kindergarten Readiness Assessment (MKAS) scores in pre-kindergarten from August 2018. I selected 60 points as a goal for research question one after Michael Heggerty Phonemic Awareness Model implementation. The average gain of the lowest 10% over the past five years in kindergarten was 56.3 per student. The median was 53 points. Mississippi Department of Education reviewed the Reading Proficiency Indicators and determined students are expected to score a 530 or above at the beginning of kindergarten. Based on the review by Mississippi Department of Education, 85% of students scoring 530 or higher at the beginning of kindergarten are proficient in reading at the end of grade 3. Students with a score below 530 usually need additional help. With this performance data in mind, action must be taken to advance these pre-kindergarten students in reading.

Through my own practice, using an applied research design with program evaluation, I examined the problem of at-risk readers in kindergarten. The following sections will include demographic information about the school and district in which the action plan took place, followed by a rationale for the problem. The justification includes both global and local reasons for the study.

**Description of the problem.**

Mayberry Elementary has been located in the same building for 72 years. The old, tired building has given many years of service to the children of Mayberry. I first walked the halls of
Mayberry Elementary as a kindergartener. Many years later, I returned to this same building and began my teaching career. Now, I serve as Mayberry’s instructional leader. I have an indescribable sense of pride for this old building and the children who fill its classrooms.

Upon entering the halls of the school the bright and colorful displays of children’s work covering the walls are evidence of the energy inside the classrooms. Dr. Seuss (1978), a favorite author of many children and adults, once said, “The more you read, the more things you will know. The more you learn, the more places you will go” (p. 27). Many educators would agree with the statement reading leads to a prosperous future. Reading instruction starts at an early age. Worthington (2013) explained, “Children need lots of opportunities to build spoken language by talking and listening, learn about print and books, learn about sounds of spoken language, identify the letters of the alphabet, and listen to books read aloud” (p. 2).

By the time children have reached school age, the foundation for reading has been set. Students are able to speak, and most understand a large quantity of environmental print by the age of four. Educators are then tasked with teaching all students to read. Mastering reading is a primary tool for success for children. We have the opportunity to ensure all students are successful in reading. What can I do as the principal to positively impact the learning to read process at Mayberry Elementary?

The Carol School District is a progressive pre-kindergarten-12 school system, which prides itself on an individualized and personalized approach to educating students. Classes of instruction are relatively small. Student support services are strong, and the curricular and co-curricular programs are diverse. The pursuit of academic excellence in the district reflects the deep belief of all students can learn and all students deserve high-quality instruction in the
classroom. We have high academic expectations for basic literacy. The educational program encourages critical thinking and a love of learning.

The Carol School District has traditionally been high achieving and is currently rated a B district by the State Department of Education. Carol School District is a comprehensive pre-k-12 school district with over 2,160 students enrolled in five schools. Mayberry Elementary, pre-kindergarten-grade one; Middle Elementary, grades two-three; Upper Elementary, grades four-five; Junior High, grades six-eight; and Senior High, grades nine-twelve. An experienced faculty serves a full range of students with the student-ratio averaging 20 to 1.

The county in which Mayberry Elementary School is located has a population of 19,085, and the city has a population of 7,208 based on the latest census. The population density is 956 per square mile. The median age in Mayberry is 40.6 and our poverty level sits at 35.06%. The median household income is $17,894, with 49% of the children living in single-parent homes. Our high school graduation rate is 76.90%. Of the residents of Mayberry, 85% were born here, 14% were born out of state, 0% were born outside of the United States and 1% was foreign-born.

Mayberry Elementary School serves 567 children who are in pre-k, kindergarten, and first grade. We are a rural school serving a community which is predominantly white and African American. We service students of which 38% are white, 58% are African American, 2% Asian, 0.2% Pacific Islander, 0.4% American Islander and 3% Hispanic. The residents are middle to low income. Of our students, 77% receive free and reduced lunch.

At Mayberry Elementary the Mississippi Kindergarten Readiness Assessment (MKAS) scores have been consistently in the top five of the state since 2015, the first year the test was given. Two of these years we held the number one spot. Although we have these outstanding
MKAS scores, we still have 11 students in the bottom 10% in reading on this test which means they are considered our at-risk students.

Mayberry’s faculty and staff consists of 74 members. Of those, 34 are certified staff members and 40 non-certified members. Of the faculty and staff members, 61 (approximately 82.4%) graduated from Mayberry High School. Out of the remaining 13 members, nine are products of public schools. The school climate is positive and fun for teachers and students. We are like one large family which supports each other inside and outside of school. Teacher turnover in our school is low, so it is very hard to get a job unless someone retires. The industry in Mayberry is limited. The school district, Wal-Mart, the hospital, and three small industrial companies provide employment to most of our students’ families.

We have a warm inviting culture, so we do not have any major discipline issues. We offer group counseling twice a month in every classroom which includes pre-kindergarten through first grade. We provide tutorial services for those in need of extra help. Assistant teachers are a vital part of our success. They enable us to teach in small groups, which allows more individual time per student.

The community involvement is embedded at Mayberry Elementary School. We have a relationship with our stakeholders which include the students, the parents, and the community. Intentional efforts to involve stakeholders at Mayberry Elementary School include Junior Auxiliary volunteers, high school students from the vocational center, parent volunteers, community leaders, as well as youth and adult mentors. We have weekly readers, Christmas family craft day, grandparent day, superintendent and principal luncheon, and Dr. Seuss week. Parent academy is offered five times a year for our pre-k parents. During the parent academy sessions, resources are given and teachers discuss strategies to help their children.
Although all of these services are in place, year after year the data shows Mayberry Elementary has a need to make changes to the existing reading program to assure these at-risk students become successful readers to positively impact their lives. Once identified, what is being done to meet the needs of the at-risk students? We identified 11 at-risk students in the bottom 10% in pre-kindergarten based on MKAS scores from August of 2018. The scores of the at-risk students range from 304-340. The average scale score for pre-kindergarten was 393. Each classroom has one or two at-risk students. The students took the MKAS post-test in the first week of May 2019. Upon receiving the results, the bottom 10% were reevaluated. (See Table 1).

Table 1

**MKAS Accountability Results Comparison from August 2018 to May 2019 for Mayberry**

<table>
<thead>
<tr>
<th>Literacy Qualifications</th>
<th>August 2018</th>
<th>May 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Emergent Reader</td>
<td>300-487</td>
<td>102</td>
</tr>
<tr>
<td>Late Emergent Reader</td>
<td>488-674</td>
<td>9</td>
</tr>
<tr>
<td>Transitional Reader</td>
<td>675-774</td>
<td>0</td>
</tr>
<tr>
<td>Probable Reader</td>
<td>775-900</td>
<td>0</td>
</tr>
</tbody>
</table>

**Mayberry At-Risk Students**

| Early Emergent Readers     | 305-340     | 11       | 11       |

This program and evaluation was revised due to COVID-19. We were not able to give state tests because all Mississippi schools were closed. The MKAS was scheduled for the second week of April. Our benchmark data which was administered the week before Spring Break was utilized as end of year data.
As principal, it is my duty to provide the leadership needed to make sure every student is successful in reading. Reading is the key to everything. It is relevant to conduct problem-based research to examine what is being used and what might be added to reach these students. These opportunities allowed strides to be made toward improving student achievement and continued growth in reading to the level.

**Justification of the problem.**

The development of strong and comprehensive reading skills is imperative to a well-functioning, productive and successful adult. These skills are developed early in childhood. According to the Council on Early Childhood (2014), 34% of children entering kindergarten lack the basic language skills needed to learn how to read. Mississippi and the nation must pay attention to the development of these reading, writing and other related skills in our children.

Improving the quality of education for at-risk students is a leading challenge in our educational system. We live in a world filled with reading. Students should be guaranteed every opportunity to succeed in this information-driven society. Children today are exposed to more reading material than ever before at school as well as on the internet, television, billboards, and street signs causing the reading to become a relevant and essential need in the life of every child. The ability to read has become the foundation our information-driven society is built upon.

In order to help these at-risk students meet proficiency, we must meet the needs of each student. When children have a strong foundation of learning, they do not get behind and stay in school, graduate, and pursue careers and training to successfully transition into adulthood. This action research determined if the Michael Heggerty Phonemic Awareness Model helped at-risk readers reach proficiency in reading to achieve academic success.

**Audience.**
The eight teachers and 11 children who participated in the Michael Heggerty Phonemic Awareness Model benefitted from the process and outcomes of this applied research at one public elementary school in Mississippi. The goal of this model was to equip the teachers with the necessary training and skills needed to monitor and adjust their teaching practices to better meet the needs of the identified at-risk readers. This allowed the teachers to make changes in their teaching practices to meet the specific needs of the at-risk students in their classroom. The school that participated in this study was Mayberry Elementary School, located in a rural community within Mississippi.

The applied research study was designed to set targeted goals and objectives based on current research and practices; create and implement a research-based action plan, evaluate the results, and adjust the plan for future use. However, in regards to the Michael Heggerty Phonemic Awareness Model, there is little research. Researchers may find the findings useful as they continue to search for answers for ways to help at-risk readers. It is my hope this applied research study gave a better understanding of ways teachers can adjust their teaching practices to meet the needs of the at-risk readers in kindergarten. Throughout this process, the teachers gained knowledge regarding inclusive practices within the classroom.

This model may be used in other schools in the district which will allow students, teachers, and administrators to benefit from the outcomes of the process. The results of this study provided some insights and information on how they can continue to find new teaching techniques to reach at-risk readers. Additionally, educators across the state may be encouraged to use this model to meet the needs of each at-risk student so they can reach his or her full potential.

**Purpose Statement**
The purpose of this applied research study aimed to help at-risk readers improve phonemic awareness in kindergarten at Mayberry Elementary so the students can become successful readers. The research process began with a description of the problem at Mayberry Elementary School and a justification for the need to conduct research. A review of the literature is presented in chapter two. Through a collaborative approach with teachers and administration, an action plan was developed, implemented, and evaluated. To develop the plan, teachers and administration had group discussions to review the data and discuss the process to support the at-risk readers. Regular meetings, observations, and data review of student achievement throughout the year was ongoing. This allowed the process to be amended as necessary. Finally, post surveys were used to determine if the model was effective in reaching at-risk readers.

The central phenomenon of this applied research study was to increase student achievement of at-risk readers through the Michael Heggerty Phonemic Awareness Model. A program evaluation was completed to provide both formative and summative assessment about the program action plan and its elements. The researcher utilized qualitative data from observations, focus groups, and interviews as well as quantitative data from surveys and student assessments in the evaluation process. In conclusion, the purpose of this applied research was to increase student achievement of at-risk readers in kindergarten at Mayberry Elementary School.

**Research Questions**

The goal of this applied research project aimed to help at-risk readers improve phonemic awareness in kindergarten at Mayberry Elementary so the students could become successful readers. This research study assessed the implementation process of the Michael Heggerty Phonemic Awareness Model. The following research questions were used to evaluate the action plan:

1. What was the impact of the Michael Heggerty Phonemic Awareness Model on the at-risk readers in kindergarten at Mayberry Elementary?
2. How effective was the collaborative approach with teachers and administration in developing, implementing, and evaluating the action plan?
3. What were the key factors that contributed to the success of the action plan?
4. How did the regular meetings, observations, and data review of student achievement throughout the year affect the process and outcomes of the study?
1. Did the implementation of the Michael Heggerty Phonemic Awareness Model result in improved phonemic awareness among at-risk kindergarten students at Mayberry Elementary as indicated with a 60 point increase on the MKAS score in April of 2020?

2. What were teachers’ perceptions of their efficacy in teaching phonemic awareness to at-risk students while implementing the Michael Heggerty Phonemic Awareness Model?

3. What were teachers’ perceptions of the training they received with the Michael Heggerty Phonemic Awareness Model?

4. What were the perceived benefits for at-risk students of the Michael Heggerty Phonemic Awareness Model?

5. Was the program implemented as it was designed?

Definition of Terms

The following definitions clarify the terminology used in this research.

Comprehension: Comprehension is the process of making meaning. It is connecting what you read and hear with your experiences. Background knowledge helps the reader understand the meaning of language.

Fluency: Fluency is the ability to read as well as we speak and to make sense of the text without having to stop and decode each word.

Knowledge of print: Knowledge of print refers to all the concepts related to how print is organized and used to convey meaning. Children begin to understand that print carries meaning but that written language is different from oral language.

Phonemes: Phonemes are the individual sounds that make up spoken words.
**Phonics:** Phonics is a method of instruction associating letters with the sound of speech.

**Phonemic Awareness:** Phonemic awareness is the ability to notice, identify and manipulate the individual sounds of spoken language.

**Phonological Awareness:** Phonological awareness is the ability to detect and manipulate sounds in a word at the syllable, onset, and rime level.

**Pre-kindergarten:** Pre-kindergarten refers to a setting that provides educational instruction for children four years old or younger.

**Vocabulary and Language:** Oral language is the foundation of literacy. Literacy learning begins with listening and speaking.

**Overview of the Study**

This applied research study was organized into five chapters. The first chapter details the need to help at-risk readers improve phonemic awareness in kindergarten at Mayberry Elementary so they can become successful readers. The remaining chapters of this action research study were dedicated to presenting relevant research, describing the development and implementation of the action plan, and program evaluation, presenting the data, and analyzing the findings. Chapter two provides relevant research related to improving reading literacy achievement for elementary children in grades kindergarten and first. Chapter three discusses the development, implementation, and the evaluation of the action plan and program evaluation. Chapter four presents a review of the evaluation results of the study. Chapter five presents the conclusions and future implications for further study and implementation.
CHAPTER II
LITERATURE REVIEW

Introduction

"Learning to read is a major milestone and should be an event to celebrate" (Ackerman, 2004, p. 1). Teaching children to read has been an objective for parents and educators for many years, but the methods of how to do so are often debated. The controversy over what defines effective reading instruction has been ongoing since the beginning of education. Because of the increase in rigorous teacher evaluations and high-stakes testing, the search for the perfect techniques of reading instruction has increased exponentially. The need to show growth and high achievement with all reading students presents a challenge for educators (Gulek, 2003). For decades reading has been taught to children of all ages through various ways of instruction. Student learning is the main goal of educators and learning happens when best practices are consistently applied on a daily basis in the classroom (Crumly, Dietz, & D'Angelo, 2014).

This chapter presents a summary of the literature related to improving reading literacy achievement for elementary children in grades kindergarten and first. My mixed-methods study explored what research suggests works to help at-risk students in an elementary school. This review supports this applied research which helped me develop and implement an action plan to improve reading literacy for elementary children. For the purpose of this study, this review is divided into the following sections: (a) historical literature of teaching reading, (b) the need for best practices, (c) at-risk readers, (d) role of the family in motivation for reading, and (e) a
summary. The resulting action research plan, derived from this information, which focused on improving reading literacy, is explained in Chapter 3.

**History of Reading Instruction**

Reading is one of the most important skills children acquire in elementary school. "Reading disability and illiteracy are among the most pressing educational issues facing the United States today. At least 40% of America's fourth-graders are unable to read at grade level and a similar proportion of adults read at the lowest two levels of prose literacy" (Sherman, & Ramsey, 2006 p. 24). One must investigate the teaching strategies used throughout history to determine the best strategies to teach reading. A look back to the beginning of reading instruction will reveal lessons learned by the earliest educators.

Reading instruction in the United States can be dated back to the first Jamestown settlement in 1607. Between 1607 and 1840, the majority of reading instruction was based on religion and taught primarily about morally high men (Vogt & Shearer, 2007). Recognition of the alphabet, knowledge of the Bible verses, and recitation of poetry was the main focus of instruction (Brown, 2014). Textbooks were pieces of wood with the text either carved or printed on the separate pieces. Sometimes teachers would place a piece of the animal horn on top of writing for protection. The setting for most beginning reading instruction happened on Indian reservations, slave quarters, or church schools (Venezky, 1986). Regardless of where it took place, reading would soon play an important role in American history.

19th century.

The impact of the Civil War and westward expansion changed our country and reading instruction developed. The first readers were published in 1841 by Reverend William Holmes McGuffey (Vogt & Shearer, 2007). Instead of focusing on alphabet instruction, educators began
to introduce the whole to a part method of reading instruction. Children were given whole words to memorize, known as sight words (Barry, 2008). There were six readers and each one increased in difficulty. The text included in the readers was primarily moralistic and based on white Protestants beliefs (Vogt & Shearer, 2007, p. 7). The first reader included 55 lessons about a child's code of ethics dealing with truthfulness, promptness, honesty, and kindness. The second reader moved on to lessons about biology, history, botany, and astronomy. Also included in this reader were writings about how children should behave toward God, parents, teachers and the poor. The final four readers were for middle and high school age students which included works from Shakespeare and Charles Dickens (Vogt & Shearer, 2007).

Phonics was introduced into reading instruction during the Civil War. "Readers were given to children which included an invented or reformed alphabet, diacritical markings on the traditional alphabet, and synthetic phonics, an approach which converts letters into sounds and then blends the sounds" (Barry, 2008, p. 37). Phonics is the relationship between letters and sounds. Isaac Pittman created the first phonemic alphabet to spread this movement. George Watt, a phonemic expert hired by Brigham Young University created a new version of the phonemic alphabet called the Deseret alphabet (Barry, 2008).

Instead of a new alphabet, some educators believed the use of diacritical markings could show students how to pronounce letters. Edward G. Ward developed a popular set of readers at the end of the 1800s using diacritical marks, but the diacritical phonics method ended in the 1880s. Shortly thereafter, the synthetic approach replaced it and is still implemented today.

20th century.

The beginning of the twentieth century encountered another significant change for education due to the vast increase in attendance in public schools. Both federal and state
legislatures provided additional support and funding to institutions of education. Although reading instruction continued to develop along with the need for more universal education, limited access to formal education was still prevalent, and the gap between the literate and illiterate widened (Vogt & Shearer, 2007).

The Bible was the main source of text for many and used as the primary source for reading instruction. Phonics was being used and widely accepted, but the question of how to teach phonics correctly still remained unanswered. Educators were not being properly trained before entering the classroom, and this lack of preparation led to the incorrect teaching and understanding of phonics by the students (Crumly et al., 2014).

Research in teaching reading arose in the 1930s. Dick and Jane books were popular basal readers (Gray, 1946), and they were used to teach children to read through the 1990s in the United States. The books were meant to portray the typical American family (Vogt & Shearer, 2007). There was not much diversity in the characters of the first readers. Forty years later, the second version of the first readers included more diversity which was representative of America, although the series was still focused on Dick, Jane, and Sally (Vogt & Shearer, 2007).

Reading instruction faced another change during World War II. The majority of soldiers were illiterate; therefore, they were unable to read the manuals and battle plans. Our soldiers were not prepared to properly defend our country because they lacked the basic foundational skill of reading (Brandt, 2001). Content area reading instruction was introduced, and expository and informational texts were then embedded into the reading curriculums.

In the late 1950s, the government began to give millions of dollars to reform educational programs to better prepare students in math, science and reading. There was much debate about the "best practices" in teaching reading, specifically the debate over phonics instruction. All
agreed phonics instruction was necessary, although how it should be taught was the problem (Brown, 2014).

In the late 1960s and early 1970s, the Initial Teaching Alphabet was experimentally implemented. It was called the Augmented Roman Alphabet and contained 44 characters. The purpose of the new alphabet was to allow easy transfer to the regular alphabet and text, but children were unable to transfer their learning (Vogt & Shearer, 2007).

Basal reading programs emerged in the 1970s and early 1980s. These programs were scripted and used skill practice with worksheets. They included decoding, vocabulary, comprehension, and life/study skills (Venezky, 1986). There was also a push on content area reading in social studies, math, and science. Connecting to the text became the new way of instruction in the 1980s and 1990s.

Whole language became the new idea in reading instruction in the 1970s. According to whole-language advocates, readers read to communicate their own interpretation of texts written by authors with the intent to communicate (Pearson, 1989). The whole language approach focused on putting the meaning behind the words instead of just reading the words.

21st century.

Background knowledge came to the forefront due to the increase of technology in schools in the 1990s (Vogt & Shearer, 2007), and the importance of phonics instruction was emphasized (Brown, 2014). Teachers must prepare students for a more demanding world, with higher expectations for students entering college or careers. Today reading teachers have standard-based instruction (Datnow & Hubbard, 2016).

The Common Core State Standards (CCSS) are an example of instructional standards. The CCSS have more rigorous instruction and higher expectations. Standards-based reading
instruction aims to improve the United States’ standing in the educational system rankings. Another goal is to make certain more students are prepared for college through more challenging reading instruction (Vogt & Shearer, 2007).

**Need for Best Practices**

In order for teachers to help develop proficient readers, all areas must be researched to find what works to help struggling readers. The field of reading education has been engaged in thinking about best practices for years. Throughout all of the different programs, teachers' goals are to teach the appreciation of good literature, to increase reading motivation, to develop reading comprehension, to learn from texts, and to be able to read accurately and automatically (Stahl, 1998). The themes found throughout the present review of reading research are the love of reading, vocabulary development, background knowledge, cooperative grouping, teacher modeling, and fluency.

Students who start out loving to read are a jump ahead. Sherman (1998) presents eight essays on the theme of how young children can become strong and successful lifelong readers. He reviews the debate over how to best teach young children to read. The study suggests, by reading aloud to young children and filling their world with print, parents and preschool providers lay the groundwork for literacy in the beginning. Next, a multi-aged classroom of first, second, and third-grade students who exhibit a love of reading, delve into literature and challenge themselves are described. Then an explanation of how a teacher brings reading down to earth for her first-graders is given. Creating eager readers can be established by using informal assessments to help mine text for meaning. Last a volunteer tutor describes experiences in giving kids an extra boost in reading. Teaching at its best includes instruction in all types of skills and an awareness of children’s background knowledge and stages of development. The research in
this study gives different examples of how young children can become strong and successful lifelong learners.

As educators, we must think outside the box to keep our young readers engaged. Iwasaki, Rasinski, Yildirim, and Zimmerman (2013) present a study of curricular engagement in which the teacher explored using music, specifically singing songs, as a fun and motivating way to accelerate reading progress. The belief is singing can be a useful instructional tool to teach reading to beginning readers. The process involves learning one new song per week, followed by repeated readings/singings, discussions of content, and activities related to phonemic awareness, phonics, fluency, and word work. On average, the children made more than a year’s reading growth during the duration of the teacher’s investigation. This study explores the possibilities and benefits of having struggling readers sing as an instructional strategy to enhance reading progress.

The more reading children do, the more quickly they will develop as readers. How much should young children read? McIntyre’s (2006) study examined the relationship between the development and instruction of reading. The study questioned the amount of time beginning readers should spend reading connected text in school. Based on a study of 66 children in 26 classrooms, the authors found children in the first-grade classrooms with less reading of connected text excelled more in their phonics learning than the children with more reading of connected text. There were no significant differences in other areas of reading achievement. Although, because the participants in the study were first grade “struggling” readers, they may have been developmentally ready for the phonics instruction they received. Children’s development is not always taken into account with phonics programs. The authors argue time spent reading might be more beneficial mediated by the classroom teacher in the earliest stages.
of beginning reading. They found four areas the teacher should intervene: (a) repeated readings, (b) choral or echo reading, (c) paired reading, and (d) assisted oral reading.

The face of content area literacy instruction is changing. Today educators are directing their attention to the importance of encouraging content area literacy instruction at even the earliest levels. Moss (2005) recommends in this study using multiple text types to link content learning with literacy, which will enable teachers to achieve goals more so than just helping students read their content area textbooks. The purpose of this study was to examine why and how effective elementary content area literacy instruction might reverse this situation.

**At-Risk Readers**

Struggling readers are present in classrooms in the United States. A teacher may notice a student who struggles in the area of reading through assessment, class assignments, and/or reading activities. Balajthy and Lipa-Wade (2003) conducted case studies which bring to life the specific problems struggling readers are likely to face and illustrate research-based instructional strategies can help get learning back on track. They identified three distinct types of struggling readers with which teachers are familiar. They are the “catch-on reader,” the “catch-up reader,” and the “stalled reader.” The causes and consequences of literacy difficulties are also explored, giving elementary teachers a better understanding of how to meet the needs of each child.

Reading Recovery is one of the most researched literacy programs worldwide. Using a hierarchical linear modeling (HLM) v-known analysis, D’Agostino and Harmey (2016) examined if effects differed in the United States versus other nations, if experiments yielded larger effects than quasi-experiments, if the effects changed over time, and if the type of outcome mediated the impact estimates. The study also considered the sustained effects of the intervention. After reviewing 203 primary studies, 16 were identified which met the criteria, such
as treatment fidelity and experimental or high-quality quasi-experimental design. Overall, the effects did not change over time, but the effects did improve significantly from earlier to later studies. The study also found the long-term effect may diminish, but there were too few studies to estimate the sustained impact with confidence. The .59 overall effect places Reading Recovery in the top 10% in terms of the impact of early literacy programs. This study provided data in many areas to review the program Reading Recovery. The impact of early literacy programs shows a positive impact.

Differences in content knowledge may account for differences in understanding text. Elleman, Olinghouse, Gilbert, Compton, and Spencer (2017) conducted a study to compare the effects of two strategy-based comprehension treatments intended to promote vocabulary and content knowledge for elementary students at risk for developing reading difficulties with a traditional content approach. The study examined the effectiveness of strategy versus non-strategy instruction on reading comprehension, vocabulary, and knowledge acquisition. The study considered the trade-offs between using a program focused on building vocabulary and a program focused on content knowledge through strategy-based dialogue. The findings suggest practitioners should focus heavily on vocabulary when using expository texts with young children. Based on the results, it was suggested to use blending the best of content and strategy instruction to enhance comprehension instruction in the classroom.

McIntyre et. al., (2005) examined the effects of one year of supplemental instruction on first-grade children considered struggling readers on their phonics and reading comprehension achievement, along with second-grade children considered struggling readers on their reading comprehension achievement. This study included 196 children in 17 schools. The authors invited teachers to participate who were successful at implementing the instructional model awarded
through the grant program. The results suggest 39 first-grade children and 20 second-grade children served by models included daily intensive instruction as a supplement to their regular classroom reading instruction achieved significantly higher on the reading passage than did 84 first-grade and 43 second-grade children who did not receive supplemental instruction.

The purpose of Allington’s (2012) study was to explore the importance of identifying and improving the reading ability of at-risk readers and in the United States in first grade. He found two of every three students in U.S. schools have reading proficiencies below the level needed to adequately do grade-level work. The study found schools are not offering either high-quality professional development for kindergarten teachers nor expert tutorial instruction for at-risk kindergarteners. Three areas which schools focused on were not successful: using paraprofessionals to help struggling readers, using computer-based instructional programs, and using core reading programs. To effectively support young struggling readers, schools need to screen kindergarteners on the first day and provide additional high-quality reading instruction to those in need of it, continue to offer support in first grade, and engage students in high success reading. Engaging students with successful reading experiences and providing ongoing support for reading throughout the elementary school will make the difference for at-risk students.

Chard and Kameenui (1998) studied the frequency and progress of the reading of struggling readers. The basis of this study was to identify if progress has been made with best practices of instruction with struggling readers to prevent reading difficulties. First-grade struggling readers’ oral reading was observed during reading instructional time. There were 65 first-grade participants experiencing difficulties in beginning reading. Their teacher recognized them as at-risk for reading failure. Each participant was observed three times over a 12-week period in the spring of the first-grade year. Observers collected frequency data on participants’
oral reading at three levels of complexity: letter-sound, word-word part, and sentence-paragraph. Phonemic awareness, letter sounds, vocabulary, fluency, comprehension, and motivation are different areas which may cause difficulties. Throughout the observation period measures of student reading progress were also collected. The findings of this study revealed most instruction for struggling readers may not be aligned with recent research on preventing reading difficulties, and struggling readers receiving reading instruction aligned with best practices may be only making minimal progress.

Fien et. al., (2015) examined the efficacy of a multi-tiered intervention on early reading outcomes for first-grade students at risk for reading difficulties. Schools were randomly assigned to the treatment or control condition. In the fall of first-grade, students were assigned to an instructional tier on the basis of Standard Achievement Test-10th edition scores (31st percentile and above-Tier 1; from the 10th to the 30th percentile-Tier 2). In both conditions, students identified as at-risk received 90 minutes of whole group instruction and an additional 30 minutes of daily small group intervention. In the treatment condition, teachers were trained to enhance core reading instruction by making instruction more explicit and increasing practice opportunities for students in Tier 1. In addition, at-risk readers were provided an additional 30-minute daily small group intervention with content was highly aligned with the Tier 1 core reading program. Results indicate significant, positive effects of the intervention on students’ reading and reading comprehension and total reading achievement.

Implementing best practices for reading helps with using the strategies needed to meet the needs of at-risk readers. Response to intervention, ability grouping, cognitive strategy instruction, foundation, initial instruction, review, and expansion are strategies used to help at-risk struggling readers. Vernon-Feagans, Bratsch-Hines, Varghese, Cutrer, and Garwood (2018)
designed a study to examine how to improve struggling readers’ early literacy skills through a tier two professional development program for rural classroom teachers. The results were shared of a randomized controlled trial replicated and extended research on the Targeted Reading Intervention (TRI), a professional development program for kindergarten and first-grade teachers in low-wealth rural schools helps enhance literacy skills of struggling readers.

Literacy coaches gave feedback to classroom teachers as they worked one-on-one with struggling readers in weekly webcam coaching sessions (Vernon-Feagans et al., 2018). Teachers worked with one child for 15 minutes a day for six to eight weeks before moving to another struggling reader. Hierarchical linear models replicated previous findings in which struggling readers in TRI treatment classrooms showed greater gains in early literacy compared with struggling readers in control classrooms. This study extended previous TRI work by examining whether teachers who received the second year of TRI training produced greater gains for their students compared with their first year. Results showed no advantage of teachers’ two year TRI participation (Vernon-Feagans et al., 2018).

During the spring of 2004, research was conducted exploring the emotions of struggling readers. Triplett (2005) conducted a study in finding out how school contexts, curriculum, and relationships influence students’ experiences of struggle. In this study, there were 14 first, second, and third graders identified for reading intervention at their school. Field notes and interviews with students and teachers were analyzed. It was concluded literacy activities allowed students to be engaged cognitively and emotionally during the book discussions which took place in their reading classroom. Although, book discussions were not a part of reading instruction in their regular classrooms, which contributed to their experiences of struggle. The
researcher found the stories shared by several young readers concur with and enhance the growing body of evidence in which book talk inspires in the minds and hearts of readers.

In a study of strategies to improve reading achievement, Canady and Canady (2012) found focusing on methods will raise reading ability among struggling readers. The benefits of using literacy coaches for individual instruction, grouping students into literacy groups, and creating an early literacy team were explored in the study. The study suggests strategies used consistently with struggling readers equals success. Murphy and Hernandez (2011) conducted a study on the positive impact of acquiring core skills such as phonemic and phonological awareness can have to ensure successful readers. In this study a reading group of four students categorized as emergent readers was placed in the lowest reading group. The teacher continuously reviewed core skills, and the results of this study were very similar to the Canady and Canady (2012) study. This study proves consistency is the key to success.

Compton et. al., (2010) designed a study to identify measures when added to a base first-grade screening battery to help eliminate false positives and to investigate gains in efficiency associated with a two stage-gated screening procedure. They tested 355 children in the fall of first grade and assessed for reading difficulty at the end of second grade. The base screening model included measures of oral vocabulary, rapid naming skill, phonemic awareness, initial word identification fluency (WIF). Short-term WIF progress monitoring, dynamic assessment, running records, and oral fluency were each considered as an additional screening measure in contrasting models. The results indicated the addition of WIF progress monitoring and dynamic assessment, but not running records or oral reading fluency, significantly decreased false positives. The two stage-gated screening process using decoding efficiency in the first stage significantly reduced the number of children requiring the full screening battery.
The purpose of Granger and Grek’s study (2005) was to explore the effectiveness of paraprofessionals’ and teachers’ instruction for at-risk first graders. A group of paraprofessionals in Florida worked with students struggling to read at grade level. The students’ gains show the intensive attention of these professionals to small groups of students can make a significant difference. This study found these first graders gained literacy skills when: (1) participating paraprofessionals were carefully selected; (2) paraprofessionals used an explicit research-based curriculum; and (3) the paraprofessionals took part in high-quality professional development. At-risk readers present educators with a challenge to meet their needs (Canady and Canady, 2012).

Miller (2003) also did a study on using classroom assistants to provide help for struggling readers. This study evaluated the possibility of using classroom assistants as tutors of first-grade struggling readers in a school with limited financial and personal resources. The tutoring program offered assistance to 54 first graders in two cohorts. Classroom assistants scheduled tutoring a minimum of four times per week for 30 to 40 minutes per session. The students who received tutoring outperformed controls at the end of first grade. This study focuses on the benefits of using classroom assistants as tutors and the related questions of when tutoring should be offered, its duration, and its evaluation.

The Five Components of Reading

The National Reading Panel (2000) identified five skills which are essential for reading development: phonemic awareness, phonics, oral reading fluency, vocabulary, and comprehension. Two of these skills, phonemic awareness and phonics, highly involve the alphabetic principle of reading. These skills became the foundation for the Reading First legislation which had a role in the No Child Left Behind Act (Paris, 2005).
Phonemic awareness is the first of the five skills essential for reading development and is the first step that children traditionally take in learning to read. Phonemes, which are known as the smallest units making up spoken language are combined to form syllables and words. Phonemic awareness is known as the student’s ability to focus and then manipulate the phonemes in spoken syllables and words. According to the National Reading Panel (2000), if children are taught phonemic awareness, their reading improves more than instruction which has no emphasis on phonemic awareness.

The second skill essential for reading development is phonics. This is the relationship between letters or letter combinations in written language and the individual sounds in spoken language. Teaching students how to use these relationships to read and spell words is the role of phonics instruction. The National Reading Panel (2000), suggested systematic phonics instruction enhances children’s success in learning to read and is also more effective than instruction which teaches little or no phonics.

The third skill essential for reading development is fluency. Fluency is the ability to read as well as we speak while being able to make sense of the text without stopping to decode the word. Readers who are fluent can read orally with accuracy, speed, and the appropriate expression. According to the National Reading Panel (2000), guided oral reading and repeated oral reading had a positive and significant impact on reading fluency, comprehension, and word recognition in children of all ages.

The fourth skill essential for reading development is vocabulary. The development of vocabulary is intertwined with comprehension. The larger the reader’s vocabulary the easier the task is in making sense of the text. The active engagement in instruction which includes learning words before reading, various exposures, incidental learning, learning in rich contexts, and use of
computer technology. The National Reading Panel (2000), suggests vocabulary can be learned through storybook reading or listening to others, and vocabulary should be taught directly and indirectly.

The final essential skill for reading development is comprehension. Comprehension is the process of making meaning by connecting what you read and hear with your experiences. According to Balajthy (2003), background knowledge is important in helping the reader understand the meaning of language. Young readers develop text comprehension through answering questions and retelling the story.

Role of the Family

Ackerman (2004) designed a program with the encouragement of her principal, and the help of a children’s librarian at the public library, the community coordinator at a nearby Barnes and Noble, and a children’s book buyer at a local independent bookstore. The program was called “Reading Debut.” The goal of this program was to make children’s entrance into the world of reading a magical experience so the first graders would never forget this experience. Initially, these programs were set up in three places, lasted about 75 minutes, and featured approximately seven readers. Local authors were invited to take part, and parents were encouraged to participate. The study determined to work together with all stakeholders, including the family, presents a much needed positive impact on beginning readers.

Interest is currently high among practitioners and researchers on the role of the family and the value of home-school collaborations in the promotion of motivating children to read. Baker (2003) found in this study many collaborative interventions involving home and the school have intensified the reading motivation of struggling readers as they enhanced comprehension. The study was primarily to inform practitioners working with struggling readers
of the most recent research on home influences on reading motivation, and to provide research-based suggestions to teachers as to how they might enlist the assistance of parents in motivating struggling readers. They were: (a) making reading enjoyable, (b) interacting with print at home, (c) sharing storybook reading, and (d) modeling and support from parents. Teachers must enlist the assistance of parents in motivating struggling readers. Research has shown supportive home environments foster motivation for reading, which leads to more frequent voluntary reading, which improves reading achievement. Strong relationships between home and school develop successful readers.

Summary

American reading instruction has changed throughout history as the country has evolved, and the controversy surrounding best practices in effective reading instruction continues. The need to show growth with all students is challenging for educators (Gulek, 2003). The literature review in this section consists of four primary parts. The historical literature of teaching reading is explained in order to better understand where we are today. The importance of best practices to better meet the needs of at-risk readers is identified, and current research related to increasing student reading achievement for at-risk readers is reviewed. This section identifies different areas which may cause problems, and this leads to the strategies needed to meet the needs. The last section of this review identifies the role of the family in motivation for reading. This research review supported the need to develop a clear action research plan with three elements which addressed the needs of at-risk readers. Through professional development, teacher professional learning communities, and data meetings, the action plan will seek to increase reading literacy achievement for at-risk students.
The upcoming chapter will explain how this literature review will impact decisions as an action plan is created and developed to increase reading literacy achievement for at-risk students, as well as the methods and evaluation of the action plan.
CHAPTER III
RESEARCH METHODS

Introduction

Viable day by day instructional practices are a higher priority today because of expanded testing and accountability in education (Gulek, 2003). These effective practices are imperative in reading instruction. Having literate and well-educated children is crucial to the future of the nation and Mississippi, and for each individual child. Literacy is defined by The National Institute for Literacy as “all the activities involved in speaking, listening, reading, writing, and appreciating both spoken and written language” (2009). Through basic interfacing with the world and encountering life, children are continually reading the world (Freire & Slover, 1983). The building blocks for reading have been set up when they enter school.

Presently, a multitude of reading programs, curricula, and intervention strategies are available to address the needs for teaching every student to read on grade level. At Mayberry Elementary, we have utilized and experienced some success with Saxon Phonics, Abeka Reading, and Reading Horizons. Despite these efforts, we still have 11 students which represent the bottom 10% in reading who need to be able to reach success. These 11 were identified using the Mississippi Kindergarten Readiness Assessment (MKAS) scores in pre-kindergarten from August 2018. Based on the average growth over the past five years of the lowest 10% in kindergarten at Mayberry Elementary from fall to spring I selected a point gain of 60 points for the identified 11 students. The average gain was 56.3 and the median was 53 points. Mississippi Department of Education reviewed the Reading Proficiency Indicators and determined students
are expected to score a 530 or above at the beginning of kindergarten. Based on the review by Mississippi Department of Education, 85% of students scoring 530 or higher at the beginning of kindergarten are proficient in reading at the end of grade 3. Students with a score below 530 usually need additional help.

This chapter presents the applied research design and methods used in this research to address the problem of helping at-risk readers improve phonemic awareness in kindergarten at Mayberry Elementary so they can become successful readers. Improving the organization’s ability to help at-risk readers within the school, to develop a plan for improvement through training, and to learn to use data for a deeper understanding of student achievement in the Michael Heggerty Phonemic Awareness Model are parts of this applied study. Beginning with a description of the collaborative process, the first part of the chapter provides an explanation of the process used in the development of the action plan. With improving phonemic awareness of at-risk readers in kindergarten the basis of this action plan, this section provides an overview of collaboration with stakeholders, a review and timeline of the process, existing research which guides the work, and internal data which has been examined to help create the action plan.

The entire action plan is presented in the second portion of this chapter. The goals of this action plan seeks to implement the Michael Heggerty Phonemic Awareness Model to improve phonemic awareness in kindergarten with at-risk readers to improve student achievement. Additionally, this action research study aimed to improve the capacity of the organization’s ability to address a problem of practice within the school, set goals, develop a plan for improvement, and evaluate the progress. Throughout the action research, I attempted to answer five questions. Those questions are stated as follows:
1. Did the implementation of the Michael Heggerty Phonemic Awareness Model result in improved phonemic awareness among at-risk kindergarten students at Mayberry Elementary as indicated with a 60 point increase on the MKAS score in April of 2020?

2. What were teachers’ perceptions of their efficacy in teaching phonemic awareness to at-risk students while implementing the Michael Heggerty Phonemic Awareness Model?

3. What were teachers’ perceptions of the training they received with the Michael Heggerty Phonemic Awareness Model?

4. What were the perceived benefits for the at-risk students of the Michael Heggerty Phonemic Awareness Model?

5. Was the program implemented as it was designed?

Each element of the action plan served as a part of the overall outline designed to help at-risk readers improve phonemic awareness in kindergarten at Mayberry Elementary so they can become successful readers. For each element, a description of the systems, participants, timelines, responsible parties, and resources is presented in detail and the measurable goal associated.

When collecting data, the results needed to be precise, stable and reproducible. Observers were trained in the observation techniques being used to make sure everyone understands to ensure interrater reliability among observers. I conducted the training and led discussions about the theory of reliability.

The final portion of Chapter Three presented the evaluation of the action plan. Upon the completion of one year of the action plan, a program evaluation was conducted to analyze goal
attainment and the development of the organization’s capacity to utilize an applied research method to address problems. For each element, formative and summative assessments were conducted using qualitative and quantitative data. The research questions presented in Chapter One and again in this chapter were evaluated using multiple sources of data and analyzed through the program evaluation process which is presented in the final portion of this chapter.

**Development of the Action Plan**

In the beginning of the fall of 2018, the district administrative team met to review school accountability data from the state. After two of the three elementary schools in the Carol School District were identified by the Mississippi Department of Education as Additional Targeted Support and Improvement (ATSI) schools, district leaders which consisted of the Superintendent, Principals, Federal Programs Director, and Special Education Director realized the need for increased student achievement at each of the elementary schools with the bottom 10% in reading. When talking with our team about this data, we soon realized the need to take immediate action to try something new to target the bottom 10% in reading.

The three elementary principals began having conversations with our teachers. The elementary school where I am principal was the only elementary school in our district not identified as an ATSI school by the Mississippi Department of Education. Although when we sat down as a district administrative team and disaggregated the data, we soon realized the increase of students in the lower 10% in reading at the other two elementary schools. The elementary school where I am the principal is the feeder school, so I must try to reach every student to help with their success in reading before they are promoted to the other two schools. MKAS data from August of 2018 identified 11 students as at-risk. The data from the MKAS post-test from May 2019 continued to identify the same 11 students as at-risk. These 11 students
are in the bottom 10% at Mayberry Elementary (See Table 1). Star Early Literacy divides student performance into four levels. A complete description of each level can be found in Table 2.

Table 1

*MKAS Accountability Results Comparison from August 2018 to May 2019 for Mayberry*

<table>
<thead>
<tr>
<th>Literacy Qualifications</th>
<th>August 2018</th>
<th>May 2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Emergent Reader</td>
<td>300-487</td>
<td>102</td>
</tr>
<tr>
<td>Late Emergent Reader</td>
<td>488-674</td>
<td>9</td>
</tr>
<tr>
<td>Transitional Reader</td>
<td>675-774</td>
<td>0</td>
</tr>
<tr>
<td>Probable Reader</td>
<td>775-900</td>
<td>0</td>
</tr>
</tbody>
</table>

**Mayberry At-Risk Students**

<p>| Early Emergent Readers        | 305-340     | 11       | 11       |</p>
<table>
<thead>
<tr>
<th>Performance Level</th>
<th>Scale Score Range</th>
<th>Descriptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Early Emergent Reader</td>
<td>300-487</td>
<td>Student is beginning to understand that printed text has meaning. The student is learning that reading involves printed words and sentences, and that print flows from left to right and from the top to the bottom of the page. The student is also beginning to identify colors, shapes, numbers, and letters.</td>
</tr>
<tr>
<td>Late Emergent Reader</td>
<td>488-674</td>
<td>Student can identify most of the letters of the alphabet and can match most of the letters to their sounds. The student is also beginning to “read” picture books and familiar words around the home. Through repeated reading of favorite books with an adult, students at this stage are building their vocabularies, listening skills, and understandings of print.</td>
</tr>
<tr>
<td>Transitional Reader</td>
<td>675-774</td>
<td>Student has mastered alphabet skills and letter-sound relationships. The student can identify many beginning and ending consonant sounds and long and short vowel sound and is probably able to blend sounds and word parts to read simple words. The student is also likely using a variety of strategies to figure out words, such as pictures, story patterns, and phonics.</td>
</tr>
<tr>
<td>Probable Reader</td>
<td>775-900</td>
<td>Student is becoming proficient at recognizing many words, both in and out of context. The student spends less time identifying and sounding out words, and more time understanding what was read. Probable readers can blend sounds and word parts to read words and sentences more quickly, smoothly, and independently than students in the other stages of development.</td>
</tr>
</tbody>
</table>
When I talked with my teachers about the achievement data the conversations always seemed to go back to the students’ lack of understanding of phonemic awareness. Therefore, in the fall of 2018 we assembled a team. The team comprised of the principal, pre-k, kindergarten, and first grade teachers, curriculum coordinator, counselor, parent center coordinator, federal programs coordinator, and parents. We used three guiding questions as we began to collaborate. The first question examined how the lack of understanding in phonemic awareness affects the process of learning to read. The second question examined existing research and processes which have been used to successfully improve phonemic awareness in kindergarten so students can become successful readers. The third question focused on what organizational pieces such as the implementation process and training might positively aid in the change for success.

Planning began in the late fall of 2018 to search for a new and innovative way to help in the teaching of phonemic awareness to kindergarten students at Mayberry Elementary. This group began meeting together in May of 2018 and continued through the 2020 school year. Based on these meetings, the team identified the need to help at-risk readers improve phonemic awareness in kindergarten in order to become successful readers.

Question one was used to guide the team through questions which could be used in interviews with teachers in order to gather perspectives of causes and effects in the lack of understanding in phonemic awareness as related to the process of learning to read. To address question two, the team felt after reviewing the existing research and processes to successfully improve phonemic awareness, the Michael Heggerty Phonemic Awareness Model would support the at-risk readers in kindergarten at Mayberry Elementary. The team researched various models of teaching reading and agreed the at-risk students would benefit from an interactive approach to learning to read. The Michael Heggerty Phonemic Awareness Model is based on daily lessons
which contain the same eight phonemic awareness skills: rhyming, onset fluency, blending, identifying final or medial sounds, segmenting, adding phonemes, deleting phonemes, and substituting phonemes. Daily opportunities for working with letter names and sounds are included within a Letter Naming activity and students work with repeating sentences and nursery rhymes during the Language Awareness activities. Due to the daily practice in all 8 skills, students are able to build the necessary foundation to become automatic decoders of print. In addition, the model is cost-effective. Because phonemic awareness is an auditory skill, there is no student component to purchase. Other than the curriculum, each teacher will only need sets of letter flashcards for the daily letter naming activity. The third and final question used to assist in the developing of the action plan was what organizational pieces such as the implementation process and training which might be needed throughout the duration of the action plan.

In the development of the action plan, the team used relevant research presented in Chapter Two throughout the collaborative process. The need to show growth and high achievement with all reading students presents a challenge for educators (Gulek, 2003). The MKAS data shows we have 11 students in the bottom 10% in reading. Our team decided the action plan must provide the tools all stakeholders need to help these students find success in phonemic awareness in order to become successful readers.

There have been various ways of teaching reading to students throughout history. Reading has been taught to children of all ages for decades. The main goal of educators is student learning. Like the research in Chapter Two suggested, learning happens when best practices are consistently applied on a daily basis in the classroom (Crumly, Dietz, & D’Angelo, 2014). This research led the team to ensure consistent training is a vital component of the action plan. Additionally, Sherman (1998) studied how to best teach young children to read. This research
points to the importance of how young children can become strong and successful lifelong readers. Next, McIntyre’s (2006) study examined the relationship between the development and instruction of reading. A child’s development of word-level reading is substantially affected by phonological awareness skills, from learning letter names all the way to efficiently adding new multisyllabic words to the sight vocabulary. This research supports the importance of the developmental stage of reading. Finally, Allington’s (2012) study found schools are not offering either high-quality professional development for kindergarten teachers nor expert tutorial instruction for at-risk kindergarteners. This research supports the need for professional development for teachers in order to provide training and support on how to engage students with successful reading experiences and to provide ongoing support for reading throughout the elementary school in order to make a difference for at-risk students.

We were challenged as a team to find a proactive solution which involved all stakeholders to help at-risk readers improve phonemic awareness to become successful readers in kindergarten at Mayberry Elementary. The areas of professional development, implementation of the Michael Heggerty Phonemic Awareness Model, and student achievement were specific areas of focus in this action research plan. Together, we collaborated using published research to develop this action research plan where organizational learning took place.
The Action Plan

Table 3 provides the elements and details of the action plan

Table 3

*Action Plan*

<table>
<thead>
<tr>
<th>Element</th>
<th>Goals</th>
<th>Timeline</th>
<th>Responsible Party</th>
<th>Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Development</td>
<td>To help at-risk readers improve phonemic awareness</td>
<td>August 2019-May 2020</td>
<td>Consultant, and Principal</td>
<td>$4,540</td>
</tr>
<tr>
<td>Teacher PLC</td>
<td>Teachers develop a higher level of expectations and feel more supported with an increased level of collaboration between teachers</td>
<td>August 2019-May 2020</td>
<td>Principal</td>
<td>$350</td>
</tr>
<tr>
<td>Data Meetings</td>
<td>Teachers will learn to use data to drive instruction in order to grow as an organization</td>
<td>August 2019-May 2020</td>
<td>Principal and teachers</td>
<td>$250</td>
</tr>
</tbody>
</table>

**Element I---Teacher Professional Development.**

The first element of this action plan is professional development. Intentionally focus was placed on addressing the problem of helping at-risk readers improve phonemic awareness in kindergarten. The first step of the action plan involved professional development training on the Michael Heggerty Phonemic Awareness Model which included pre-implementation training on the phonemic awareness curricula, post-implementation, classroom observations, and phonics/decoding. Prior to the training, the teachers participated in a pre-implementation
interview (see Appendix A) about prior knowledge of the Michael Heggerty Phonemic Awareness Model. The information from the interviews was used as a baseline of prior knowledge to document teachers’ progress and to capture detailed information about the use of the model. Teachers were trained by a consultant with Literacy Resources, Inc. The consultant provided one day of training in December 2019 to provide support for implementation of the phonemic awareness lessons in the classroom setting. The consultant provided teachers and assistants with guidance throughout the 35-weeks of lessons and hand motions which are included for some of the skills. The professional development in the curriculum provided common language around the lessons, fidelity of implementation with the phonemic awareness skills, and consistency of instruction among classrooms. A deeper understanding of the curriculum helped teachers to see the importance of implementing phonemic awareness instruction into their literacy lessons. The lessons included 10 components, which are eight phonemic awareness skills and two additional activities to develop letter name and letter-sound recognition and language awareness. Teachers conducted phonemic awareness using the Michael Heggerty Phonemic Awareness Model for 45 minutes per day. The lessons consisted of flashcards, small group instruction, and whole group instruction. Collaboration with all stakeholders took place in the planning of the activities used in these 10 lessons. The activities are subject to change once all stakeholders meet and share ideas. The consultant with Literacy Resources, Inc. continued to be a resource for each teacher throughout the school year.

Upon the conclusion of the professional development training, the teachers were given a survey (see Appendix B) about the benefits of the training. This survey was used as a baseline for measurement of growth. Teachers were encouraged to reflect on their growth and
understanding from the training on how to support their at-risk readers to improve phonemic awareness in order to become successful readers in kindergarten at Mayberry Elementary.

Training continued after the consultant completed the professional development. The training was scheduled every two weeks, although training was added when needed. The training was held during grade-level planning time in the principal’s meeting room for one hour. Feedback was a vital part of this action plan. We monitored and adjusted based on the on-going feedback from all stakeholders as the action plan moved forward. I kept an advisor’s field notes/weekly support log which provided documentation as I observed the implementation of the Michael Heggerty Phonemic Awareness Model in the classrooms.

**Element II---Teacher Professional Learning Communities.**

In addition to professional development by the Literary Resources, Inc. and the bimonthly district training, the team met monthly for teacher professional learning community (PLC) meetings. The PLCs were an opportunity to create conditions for a learning environment for teachers in which innovation and experimentation could lead to student success in phonemic awareness. I led this team of 16 teachers in these meetings. We discussed in detail the implementation of the Michael Heggerty Phonemic Awareness Model. Teachers started the model in whole group. Once a routine was established and the first two lessons were mastered, the lessons were taught in small groups. Teachers were asked to share the challenges or success stories they encountered through the implementation of the new model. This PLC gave them an opportunity to seek solutions together. This also gave teachers a designated time to meet and collaborate. Each member of the team was engaged in sharing ideas to build on strengths and weaknesses in their individual implementation of the Michael Heggerty Phonemic Awareness Model while discussing what was effective and what was not in order to learn from one another.
Teachers were able to draw support from each other to gain continuous improvement. Collaboration between teachers contributed to school improvement and success. The teachers were asked to share activities they were currently using in their classroom related to the Michael Heggerty Phonemic Awareness Model. This gave the team an opportunity to collaborate with their peers.

The PLCs were an opportunity to empower the teachers to develop a higher level of expectations in the implementation of the Michael Heggerty Phonemic Awareness Model. I discussed the monitoring I would do through classroom observations two times weekly. Monitoring allowed direct feedback to the teacher. I kept an advisor’s field notes/weekly log to provide documentation on following suggested teaching strategies to learn if the teachers had developed the instructional skills needed in the implementation process to help at-risk students become successful readers in kindergarten. Teachers provided feedback based on student engagement and parent concerns. Each team member was a part of improving student learning in phonemic awareness. Working together in the PLCs, teachers reflected on their own processes and the development of their skills in the new model. Additionally during the PLCs, we had a time of reflection before dismissing after each meeting. We discussed the roles our stakeholders were having in the implementation of the new model.

Element III---Data Talks.

Data talks were held bi-monthly at Mayberry Elementary throughout the year. Developing a data team provided teachers the opportunity to collaborate on student data to improve student learning. During these meetings, each teacher reviewed student growth based on assessments of the Michael Heggerty Phonemic Awareness Model. Using data teams helped ensure all students were learning and making progress toward reaching proficiency levels (Besser, 2010). We
discussed concerns and areas of improvement. Educators need to engage in a process of collaborative inquiry to bridge the gap between student data and academic results (Datnow & Hubbard, 2016; Love, 2009; Love, Stiles, Mundry, & DiRanna, 2008). At the center of data teams are the continuous use of data to drive the decision-making process (Allison, 2010; Campsen, 2010; Kamm, 2010; Mandinach & Gummer, 2016). We used the data efficiently and effectively to drive our instruction. Teachers shared resources and strategies with one another.

The data talks provided the opportunity for the staff to reflect on what they had learned from implementing and monitoring the new model. We discussed and addressed the challenges in order to improve student achievement.

We were unable to use our May MKAS scores due to all state testing being suspended because of COVID-19. We used the last benchmark testing administered the week before Spring Break. In order for our scores to improve, we must help our at-risk readers in phonemic awareness in kindergarten at Mayberry Elementary so they can become successful readers. Not only does increasing our MKAS scores help our accountability rankings, but it helps ensure every student becomes a successful reader in order to be prepared for the future. Based on our MKAS scores from previous years, we continue to be in the top ten in the state of Mississippi. Although our scores reflect high achievement, we continue to have students in the bottom 10%. We have identified 11 students in this bottom 10%. We want to reach these at-risk students in order to have every child become a successful reader in kindergarten.

My goal in this action research plan was to positively affect phonemic awareness in kindergarten in order for at-risk students to become successful readers. My research looked at the growth of phonemic awareness in reading throughout the implementation of the Michael Heggerty Phonemic Awareness Model at Mayberry Elementary. Student achievement was
monitored weekly throughout the school year. We used iReady data to monitor student progress.

Teachers also reviewed common assessment data in the bimonthly data talks looking for trends in the data results. Teachers collaborated to disaggregate the data results, and each teacher kept a chart with student progress. These data talks were closely connected to the PLC meetings. The PLCs and data talks allowed informative conversations to increase our organizational learning at Mayberry Elementary. Additionally, these meetings allowed for changes in our instruction in the classrooms to meet the needs of individual students while allowing collaboration between teachers.

**Timeline.**

The district administrative team met to review the state accountability results in the fall of 2018. After two of the three elementary schools in the Carol School District were identified by the Mississippi Department of Education as Additional Targeted Support and Improvement (ATSI) schools, district leaders which consisted of the superintendent, principals, federal programs director, and special education director realized the need for increased student achievement at each of the elementary schools with the bottom 10% in reading. We realized the need to take action. Planning began in the late fall of 2018 to search for a new and innovative way to help in the teaching of phonemic awareness to kindergarten students at Mayberry Elementary.

The action plan began in August of 2019. The consultant with Literary Resources, Inc. did professional development with teachers and assistant teachers for one day in August 2019. We would have had the consultant return if additional professional development was needed. In September, teachers began meeting bimonthly with me for additional training. The training was held during grade-level planning time in my meeting room for one hour. We discussed feedback
from all stakeholders each month as the plan moved forward. Training was added as needed on any of the eight phonemic awareness skills: rhyming, onset fluency, blending, identifying final or medial sounds, segmenting, adding phonemes, deleting phonemes, and substituting phonemes.

In September 2019, the team began meeting monthly for teacher PLCs. This team consisted of 16 teachers. We discussed classroom observations, implementation of the Michael Heggerty Phonemic Awareness Model, and student achievement. Feedback drove the PLCs throughout the year. Revisions to the PLC meetings were determined by stakeholder input. I continued classroom observations of the implementation of the Michael Heggerty Phonemic Awareness Model throughout the action plan. I provided feedback for individual teachers.

Data talks were conducted bi-monthly beginning in August 2019 and continued through August 2020 with all members of our team. We were unable to have the May data talk due to COVID-19. We disaggregated data and used data to drive instruction to grow as an organization. We had the final data meeting of the 2019-20 school year in August 2020 to review the last benchmark testing that was done before Spring Break and reviewed individual student results. Helping at-risk readers improve phonemic awareness in kindergarten at Mayberry Elementary so they can become successful readers was the overall focus of this action plan. Teacher interviews took place the last week in August 2020 to glean insight into the teacher’s perceptions regarding the implementation of the Michael Heggerty Phonemic Awareness Model. The team reflected on the progress made as the instructional leader in helping at-risk readers with phonemic awareness in kindergarten at Mayberry Elementary so they can become successful readers. We as a team, along with our stakeholders planned the steps for the upcoming school year. Revisions to the action plan were made based on stakeholder feedback and results.
Responsible Party.

This action plan was the main responsibility of the team of teachers being led by me. The district leadership team was part of the beginning process. The actual action plan development involved all stakeholders. Following the first professional development training by the outside consultant, the training which was held every two weeks was developed, coordinated, and planned by me based on teacher feedback.

The teacher PLCs were held monthly. Each member of the team contributed to the meetings by sharing areas of strengths-based on data on the implementation of the Michael Heggerty Phonemic Awareness Model. For example, there are eight phonemic awareness skills to develop letter name and sound recognition and language awareness. Each teacher was responsible for presenting one of the eight skills in a PLC meeting. This allowed each team member to contribute to the meetings by facilitating a session.

I offered ongoing support to the team of teachers in the implementation process. The success of this action plan weighed heavily on the leadership and support provided to the teachers. I provided continuous feedback based on classroom observations, stakeholder feedback, monthly PLCs, and bimonthly data talks.

Resources.

The resources needed for this action plan included consultant fees and curriculum costs. The professional development cost for the consultant was $1,500 per day. The consultant provided one day of training and was a resource for teachers throughout the action plan. The ongoing training continued for the duration of the school year and was of no expense to the district. I was responsible for the training. Although it required time from the teachers, it was during the instructional day.
The Professional Learning Community meetings were also held during the instructional day during common planning time. I was the facilitator for these meetings. This was no cost to the district.

The biggest expense of the action plan to the district was the cost of the curriculum. The curriculum cost was $1,840. The cost of printing training materials, paper, and supplies was estimated to be $1,200. This estimate included the alphabet cards which were used along with the curriculum.

**Evaluation Plan**

The purpose of the evaluation plan was to determine the success of the action plan in improving the organization’s ability in helping at-risk students in phonemic awareness become successful readers in kindergarten at Mayberry Elementary and build capacity within the organization to implement change using the improvement process. With improving phonemic awareness of at-risk readers in kindergarten the basis of this action plan, the role of collaborating stakeholders was briefly described, the process and output evaluation data collection for each element, the analyses process for each element, and how the design permits me to answer the evaluation questions. The evaluation of the action plan will seek to answer the following:

1. Did the implementation of the Michael Heggerty Phonemic Awareness Model result in improved phonemic awareness among at-risk kindergarten students at Mayberry Elementary as indicated with a 60 point increase on the MKAS score in April of 2020?
2. What were teachers’ perceptions of their efficacy in teaching phonemic awareness to at-risk students while implementing the Michael Heggerty Phonemic Awareness Model?
3. What were teachers’ perceptions of the training they received with the Michael Heggerty Phonemic Awareness Model?
4. What were the perceived benefits of the Michael Heggerty Phonemic Awareness Model?

5. Was the program implemented as it was designed?

The elements involved in the action plan are listed in the logic model. The three elements are professional development, teacher professional learning community, and data talks. These elements were obtained from the research. Each element has a goal. To determine the success of the action plan, the evaluation data to be used is presented. The elements used in this action plan are summarized, the goals to be achieved, and the evaluation, are shown in the table. The elements are listed with the details of the evaluation plan in Table 4.
<table>
<thead>
<tr>
<th>Elements</th>
<th>Goals</th>
<th>Timeline</th>
<th>Who</th>
<th>Evaluation Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional Development</td>
<td>To help at-risk readers improve phonemic awareness</td>
<td>August 2019 - May 2020</td>
<td>Consultant and Principal</td>
<td>Teacher interview (Appendix A)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Teacher survey (Appendix B)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Classroom Observation Checklist (Appendix C)</td>
</tr>
<tr>
<td>Teacher PLC</td>
<td>Teachers develop a higher level of expectations and feel more supported with an increased level of collaboration between teachers</td>
<td>August 2019 - May 2020</td>
<td>Principal</td>
<td>Teacher PLC focus group (Appendix D)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Teacher interview (Appendix E)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Teacher survey (Appendix F)</td>
</tr>
<tr>
<td>Data Talks</td>
<td>Teachers will learn to use data to drive instruction in order to grow as an organization</td>
<td>August 2019-August 2020</td>
<td>Principals and teachers</td>
<td>Common Assessment Data</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Data meeting checklist (Appendix G)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>MKAS Data IReady Data</td>
</tr>
</tbody>
</table>
Teacher Professional Development.

The first action plan element which was evaluated was teacher professional development. The goal of this training was to provide support for the implementation of the Michael Heggerty Phonemic Awareness Model with the phonemic awareness lessons in the classroom setting. Prior to the professional development in December 2019, the teachers participated in the teacher interview protocol pre-implementation which was the first evaluation data tool used with this element. This evaluation data was used to provide answers for all five research questions. The information from the interviews was used as a baseline of prior knowledge of the Michael Heggerty Phonemic Awareness Model to document teachers’ progress and to capture detailed information about the use of the model.

Following the professional development in August 2020, the teachers were given a survey about the benefits of the training to determine if the goal of helping at-risk readers improve in phonemic awareness was achieved. I wanted to find out if their understanding of how to teach phonics to at-risk readers changed after professional development. The teacher surveys were the second evaluation data tool used for element one. The surveys were used as a baseline for measurement of growth. This survey evaluated research question three. The teacher surveys were used to determine goal achievement of helping at-risk readers in phonemic awareness to become successful readers. After the teachers completed the surveys, I compiled the data to use as a formative assessment.

A classroom observation checklist was used as the third evaluation data tool for element one to check for teachers’ usage of the 10 components, which are eight phonemic awareness skills and two additional activities to develop letter name and sound recognition and language awareness. The checklist allowed me to determine the degree teachers were using the skills
taught in the professional development and the training. I was responsible for leading the training in best practices for the Michael Heggerty Phonemic Awareness Model. The checklist I compiled covered the type of student engagement, phonemic awareness skills, instructional practices, and displayed student work. Research question two was answered by the checklist. I randomly visited eight kindergarten classrooms. The data was used for formative assessment.

**Teacher Professional Learning Communities.**

The second element of the action plan to be evaluated was the Teacher Professional Learning Communities. The goal for the PLCs was for teachers to develop a higher level of expectations and feel more supported with an increased level of collaboration between teachers. All eight kindergarten teachers participated in the focus group following the PLC meetings.

The first evaluation data tool used in element two was Teacher PLC focus group questions. Research question two was answered by this data tool. Additionally during the PLCs, we had a time of reflection before dismissing after each meeting. We discussed the roles our stakeholders had in the implementation of the new model. Following each PLC meeting, I had a focus group meeting with the teachers to inquire to see if they felt more supported with increased collaboration. This information was used for formative assessment.

I interviewed the teachers in August 2020. The post-implementation interview was the second evaluation data tool used with element two. The information was used to better understand the implementation of the model, and build teacher efficacy in supporting at-risk readers. The information was also helpful in answering all five research questions. All kindergarten teachers participated in the post-implementation interview (see Appendix E). The topics covered in the interview were professional development, teacher efficacy, and the Michael Heggerty Phonemic Awareness Model implementation. The post-implementation interview
results were compared to the pre-implementation interview results. All eight kindergarten teachers were interviewed to learn more about their feelings about the implementation of the Michael Heggerty Phonemic Awareness Model, specifically how they felt, positively or negatively and suggestions for the next school year. In addition, I used the results to determine if the goal had been met of teachers developing a higher level of expectations and support with an increased level of collaboration between them. We also looked for trends in teacher implementation and ways to improve the implementation of the model for the next school year.

The third evaluation tool used for element two was the teacher survey. The information from this survey helped us understand the role PLCs had in the implementation of the Michael Heggerty Phonemic Awareness Model. This evaluation data also helped answer research question one, two, and four.

Data Talks.

The final element of the action plan to be evaluated was the data talks. The data talks were held bi-monthly at Mayberry Elementary throughout the year. Developing a data team provided teachers with the opportunity to collaborate on student data to improve student learning. During these meetings, each teacher reviewed student growth based on assessments of the Michael Heggerty Phonemic Awareness Model. These common assessments were the first evaluation tool used for element three. Research question four was answered based on the data from the common assessments. Common assessments were reviewed during the data talks. Once a week, each student took a district common assessment. Using this weekly data, teachers checked for understanding and this allowed adjustments to instruction to be made. The goal of the data talks was for the teachers to learn to use data to drive instruction in order to grow as an organization. The common assessment data was analyzed using document analysis as a formative assessment.
The data talks provided the opportunity for the staff to reflect on what they learned from implementing and monitoring the new model. We discussed and addressed the challenges in order to improve student achievement. The second evaluation data tool used with element three was the data talk observation checklist. Research question four was answered with this data evaluation tool. The researcher took field notes as the meeting progressed. Upon conclusion of each data meeting, the researcher used the observation checklist for data collection.

The third evaluation data tool used with element three was IReady data. Research question four was answered with this data. The IReady data was analyzed at the data meetings using document analysis. Teachers reviewed the assessment data to look for trends in the results. Teachers collaborated to disaggregate the data results. Each teacher kept a chart with student progress. IReady data is aligned with state standards. This data was used as a formative assessment to see if goals were met. These data talks were closely connected to the PLC meetings. The PLCs and data talks allowed informative conversations to increase our organizational learning at Mayberry Elementary. Additionally, these meetings allowed for changes in our instruction in the classrooms to meet the needs of individual students while allowing collaboration between stakeholders and teachers.

The fourth evaluation data tool used with element three was MKAS scores. Research questions four and five were answered based on the data from MKAS scores. The fall 2019 MKAS scores were reviewed in the data meetings to look for trends in weak areas in phonemic awareness. We planned to compare these scores to the spring 2020 MKAS scores looking for improvement in phonemic awareness after the implementation of the Michael Heggerty Phonemic Awareness Model. Due to COVID-19 state testing was eliminated. We used the last
benchmark testing which was given the week before Spring Break as this data point. This data was used as a formative assessment to see if goals were attained.

I led the data talks with the intent of the teachers becoming more comfortable collaborating to disaggregate the data results. Teachers came to meetings prepared to discuss student progress. The data talks were closely connected to the PLCs and allowed informative conversations to increase our organizational learning at Mayberry Elementary. Feedback from all stakeholders drove the PLCs and data talks throughout the year. I used this information to document the data talks (Appendix F). Additionally, these meetings allowed for changes in our instruction in the classrooms to meet the needs of individual students while allowing and encouraging collaboration between teachers. This information was used as formative assessment to check goal attainment.

As an additional aspect, I tracked the Michael Heggerty videos teachers posted on Facebook after school was dismissed in March due to COVID-19. These videos were posted Monday through Friday of every week. We even continued our videos throughout the summer.

**Formative and Summative Elements.**

Quantitative and qualitative data were both collected during the action plan. There was a continual review of data used for formative assessment in order to improve the action plan. After the completion of the first year of implementation, the next year will be planned with improvements to the action plan, based on feedback from all stakeholders and trends revealed by the data.

Upon completion of the action plan, a summative evaluation took place to determine whether to continue or discontinue the action plan. Goals were established for the action plan and used to gauge effectiveness after the completion of the action plan. As changes or
improvements were made, the summative data revealed the need to continue the action plan, while continuous improvements were made.

**Conclusion.**

The goal of this action research plan was to help at-risk readers improve phonemic awareness in kindergarten at Mayberry Elementary so they can become successful readers. Through professional development, professional learning communities, and data talks, the goals of this action plan were evaluated. Feedback from all stakeholders played a vital role in this action plan. Measurable goals were identified and the evaluation plan was used. Chapter Four discusses the findings of the research.
CHAPTER IV

RESULTS

Introduction

As described in Chapter III, this applied research study sought to help at-risk readers improve phonemic awareness in kindergarten at Mayberry Elementary by implementing the Michael Heggerty Phonemic Awareness Model so the students can become successful readers. Through professional development, teacher PLCs, and data meetings with peer teachers throughout the year, the researcher sought to build teacher capacity in the implementation of the Michael Heggerty Phonemic Awareness Model to improve student achievement. Additionally, the goal of this research study aimed to improve the educator’s capacity to address a problem of practice within the school which included setting goals, developing a plan for improvement, implementing the plan, and evaluating for further improvement.

At Mayberry Elementary the Mississippi Kindergarten Readiness Assessment (MKAS) scores have been consistently in the top five of the state since 2015, the first year the test was given. Although these MKAS scores could be considered outstanding, 11 students are in the bottom 10% in reading on this test which means they are considered our at-risk students. Eight teachers and 11 children participated in the Michael Heggerty Phonemic Awareness Model implementation. The goal of the model was to equip the teachers with the necessary training and skills needed to monitor and adjust their teaching practices to better meet the identified at-risk readers. This allowed the teachers to make changes in their teaching practices to meet the specific needs of the at-risk students in their classroom.
The action plan to accomplish these goals began with targeted professional development from an outside consultant for the kindergarten teachers. This training provided each teacher with the foundational skills needed to implement the Michael Heggerty Phonemic Awareness Model. As the school year began, the teachers participated in bi-monthly PLCs and data talks with their peer teachers and me. This allowed a time to share and be transparent with one another. As this research study progressed, the teacher PLCs and data talks became the foundation of this research study. Collaboration between the teachers increased and became an essential part of the process. We had scheduled weekly meetings for the PLCs, professional development, and data talks. The teachers eventually saw the benefits of working collaboratively in these meetings. On the days I had something important come up which must be handled, they would still meet and I would join when I completed my task. The level of collaboration which has developed as a result of this action plan was not present before the action plan implementation. Additionally, teachers worked together during the weekly meetings sharing successes and challenges they had experienced in the implementation process of the action plan. The researcher collected and analyzed the quantitative and qualitative data to answer the research questions. These research questions were used to evaluate the results of the action plan.

1. Did the implementation of the Michael Heggerty Phonemic Awareness Model result in improved awareness among at-risk kindergarten students at Mayberry Elementary as indicated with a 60 point increase on the MKAS score in April of 2020?

2. What were teachers’ perceptions of their efficacy in teaching phonemic awareness to at-risk students while implementing the Michael Heggerty Phonemic Awareness Model?
3. What were teachers’ perceptions of the training they received with the Michael Heggerty Phonemic Awareness Model?

4. What were the perceived benefits for at-risk students of the Michael Heggerty Phonemic Awareness Model?

5. Was the program implemented as it was designed?

**Statistical methodology**

An applied research study with program evaluation was used to answer the research questions. Specifically, the program evaluation was used to determine the effectiveness of the study and to make improvements in the program created through the action plan. Teacher surveys, interviews, and MKAS and iReady data were used as evaluation tools for this action plan. After administering two Likert scale surveys to participants (see Appendix B and Appendix F), each question was examined to determine the number of teachers who agreed or disagreed. This researcher chose to discuss specific questions which contributed to the findings and understanding of the model, all surveys and questions can be found in the Appendix section of this paper. In addition, descriptive data was used to analyze the data talk meetings.

**Research Question One**

Research question one asks: Did the implementation of the Michael Heggerty Phonemic Awareness Model result in improved phonemic awareness among at-risk kindergarten students at Mayberry Elementary as indicated with a 60 point increase on the MKAS score in April of 2020? The results are presented for each element associated with this question. MKAS was scheduled for the second week in April 2020; however, the state test was not administered then because all Mississippi schools were closed due to COVID-19. Therefore, no comparisons could be made between MKAS scores from the fall to the spring to check for the 60 point increase.
Consequently, I utilize the iReady benchmark data which was collected the week before Spring Break as the end-of-year data. The iReady data showed an increase on all 11 at-risk kindergarten student’s scores in reading. The following data is evidence of the implementation of the Michael Heggerty Phonemic Awareness Model did result in improved phonemic awareness among at-risk kindergarten students.

The first action plan element associated with this question was professional development and the evaluation data used was teacher interviews. Prior to professional development, the teachers participated in the teacher interview protocol pre-implementation (see Appendix A). This information was used as a baseline of prior knowledge of the Michael Heggerty Phonemic Awareness Model. This was a measure for the teachers to provide detailed information about their approach to teaching reading, experiences with at-risk readers, and the activities they felt at-risk readers found most engaging. Additionally, this was an opportunity for me to find out if they had any prior knowledge of the components of the new model. As the action plan continued, the information from the interviews was used to document teachers’ progress and captured detailed information about their use of the model. Only one of the eight teachers had prior knowledge of the Michael Heggerty Phonemic Awareness Model. Her knowledge was minimal about the model. She had a nephew in first grade who had experienced the Michael Heggerty Phonemic Awareness Model.

The second action plan element associated with this question was teacher professional learning communities (PLC). The evaluation data used was the teacher interview protocol post-implementation. All eight teachers participated in the post-implementation interview (see Appendix E). The information was used to understand the implementation of the model and build teacher efficacy to support at-risk readers. The topics covered in the interviews were
teacher efficacy and the Michael Heggerty Phonemic Awareness Model implementation. The post-implementation interview results were compared to the pre-implementation interview results. The teacher interview protocol consisted of 21 questions. It began with the teacher’s academic background and then closed with the model’s components. The question which received the most interesting responses was question seven. This question asked the teachers to describe their approach to teaching reading. Six of the eight teachers’ responses included the approach must include an association between graphemes and phonemes using repetition. In addition, they noted, it is important to teach a foundation between letters and sounds, associating text to sound, blending, decoding, and high-frequency word identification. Only two of the eight teachers mentioned comprehension in their answers. When comparing the pre-implementation results to the post-implementation results question seven had the most comments. Five of the eight teachers added the importance of repetition and engaging the at-risk reader to their answers. These are two of the major components of the new model.

The second evaluation tool used with element two in this question was the teacher survey. All eight teachers participated in the teacher survey which helped us understand the role PLCs had in the implementation of the Michael Heggerty Phonemic Awareness Model. This was a measure for teachers to provide information on organizational change which promoted improving their knowledge of ways to teach at-risk students. A forced Likert scale (see Appendix F) was used. The second statement read, “The PLCs promote organizational change.” This statement had the most positive responses, with six answering agree and two answering somewhat agree. The statement that read, “The PLCs improved my knowledge of ways to teach at-risk readers” also had positive responses from the teachers. The trends of this instrument
showed the majority of teachers felt the PLCs were helping move the school in the right direction to improve their knowledge of ways to teach at-risk readers.

Table 5

Table 5: Teacher Perceptions According to the Teacher PLC Survey

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Agree</th>
<th>Somewhat Agree</th>
<th>Somewhat Disagree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLCs were purposeful</td>
<td>75%</td>
<td>25%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLCs promote organizational change</td>
<td>87.5%</td>
<td>12.5%</td>
<td></td>
<td></td>
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<tr>
<td>PLCs contribute to lifelong learner</td>
<td>75%</td>
<td>25%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLCs improved my knowledge</td>
<td>87.5%</td>
<td>12.5%</td>
<td></td>
<td></td>
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<tr>
<td>Model contributed to improvement</td>
<td>100%</td>
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<td></td>
</tr>
<tr>
<td>Changed as leader with PLC collaboration</td>
<td>75%</td>
<td>25%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PLCs caused more comfort in sharing</td>
<td>87.5%</td>
<td>12.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School is moving in right direction/at-risk model</td>
<td>87.5%</td>
<td>12.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teachers feel more comfortable with model</td>
<td>100%</td>
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</tbody>
</table>

Research Question Two

Research question two asks: What were teachers’ perceptions of their efficacy in teaching phonemic awareness to at-risk students while implementing the Michael Heggerty Phonemic Awareness Model? The results are presented for each element associated with this question.

The following data is evidence of an increase in the teachers’ perceptions of their efficacy in teaching phonemic awareness to at-risk students while implementing the Michael Heggerty Phonemic Awareness Model.

The first action plan element associated with this question was Teacher Professional Development. The evaluation data used was a classroom observation checklist (see Appendix C). This was used to check for teachers’ implementation of the 10 components, which are eight phonemic awareness skills and two additional activities to develop letter name and letter-sound recognition and language awareness. During my random visits to the eight kindergarten
classrooms, I was able to determine the degree teachers were using the skills taught in the professional development and the training. In every classroom, the students were engaged in some way with the phonics lesson. In six of the classrooms, the instruction was in small-groups. The teacher was with a group, the assistant teacher was with another group, and the third group was working independently. The independent group was working in pairs with letter tiles. The other two classrooms were on the rug in the whole group reviewing words on flashcards and using hand signals.

During observation of these classrooms, the theme which emerged the most in instructional practice was direct instruction. Six of the eight classrooms were using direct instruction. Two classrooms were using cooperative learning. Although direct instruction was used most frequently, each teacher had some type of differentiation within the lessons. I did not see any inquiry-based instruction during my observations. During the observations, there was explicit teacher modeling with a focus on phonemic awareness and language as well as repetition in each phonemic skill introduced or reviewed. There was strong evidence that phonics skills had been taught with all the student work displayed in all eight of the classrooms. Word walls in all shapes and sizes were displayed in each of the eight classrooms with some pictures incorporated. There was also strong evidence of the family collaboration with this new model. Family projects were posted all over the classroom walls and on tables in two of the classrooms. One family project consisted of finding pictures in magazines, newspapers, or books of the words they were learning to read. These posters were displayed on the walls of the classroom. Another family project was a word tree. The students had drawn trees and cut words out of newspapers which were glued on their trees. The results of the checklist show teachers are using
the skills taught in the professional development and the training in best practices for the Michael Heggerty Phonemic Awareness Model.

The second action plan element associated with this question was teacher PLCs. In a focus group for teachers following a PLC (see Appendix D), the teachers were asked what they could implement in their classroom based on today’s meeting. In this meeting, one of the teachers shared part of the model that had not worked for her in whole group instruction. She explained how she transitioned into her small groups with her assistant teacher reviewing the rhyming words using the hand motions. She shared information she felt would be beneficial for the other teachers so this would not happen to them. This led the way for creating our weekly reflection time. We named it “glow and grow.” They shared their glowing moments; then they explained moments when they needed to grow to meet the needs of their at-risk readers. The teachers shared how this time of reflection made them realize they were all experiencing some of the same challenges with their at-risk readers.

One focus group question was: What would you like to see us cover in the next PLC? This question had the most responses, with five answering with specific ideas of interest in the model and three answering they wanted more training on how to involve the parents. The overall results of the PLC focus group questions revealed teachers’ felt more supported with increased collaboration.

Research Question Three

Research question three asks: What were teachers’ perceptions of the training they received with the Michael Heggerty Phonemic Awareness Model? The results are presented for each element associated with this question. The following data is evidence of the teachers’ perceptions of the training.
The first action plan element associated with this question was professional development. Teacher interview protocol pre-implementation was the first data tool used with this element (see Appendix A). After conducting these interviews with the teachers and discussing the professional development they received, the respondents shared they felt more comfortable after they received initial training by the outside consultants. They also indicated they felt more comfortable with the ongoing training throughout the year after actually implementing the model. The teachers shared they had more knowledge of what questions to ask in the training after starting the implementation of the model. Three teachers indicated they have learned more about the model through sharing experiences with their peers in the bi-weekly PLCs. I must add that I have had to facilitate the meetings in a way which keeps us on task. During our data talk meetings, the teachers seem to gravitate to sharing weekly experiences with the model.

The second data tool used in this element was the teacher survey (see Appendix B). The kindergarten teachers were provided professional development by an outside consultant before the implementation of the new model began. This professional development provided a foundation for teachers to understand the implementation of the model. I administered a survey to teachers following the professional development. This was a measure for teachers to provide self-perceptions of the training they received prior to the implementation of the new model. A Likert scale was used. The first statement read: The professional training of teachers was applicable with the goals of the Michael Heggerty Phonemic Awareness Model. This question had the most positive responses, with seven answering very often. Teachers’ most negative responses were for the statement that read: I was able to ask questions and receive appropriate feedback. Five responded seldom and three responded quite often. The trends of this instrument showed the majority of teachers had a positive reception of the professional development
Table 6

Teacher Perceptions of Professional Development According to Survey

<table>
<thead>
<tr>
<th>Survey Question</th>
<th>Never</th>
<th>Seldom</th>
<th>Quite Often</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional training was applicable with goals of model</td>
<td></td>
<td></td>
<td>12.5%</td>
<td>87.5%</td>
</tr>
<tr>
<td>Professional development was well organized</td>
<td></td>
<td></td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>Better equipped to implement model after training</td>
<td></td>
<td></td>
<td>25%</td>
<td>75%</td>
</tr>
<tr>
<td>Was able to ask questions and receive appropriate feedback</td>
<td>62.5%</td>
<td></td>
<td>37.5%</td>
<td></td>
</tr>
<tr>
<td>Ample time given by consultant between explanation of various parts of model</td>
<td></td>
<td></td>
<td>25%</td>
<td>75%</td>
</tr>
</tbody>
</table>

The second action plan element associated with this question was teacher PLCs. The data tool used with this element was the teacher interview protocol post-implementation (see Appendix E). I interviewed the teachers after the implementation of the model. During the interviews, one trend which emerged was the need for a continuation of professional development in the form of PLCs. When asked what type of professional development was needed, one replied, “The relationships we have developed through our professional development in our PLCs has been the most beneficial to me as a teacher.” Another said, “I do not want to miss any of our meetings when we share what is working and what is not for our at-risk readers.” Another said, “I now feel comfortable sharing with my peers the areas I am struggling in with my at-risk readers.” These responses reveal teachers are most comfortable in professional development by way of PLCs which build a collaborative environment.
Teachers were also asked if there was anything else they would like to add at the end of the interview. One teacher responded, “Professional development by outside professionals who are not actual practitioners do not benefit us in the classroom.” Another replied, “We would like to go visit a school that has been using this model successfully. We want to see the model in action.” These responses indicate the teachers have strong opinions on the benefits of professional development by consultants who were practitioners.

**Research Question Four**

Research question four asks: What were the perceived benefits of the Michael Heggerty Phonemic Awareness Model? The results are presented for each element associated with this question. The following data is evidence of the perceived benefits of the implementation of the Michael Heggerty Phonemic Awareness Model.

The first action plan element associated with this question was professional development. The first data tool used with this element was the teacher interview protocol post-implementation (see Appendix E). I conducted post-implementation teacher interviews and discussed what successes they saw after the implementation of the Michael Heggerty Phonemic Awareness Model with at-risk readers. Teachers were asked how they helped at-risk readers before implementing the Michael Heggerty Phonemic Awareness Model. Some answered with “I just try to work with the students one-on-one if time allows.” Another replied, “I made flashcards and sent them home for the parents to help them.” Another said, “I try to pair the at-risk students with a strong reader. I have also had my volunteers read with them.”

Teachers were also asked if their approach to teaching reading changed after implementing the new model. One teacher replied with:

We learned how to use a daily approach which keeps our students engaged while allowing
them to participate aloud which also increases their language skills. The daily repetition that Michael Heggerty Phonemic Awareness Model provides makes it easy for at-risk students to learn and participate with other classmates.

Another said, “We can utilize this model during carpet time, small groups, or large group time to build language skills, introduce and teach phonemic awareness skills while creating a fun environment for learning.” A 28-year veteran teacher replied:

I have seen students engaged and participating aloud which increases language skills. The model takes a daily approach to introduce and teach a certain set of skills each week, then builds upon what has been taught. The early literacy skills and phonemic awareness skills taught in the model are necessary for teaching foundational reading skills.

Another responded, “The content changes enough each day to keep students engaged and active in what they are learning.” Another teacher said, “My at-risk students have been able to manipulate sounds and letters more easily. This model benefits those that are struggling while keeping the more advanced students engaged.” Finally one replied:

I see my students answering questions and participating where they may not have before.

The new model is a comfortable program that gives students a sense of fun learning and the opportunity to express their understanding of phonemic awareness and phonetic skills presented to them.

The overall results of the interviews revealed the teachers perceived benefits of the Michael Heggerty Phonemic Awareness Model for improving phonemic awareness among at-risk kindergarten students at Mayberry Elementary.

The second action plan element associated with this question was data talks. The first data tool used with this element was the data meeting checklist (see Appendix G). The data talks
were held bi-monthly at Mayberry Elementary throughout the year. I conducted observations of the meetings throughout the school year and took field notes. The observation checklist had six questions used to rate various types of participant activity. These meetings provided teachers with the opportunity to collaborate on student data to improve student achievement. As the researcher, I used the data talk observation checklist. The teachers’ attendance rate in the data talks were recorded. There were 15 meetings during the school year 2019-2020. Teachers had perfect attendance at 13 of 15 meetings. For each of the other two meetings, one teacher was absent because of personal emergencies. In both of these meetings, the teachers were responsible for checking with their peers to see what information they missed.

The data talks were another way to help develop a collaborative team with the kindergarten teachers which will lead to organizational learning. The first question on the data talk observation checklist asked if the teachers were prepared to discuss their students’ data upon the start of the data talk. They may have had the data with them although they were not confident in sharing it with their peers. Only one teacher shared her data in the first meeting. Two others shared in the third meeting. Another question on the checklist asked if lesson plans and common assessments were discussed based on the existing data. After our fifth data talk meeting, one teacher commented, “I have not openly discussed my test scores with my peers until today. We have always discussed our lesson plans in our meetings but we have not discussed our students’ scores. I learned some new ideas today.” That comment helped guide my direction for future data talks and made me realize the importance of data talks. I also realized not all of the teachers were on board with discussing their test scores initially when we started these meetings. There was not much interaction during the first five meetings. I noticed the lead teacher began to sit back and let some of the younger teachers have greater input. As the
school year progressed, the teachers became more open and receptive to the idea of sharing and collaborating. The level of participation increased and attendance was high by the third month.

During these meetings, each teacher-reviewed student growth based on weekly common assessments. Using this weekly data, teachers were able to check for understanding of the model. The fall 2019 MKAS results were reviewed in the data meetings. We had planned to compare these scores to the spring 2020 MKAS scores. Due to COVID-19, state testing was eliminated. We used the last iReady benchmark testing which was given the week before Spring Break as the data point. The iReady data lined up closely with the state standards. The data talks were closely connected to the PLCs which allowed informative conversations to take place. This also allowed teachers to make adjustments to their instruction to meet the needs of at-risk readers. The teachers shared the areas of instruction that seemed to be challenging for their at-risk readers as well as the areas of success. The teachers set goals at the end of each data talk meeting to be completed before the next meeting. In addition, during the data talks, teachers learned to use data to drive instruction to grow as an organization and made instructional decisions based on student data. The data talks also provided the opportunity to reflect on what they had learned from implementing and monitoring the new model.

In addition, teachers made instructional videos teaching the Michael Heggerty Phonemic Awareness Model after school was dismissed in March due to COVID-19. The videos were posted on social media Monday through Friday of every week until school started in August. I tracked the use of the videos and documented 103 videos with over 200 shares and 871 views. The findings revealed there were benefits of the implementation of the Michael Heggerty Phonemic Awareness Model based on the data meeting observation checklist, teacher interview responses, and video views.
Research Question Five

Research question five asks: Was the program implemented as it was designed? The results are presented for each element associated with this question. The following data is evidence the Michael Heggerty Phonemic Awareness Model was implemented as it was designed.

The teacher participation in professional development, teacher PLCs, and data talk meetings were a success in the implementation of this model. As the year began, the teachers were hesitant in their participation in the PLCs and data talk meetings. They would come to the meetings prepared yet not comfortable enough to share their individual data results. Their full participation did not come to fruition until the fifth data talk meeting. They became comfortable sharing with each other and began to talk openly about their data. They began to ask questions among themselves. This was a learning process for all of us. I continued to take notes during the PLCs and data talk meetings. I noted on the fifth data talk meeting the seating arrangements were different. The seasoned teachers were sitting among the new teachers.

In the teacher interview post-implementation (see Appendix E), teachers were asked if their experiences changed with at-risk readers after implementing the Michael Heggerty Phonemic Awareness Model. One teacher replied:

I am loving the phonics approach where there is an association between graphemes and phonemes using repetition. It is important to teach a foundation between letters and sounds, associating text to sound, blending, decoding, and high-frequency word identification. Covering all the skills in a fun and engaging way.
Another teacher replied:

I have had students whose educational experiences come very easily and those who have difficulty in one or all areas of learning, resulting in a need for the tier process. I have worked with many students in both a multi-tiered system of support (MTSS), and special education who are behind their peers. It is important to take students from where they are academically and/or socially and work to help the student grow in learning. This model has helped me meet the needs of all my students while still having fun interaction.

A seasoned veteran teacher replied:

It is important to understand that when working with at-risk students, no two students will be alike. Although several students may be working on the same skills, same letters or numbers, not every student learns the material at the same rate, in the same way, or even using the same materials. This model allows for me to add, remove, or adjust according to the needs of my at-risk readers while still engaging the learner.

A less experienced teacher replied: “Through the implementation of the Michael Heggerty Phonemic Awareness Model I was able to provide systematic and engaging phonemic awareness lessons to my at-risk readers using a multitude of skills.”

When asked if at-risk readers were identified differently after implementing the Michael Heggerty Phonemic Awareness Model, one responded, “I will still rely on screeners and pre-test to help identify at-risk readers. This gives me an idea of where to begin and which skills need to be addressed to develop my plan for individualized instruction for my at-risk readers.” Another replied, “During the implementation of this model, I have learned specific skills in how to involve stakeholders with my at-risk readers.” In the interview, the teachers were asked after implementing the new model how has their role changed in helping at-risk readers. They stated
they had feared learning a new model at the beginning of the school year. Although, they voiced after the initial professional development and the first three weeks of implementation how they liked the way the model provided the necessary oral skills needed to help children distinguish between rhyming words, syllables, beginning/ending sounds, and substituting sounds repetitively with hand gestures. They shared their role was still to find whatever measures were necessary to teach all students to read. They agreed this new model was hands-on with repetitive activities and constant interaction with quick pace direct instruction.

The teachers were also asked in the interview how the Michael Heggerty Phonemic Awareness Model had impacted reading instruction. One responder said:

The teacher needs to have good classroom management in order to keep the students’ full attention while implementing the Michael Heggerty Phonemic Awareness Model. This will allow students to have fun while using hand gestures and ensure learning is taking place.

Another replied, “This model is not a sit and get. The students are actively engaged orally with different skills every day. The lessons start with easy skills and build on these skills throughout the year.” A seasoned veteran teacher added, “This model provides quality, structured and repetitive learning which is appropriate to the needs of my at-risk readers.”

The responses gave evidence of the teachers using the model with at-risk students and a consensus that this model is fun and engaging for the students. Evidence of the teachers collaborating and sharing ideas instead of just participating in required meetings is a positive impact on the implementation of this model.
Emerging Themes

The theme which continued to emerge during this study was that the systematic approach to teaching phonemic and phonological awareness in the Michael Heggerty Phonemic Awareness Model made it fun and engaging for all students to learn. Teachers can use the model in all aspects of learning: carpet time, small groups, or whole group learning. The students learn using the movements associated with the lessons and skills. The content is constantly changing each day which keeps students engaged and active in what they are learning.

Conclusion

The findings of this applied research study have been presented. In determining the program’s success, the data provided positive results from the study. I do recognize there are areas for improvement. This will be a focus moving forward. Although, the goal of this applied research study was met to help at-risk readers improve phonemic awareness in kindergarten at Mayberry Elementary so they can become successful readers. This study began with professional development at the beginning of the school year which continued throughout the year, to bi-weekly PLC meetings, and bi-weekly data talk meetings. All three of these elements in this study were a vital part of the success in the implementation of the model. In my role as the researcher/principal, I saw the positive impact collaboration can have on growing as an organization. The teachers are truly sharing information, having those difficult conversations, and growing together as instructional leaders. After conducting the pre-implementation and post-implementation interviews, I have gained a better insight into the needs of my teachers. Chapter Five will present the conclusions and future implications for further study and continual improvement moving forward.
CHAPTER V
DISCUSSION

Introduction

The purpose of this applied research study was to help at-risk readers improve phonemic awareness in kindergarten at Mayberry Elementary so they can become successful readers. The need for teachers to help at-risk readers improve their phonemic awareness so they can become successful readers became evident in the weekly common assessments, iReady data, and MKAS results. As mentioned in Chapter One, Gulek (2003) found effective daily instructional practices are more important than ever due to increased testing and accountability in education. These effective instructional practices are imperative in reading instruction. Having literate and well-educated children is crucial for each individual child as well as the future of the nation and Mississippi. Literacy must be a specific concern in the state of Mississippi. The Nation’s Report Card indicates 65% of fourth-graders in Mississippi performed at or above the basic level, with only 32% reaching proficient or above (2019).

This foundation begins in infancy with the exposure of babies and toddlers to text, sounds, speech, and words. A foundation of literacy is crucial to their future reading, writing, and comprehension success. According to Juel (2006), children who are poor readers at the end of first grade are likely to remain behind their peers through at least the end of fourth grade. In addition, Ergul (2012) found students who are struggling or at-risk readers in first grade are often struggling readers in the eleventh grade. Reading is a requirement for developmental goals connected to attention, memory, language, and motivation. Based on this research, we decided
to implement the Michael Heggerty Phonemic Awareness Model to improve phonemic awareness in kindergarten at Mayberry Elementary so the students can become successful readers. I worked daily with the kindergarten teachers on the implementation of the new model. Using three elements in this study, professional development, teacher PLCs, and data talk meetings, the study sought to develop and grow the at-risk readers in phonemic awareness so the students can become successful readers.

Chapter One introduces the problem and the purpose of the study, which established the need for improving phonemic awareness in kindergarten at Mayberry Elementary so the students can become successful readers. Chapter Two provides a summary of relevant research related to improving reading literacy achievement for elementary children in grades kindergarten and first. Chapter Three presents the collaborative development, implementation, and evaluation of the action plan. Chapter Four presents a review of the evaluation results of the study. Chapter Five presents the conclusions, limitations, and future implications for further study and continual improvement.

Analysis

As explained in Chapter Two, the controversy over what defines effective reading instruction has been ongoing since the beginning of education. Because of the increase in rigorous teacher evaluations and high stakes testing, the search for the perfect techniques of reading instruction has increased exponentially. The need to show growth and high achievement with all reading students presents a challenge for educators (Gulek, 2003). Student learning is the main goal of educators, and learning happens when best practices are consistently applied on a daily basis in the classroom (Crumly, Dietz, & D’Angelo, 2014). The elements used in this
action study were decided by our administrative team to be the best tools to help at-risk readers in phonemic awareness in kindergarten so they may become successful readers.

**Professional development**

The short-term goal was for teachers to be trained to address the problem of helping at-risk readers improve phonemic awareness in kindergarten. The long-term goal was for teachers to develop a deeper understanding of the Michael Heggerty Phonemic Awareness Model which will help teachers to see the importance of implementing phonemic awareness instruction into their literacy lessons. Both of these goals were attained. Prior to the training, the teachers participated in a pre-implementation interview (see Appendix A) about prior knowledge of the Michael Heggerty Phonemic Awareness Model. This information was used as a baseline of prior knowledge to document teachers’ progress and to capture detailed information about the use of the model. Only one of the eight teachers had minimal prior knowledge of the model. Before the implementation of this model, teachers were trained by an outside consultant. This training provided support for the implementation of the phonemic awareness lessons in the classroom setting. The teachers were provided guidance throughout the 35-weeks of lessons and hand motions which are included for some of the skills. The professional development in the curriculum provided common language around the lessons, the fidelity of implementation with the phonemic awareness skills, and consistency of instruction among classrooms. They were guided through the lessons of the 10 components, which are eight phonemic awareness skills and two additional activities to develop letter name and letter recognition and language awareness. These lessons consisted of flashcards, small group instruction, and whole group instruction. The teachers were guided through the expectations of the model and how to set their goals.
Upon completion of the professional development training, the teachers were given a survey (see Appendix B) about the training benefits. Teachers used this survey to report their growth and understanding from the training on how to support their at-risk readers to improve phonemic awareness and eventually become successful readers in kindergarten. The surveys revealed at the conclusion of the training that the teachers had developed a deeper level of understanding of the implementation of the new model. The consultant continued to be a resource for each teacher throughout the school year.

A classroom observation checklist (see Appendix C) was used to check for teachers’ implementation of the 10 components throughout this action plan. My random visits to the eight kindergarten classrooms allowed me to use the checklist to determine the degree of teacher usage of the skills taught in the training and professional development. In six of the classrooms, the instruction was in small groups. The other two classrooms were on the rug in whole group reviewing words on flashcards and using hand signals. In every classroom, the students were engaged in some way with the phonics lesson. The theme which emerged the most in the instructional practice was the use of direct instruction. Six of the eight classrooms were using direct instruction while two classrooms were using cooperative learning. Although direct instruction was used most frequently, each teacher had some type of differentiation within the lessons. I did not see any inquiry-based instruction during my observations. During the observations, I noted explicit teacher modeling focused on phonemic awareness and language. There was strong evidence that phonics skills had been taught with the student work and word walls on display in all eight of the classrooms. Some of the work had spilled over into the hallways to be displayed. I also observed strong evidence of the family collaboration with this new model. Family projects were posted on the classroom walls and tables in two of the
classrooms. The results of the checklist showed teachers were using the skills taught in the professional development and the training for best practices for the Michael Heggerty Phonemic Awareness Model.

Training continued after the consultant completed the professional development. We met every two weeks, and when additional training was needed. The training was held during grade-level planning time for one hour. During this professional development, teachers were given time to collaborate and build relationships. Feedback from all stakeholders was an important part of this action plan. As the action plan continued throughout the school year, teachers began to take an active role in the professional development. The teachers volunteered to be presenters. This allowed each teacher an opportunity to be a facilitator. I do believe this professional development and training initially impacted building teacher efficacy using the new model, but also helped build relationships between the teachers. Once the teachers began to feel comfortable discussing and collaborating together about the Michael Heggerty Phonemic Awareness Model, they began to share their successes and challenges.

As we continue to use this model, the teachers can facilitate professional development. The kindergarten teachers are now prepared to lead the first-grade teachers at the beginning of the next school year rather than paying a consultant as we implement the model in first-grade. Overall, the professional development and training has been beneficial and improved our organization.

**Teacher PLC**

The short-term goal of the teacher PLC was for teachers to develop a higher level of expectations and to feel more supported as they implemented the new model. The long-term goal was to increase collaboration among teachers. Both of these goals were attained. The
teacher PLC became the heart of the study. The implementation of the monthly teacher PLCs was the most important take away from this action research. The PLCs had the biggest impact on organizational improvement. Before the implementation of this action plan, teachers were used to meeting to discuss their lesson plans, although these monthly teacher PLCs were different. Something magical began to happen between the teachers, and I began to see real collaboration among colleagues. This time was truly used to share, learn, and reflect. I recall in the first meeting, the teachers only shared when I asked them questions. Then the climate began to change. I observed the lead teacher step back in the third PLC meeting and encourage some of the other teachers to share their experiences with the new model. During the school year as the action plan continued to unfold, the teachers became more comfortable sharing their successes and challenges they had encountered through the implementation of the new model during the PLCs. This designated time of reflection allowed them to have an opportunity to seek solutions collaboratively. The teachers engaged in sharing ideas to build on strengths and weaknesses in their individual implementation of the Michael Heggerty Phonemic Awareness Model while discussing what was effective and what was not allowed them to learn from one another. Teachers were drawing support from each other to gain continuous improvement.

In reviewing the results for the teacher PLC, the focus group held with the teachers (see Appendix D) produced specific qualitative data which indicated there were areas of growth which are contributed to the PLC meetings. Teachers responded to the focus group questions with precise ideas they had learned from their colleagues in the PLC meetings that could be implemented in their classrooms. The focus questions allowed the teachers the opportunity to answer with specifics that can help grow the organization. The teacher interview protocol post-implementation (see Appendix E) yielded responses from the teachers which were lengthy and
open-ended that gave valuable information about the impact of the implementation of the new model. Appendix F was a teacher survey which yielded the most honest responses from the teachers. Even though this was an anonymous survey, they seem to be comfortable answering the questions regardless of the results. One teacher answered that she now felt she had changed as the instructional leader in her classroom as a direct result of the collaboration in the PLCs. Two teachers answered that the PLCs had improved their knowledge of ways to teach at-risk readers. The most moving answers were the four teachers which answered after participating in PLCs they felt more comfortable sharing with their colleagues. This data piece produced qualitative information which indicated specific areas of growth that can be attributed to the PLCs.

In the future, teachers will be prepared to facilitate the monthly PLCs. Teachers understanding of the benefits PLCs provide is vital for success. Trust must be built between teachers during PLCs. Once the teachers saw the value in collaborating during the implementation of the Michael Heggerty Phonemic Awareness Model, the organizational change began.

Data Talks

Data talks were held bi-monthly at Mayberry Elementary throughout the year. The goal was for teachers to learn to use data to drive instruction to grow as an organization. The goal was attained. Developing this data team was the first step which provided the opportunity for teachers to meet this goal. During these meetings, teachers reviewed student growth based on common assessments of the Michael Heggerty Phonemic Awareness Model. According to Besser (2010), the use of the data teams will help ensure all students are learning and progressing toward proficiency levels. Collaboratively concerns and areas of improvement were discussed at
these meetings. Educators need to engage in a process of collaborative inquiry to bridge the gap between student data and academic results (Datnow & Hubbard, 2016; Love, 2009; Love, Stiles, Mundry, & DiRanna, 2008). Teachers shared resources and strategies with one another. In the past, data was only discussed between principal and individual teachers. There was no collaboration concerning data as a group. Teachers collaborated to disaggregate the common assessment and iReady data to track student achievement. Additionally, data meeting observation checklists (see Appendix G) were used to record how teachers used data to make decisions to increase student achievement. According to the checklist, at the start of this action plan the teachers were not prepared to discuss their students’ data. The checklist also revealed teachers were not using the data to make adjustments to their lesson plans and common assessments.

The common assessment data did show an increase in student achievement for six of the teachers. By the fifth data talk, the teachers began to open up and share their existing data. Once again I noticed the lead teacher was sitting back and let some of the younger teachers have greater input. As the school year progressed, the teachers became more open and comfortable collaborating and sharing their adjustments to their lesson plans. I noted on the checklist from the third data meeting they were actually making plans for the next data talk. The level of participation increased and attendance was high by the third month. By involving all teachers in the data meetings, teachers were able to learn from each other and collaborate while increasing student achievement. This development contributed to the attainment of this goal. Moving forward, teachers will continue to use data talks to disaggregate data to track student achievement which will allow for adjustments to be made to their lesson plans and common assessments.
Goal attainment

We experienced positive gains in student achievement for at-risk readers in phonemic awareness in kindergarten at Mayberry Elementary throughout the implementation of the Michael Heggerty Phonemic Awareness Model so the students can become successful readers. Through professional development, teacher PLCs, and data talks with peer teachers throughout the year, I sought to build teacher capacity in the implementation of the Michael Heggerty Phonemic Awareness Model to improve student achievement. Additionally, the goal of this research study aimed to improve the educator’s capacity to address a problem of practice within the school which included-setting goals, developing a plan for improvement, implementing the plan, and evaluating for further improvement.

The action plan to accomplish these goals began with targeted professional development from an outside consultant for the kindergarten teachers. Prior to this professional development, the teachers participated in the teacher interview protocol pre-implementation (see Appendix A). This information provided details about prior knowledge of the Michael Heggerty Phonemic Awareness Model. Additionally, this interview provided detailed information about their approach to teaching reading, experiences with at-risk readers, and the activities they felt at-risk readers found most engaging. This professional development provided each teacher with foundational skills needed to implement the Michael Heggerty Phonemic Awareness Model. At first, teachers participated very little in the professional development meetings. After the consultant completed her training, the meetings continued. I led most of the trainings, which were a more informal atmosphere. The teachers gradually began contributing to the conversations and even began leading in some of the meetings. This is the first time I noticed the lead teacher step back to allow and even encourage the younger teachers to engage more.
This was when the magic began to happen in organizational improvement. As the school year progressed, teachers began to take ownership of this designated time together. True collaboration was building among colleagues.

Two of the biggest takeaways from the teacher survey (see Appendix A) for me occurred when one teacher shared that professional development by outside professionals who are not actual practitioners do not benefit teachers in the classroom. Another teacher went on to add they would like to go visit a school that has been using this model successfully. These responses will be considered when making decisions moving forward for the next school year with this action plan. In the next professional development meeting, both teachers shared these comments with their colleagues.

Collaboration among teachers continued to increase in the PLCs. This new teacher behavior started in the professional development meetings and poured over into the PLCs. The lead teacher continued to guide and encourage the younger teachers. As the year progressed, the teachers became more open and receptive to the idea of sharing and collaborating. The data talks were closely connected to the PLCs which allowed informative conversations to take place. This also allowed teachers to adjust their instruction to meet the needs of at-risk readers. The teachers shared the areas of instruction that seemed to be challenging for their at-risk readers as well as the areas of success. The teachers set goals at the end of each data talk meeting to be completed before the next meeting. In addition, during the data talks, teachers learned to use data to drive instruction to grow as an organization and made instructional decisions based on student data. The data talks also provided the opportunity to reflect on what they had learned from implementing and monitoring the new model.
Another gain occurred when the second-grade teachers came over to our building and observed the kindergarten teachers teaching the Michael Heggerty Phonemic Awareness Model. We invited these teachers to our PLC meeting after their observations. This time I stepped back to allow my kindergarten teachers to lead the meeting. They did a great job explaining the new model. They allowed the second-grade teachers to ask questions throughout their meeting. A true PLC guided by the participants was taking place. The second-grade teachers have just implemented the new model. This means we will have the Michael Heggerty Phonemic Awareness Model implemented in kindergarten through the second grade. The kindergarten teachers have continued to reach out to the other teachers in our district throughout the school year. This has resulted in ongoing collaboration, on their own, between teachers in our district. This type of collaboration has not happened in the past in our district. The different buildings have worked in isolation. Moving forward, as teachers in kindergarten through the second grade continue to collaborate organizational improvement will continue to grow.

Limitations

One limitation to the study was due to COVID-19. Research questions four and five were to be answered based on the data from MKAS scores. The fall 2019 MKAS scores were to be reviewed in the data meetings to look for trends in weak areas in phonemic awareness. We planned to compare these scores to the spring 2020 MKAS scores looking for improvement in phonemic awareness after the implementation of the Michael Heggerty Phonemic Awareness Model. Due to COVID-19 state testing was eliminated. We used the last benchmark testing which was given the week before Spring Break as this data point.

Another limitation to this study was the instruments used in the research. In measuring student achievement, many variables are involved. The goal of this study was to help at-risk
readers improve phonemic awareness in kindergarten at Mayberry Elementary to become successful readers. Changing some of the instruments would improve measuring specific factors. Some of the instruments had too many questions. Additionally, changing specific questions on the two interviews and the survey would be helpful. As I reflect on the process of this action research and my understanding of how research emerged throughout the implementation of the action research plan, decisions I made at the beginning of the study may have been different.

**Program Evaluation Standards**

The Joint Committee on Standards for Evaluation describes program evaluation as a means to systematically investigate the quality of projects to make decisions based on the knowledge attained. This type of evaluation leads to improvement in response to stakeholder needs (Yarbrough et al., 2011). This action research study was evaluated according to the five program evaluation standards: utility, feasibility, propriety, accuracy, and accountability.

According to Yarbrough et al. (2011), utility defines how much the stakeholders understood the goals of the program, as well as the level of significance of the program. This action research met this standard. The stakeholders were involved from the very beginning of this study. Based on the interviews, surveys, observation checklist, and focus groups conducted in this study, stakeholders understood the goals of the study in conjunction with the overall goal of helping at-risk readers improve in phonemic awareness in kindergarten to become successful readers. Teachers learned through the PLCs and data talks to share ideas collaboratively to increase student achievement. In doing this, we met our goal in helping at-risk readers become successful readers and we also improved as an organization.
Feasibility is described as the practicality and effectiveness of the logistics surrounding implementation (Yarbrough, et al., 2011). The implementation of the Michael Heggerty Phonemic Awareness Model was a project which required organizing and scheduling meetings for all stakeholders. This became a daunting task to work around the various schedules. Also having input from all stakeholders proved vital in the success of the project. The implementation cost was also important because public K-12 schools are on a limited budget. As stakeholders, we had to look for the best outcome for the amount of money required. Student achievement and teacher accuracy were also part of this process.

Propriety is an evaluation of the ethics involved in a program. Ethics may refer to the researcher’s devotion to privacy, human rights, laws, inclusiveness, and conflicts of interests (Yarbrough et al., 2011). Before implementing the action research plan, the researcher participated in training on ethical research. The Institutional Review Board (IRB) reviewed this project and determined it did not meet regulatory definition of human subject’s research. In my efforts to protect human subjects, a consent statement was read and agreed upon prior to each interview and focus group. Surveys were kept anonymous so as to protect the identities of the participants. Teacher observations were only used for the content for conversations between principal and teacher. Data collected was done within the scope of the researcher’s job description. During the implementation of the model, input was still encouraged from all stakeholders to adjust the program.

Presenting data that is accurate is an essential part of any study. This requires the program to use multiple sources of data, detail methods of collection, and ensure the data is valid and reliable (Yarbrough, et al., 2011). The quantitative data presented in this study can be validated through school, district, and state data records. The methods of collection were planned and
reported. Multiple sources of data were used which included: focus groups, surveys, observations, meetings, interviews, quantitative data, and informal conversations. Informal conversations with stakeholders were not documented. These conversations are recalled by the researcher and other participants, but there are not any physical records of the conversations. Interviews and focus groups of various stakeholders were recorded, and quotes can be verified through these recordings. Survey data was collected and compiled. Overall, the data and findings presented are accurate.

The strength of any research study is protected by researchers being held accountable for keeping documentation of all processes and data involved in the study (Yarbrough, et al., 2011). Despite the possible limitations mentioned in this chapter, sufficient documentation supports the findings of the study. The researcher handled all parts of the data collection and analysis. The documents were kept in the researcher’s office under lock and key during the study and after the study had concluded.

**Implications**

This study was designed to help at-risk readers improve phonemic awareness in kindergarten at Mayberry Elementary by implementing the Michael Heggerty Phonemic Awareness Model. One implication of this research showed implementing the new model helped at-risk readers improve and become successful readers. This study began the implementation of the new model with teacher participation in professional development, teacher PLCs, and data talk meetings. As the year began, the teachers were hesitant in their participation in the PLCs and data talk meetings. As the program continued, teachers began to participate and collaborate in the meetings.
The theme which continued to emerge during this study was that the systematic approach to teaching phonemic awareness in the Michael Heggerty Phonemic Awareness Model made it fun and engaging for all students to learn. Teachers learned they could use the model in all aspects of learning whether in small groups or whole group instruction. The content in the model was constantly changing each day which kept the students engaged and active in what they were learning. They shared a consensus that the new model was fun and engaging for the students. Each of the three elements were important in the study and the focus needs to remain on a continuation of the elements.

The one element which provided the most significant change in the school was the teacher PLCs. While all three elements in this study will be continued, this was the heart of the study. The collaboration that evolved was because of the PLCs. This also led to the development of organizational improvement in the school. The organization functions more like a team of stakeholders since the implementation of the new model.

**Recommendations**

Based on the success of the implementation of the new model, the school needs to continue utilizing the three elements in the study. Although teachers felt the professional development by the outside consultant, in the beginning, would have been more beneficial if the consultants were practitioners, the data did reveal their knowledge of the model increased. The teachers will facilitate the meetings moving forward and continue the organizational learning. Teachers will use the knowledge gained through the implementation of the new model while continuously monitoring and adjusting the model to the needs of their at-risk readers. The schools who may consider implementing this new model must understand that stakeholder input is vital to the success.
The PLCs were evidence of improved collaboration and will continue in the future. The teachers will be encouraged to facilitate while leading their peers in learning and collaboration. The instruments used to collect data about the PLCs produced concrete results, thus I recommend continuing the use of these instruments to evaluate the PLCs.

Data talk meetings should continue bi-monthly. Developing a data team provided teachers with the opportunity to again collaborate. I led the data talks with the intent of the teachers becoming more comfortable disaggregating the data results. The teachers soon began leading the data talks. This time the collaboration with student data yielded improvement in student learning. The teachers made better instructional decisions which were based on data.

**Conclusion**

The study sought to help at-risk readers improve phonemic awareness in kindergarten at Mayberry Elementary by implementing the Michael Heggerty Phonemic Awareness Model so the student may become successful readers was a beneficial study for the Carol County School District. For the first time, all stakeholders were a part of the planning process. Teachers learned to collaborate as organizational improvement continued throughout the action research study.

Through professional development which began at the beginning of the school year and continued throughout the year, to bi-weekly professional learning community meetings, and bi-weekly data talk meetings, the goals of this action research study were achieved. All three of these elements in this study were a vital part of the success in the implementation of the model. In my role as the researcher/principal, I saw the positive impact collaboration can have on growing as an organization. The teachers are truly sharing information, having those difficult conversations, and growing together as instructional leaders. As a leader, I learned feedback
from all stakeholders is vital to the success of an organization. Organizational growth and improvement are a slow process. This study only measured one year of our school’s organizational improvement. To get more accurate results, the study needs to continue for at least three more years while continuously monitoring and adjusting during the process. Applied research requires continuous improvement to solve practical problems. Additionally, the goal of this research study to improve the capacity of the organization’s ability to address a problem of practice within the school, set goals, develop a plan for improvement, implement the plan, and evaluate for further improvement was met.
REFERENCES


https://doi.org/10.1353/tip.2003.0006

https://doi.org/10.1002/trtr.1203


APPENDICES
Appendix A

Teacher Interview Protocol Pre-Implementation

Research Topic: At-risk readers in kindergarten at Mayberry Elementary

Research Questions:

1. Did the implementation of the Michael Heggerty Phonemic Awareness Model result in improved phonemic awareness among at-risk kindergarten students at Mayberry Elementary?

2. What were teachers’ perceptions of their efficacy in teaching phonemic awareness to at-risk students while implementing the Michael Heggerty Phonemic Awareness Model?

3. What were teachers’ perceptions of the training they received with the Michael Heggerty Phonemic Awareness Model?

4. What were the perceived benefits of the Michael Heggerty Phonemic Model?

5. Was the program implemented as it was designed?

Conceptual Frameworks: teacher efficacy, at-risk readers, Michael Heggerty Phonemic Awareness Program

Statement of Consent:

Thank you for taking the time to speak with me about your experiences with the Michael Heggerty Phonemic Awareness Model. The information you share with me will be used to help us better understand the implementation of the program, and building teacher efficacy in supporting at-risk readers. Your name or other identifiable information will not be attached to any reporting of findings that are gathered. I want you to feel comfortable sharing your thoughts and perceptions. Are you willing to proceed with this interview?

This interview is part of an applied research study to fulfill partial requirements for a Doctor of Education degree for Michelle Nowell from The University of Mississippi. The study is analyzing if the Michael Heggerty Phonemic Awareness Model may help at-risk readers improve phonemic awareness in kindergarten at Mayberry Elementary so they can become successful readers. Any questions regarding the project and its findings can be emailed to: mwnowell@go.olemiss.edu

Any questions can also be directed to the Dissertation Chair, Dr. Jill Cabrera Davis, by email at The University of Mississippi: jdcabrer@olemss.edu
Thank you for taking the time to speak with me about your experiences as a teacher. The information you provide today will help us understand the implementation of the Michael Heggerty Phonemic Awareness Model. Protecting your rights is of the utmost importance to us. Any identifiable information will be removed from the responses you give. We want you to feel comfortable answering any questions fully and honestly. With that being said, are you willing to proceed with the interview?

Teacher Interview Questions

Icebreaker

1. Tell me about yourself. What led you to become a teacher?

Academic Background

2. Where did you start your career in education? What year?

3. How long have you been teaching/working in education?

4. What are your areas of certification?

5. Do you have any endorsements in reading?

6. Have you taken any classes on at-risk readers?

At-risk Readers

7. Describe your approach to teaching reading.

8. What experiences have you had with at-risk readers?

9. Tell me how you identify an at-risk reader.

10. What is your role in helping at-risk readers?

11. What activities do your at-risk readers find most engaging?

12. Is there anything else you would like to add about your reading instruction?
Michael Heggerty Program Components (goals, content, teaching, professional development)

13. Describe the Michael Heggerty Phonemic Awareness Model.

14. Tell me how your school is using the model.

15. How do you think the implementation of the Michael Heggerty Phonemic Awareness Model will impact reading instruction?

16. Tell me about goals you set in using the Michael Heggerty Phonemic Awareness Model.

17. What are the expectations of teachers in reading instruction using the Michael Heggerty Phonemic Awareness Model?

18. What are the demands on teachers, specifically around reading instruction using the Michael Heggerty Phonemic Awareness Model?

19. What did professional development consist of with the Michael Heggerty Phonemic Awareness Model?

20. Is there anything else you would like to add?

Teacher Efficacy and Program Impact

21. Where is your school in the implementation process?

22. What successes do you see in the Michael Heggerty Phonemic Awareness Model?

23. What are the challenges in implementing the Michael Heggerty Phonemic Awareness Model?
Appendix B

Teacher Survey Protocol

Research Topic: To help at-risk readers improve phonemic awareness in kindergarten to become successful readers

Specific Research Question: What were teachers’ perceptions of the training they received with the Michael Heggerty Phonemic Awareness Model?

Conceptual Frameworks: at-risk readers, Michael Heggerty Phonemic Awareness Model, and professional development

Statement of Consent:

This survey is part of an applied research study to fulfill partial requirements for a Doctor of Education degree for Michelle Nowell from the University of Mississippi. The study is analyzing if the Michael Heggerty Phonemic Awareness Model may help at-risk readers improve phonemic awareness in kindergarten in order to become successful readers. Any questions regarding the project and its findings can be emailed to: mwnowell@go.olemiss.edu

Any questions can also be directed to the Dissertation Chair, Dr. Jill Cabrera Davis, by email at The University of Mississippi: jdcabr@olemiss.edu

Thank you for taking the time to speak with me about your experiences as a teacher. The information you provide today will help us understand the implementation of the Michael Heggerty Phonemic Awareness Model. Protecting your rights is of the utmost importance to us. Any identifiable information will be removed from the responses you give. We want you to feel comfortable answering any questions fully and honestly. With that being said, are you willing to proceed with the survey?
Teacher survey questions

1. The professional training of teachers was applicable with the goals of the Michael Heggerty Phonemic Awareness Model……………………1  2  3  4

2. The professional development was well organized… …………………………1  2  3  4

3. I am better equipped to implement the new model after the training………………………………………1  2  3  4

4. I was able to ask questions and receive appropriate feedback……………….1  2  3  4

5. The consultant gave ample time between explaining the various parts of the model……………………………….1  2  3  4
Appendix C

Classroom Observation Checklist

Statement of Consent:

This observation is part of an applied research study to fulfill partial requirements for a Doctor of Education degree for Michelle Nowell from The University of Mississippi. The study is analyzing if the Michael Heggerty Phonemic Awareness Model is helping at-risk readers improve phonemic awareness in kindergarten at Mayberry Elementary so they can become successful readers. Any questions regarding the project and its findings can be emailed to: mwnowell@go.olemiss.edu

Any questions can also be directed to the Dissertation Chair, Dr. Jill Cabrera Davis by email at The University of Mississippi: jdcabrer@olemiss.edu

The researcher will observe eight kindergarten classrooms. The researcher will fill out the observation form as she is visiting in the classroom.
**ACTIONS** | **EVIDENCE**
---|---
1. **Student engagement**<br>Were the students actively engaged in the phonics lesson? | a. Small-Group<br>b. Whole Group<br>c. Manipulatives<br>d. Technology<br>e. Independent Group<br>f. Other<br>Explain: _______________________<br>_____________________<br>_____________________<br>_____________________<br>_____________________<br>_____________________<br>_____________________<br>_____________________<br>

2. **Phonic Skill**<br>What phonemic awareness skill was being taught? (1-8) | Skill _______________________<br>_____________________<br>_____________________<br>_____________________<br>_____________________<br>_____________________<br>_____________________<br>_____________________<br>_____________________<br>

3. **Instructional Practices**<br>What instructional practice is the teacher using to help students achieve the phonics skill? | a. Direct Instruction<br>b. Cooperative Learning<br>c. Inquiry-Based<br>d. Differentiation<br>e. Visualization

4. **Student work displayed**<br>What is displayed as evidence that phonics skills have been taught? | a. Student Work<br>b. Word Walls<br>c. Pictures<br>d. Family Projects
Appendix D

Teacher PLC Focus Group Questions

**General Research Topic:** Helping at-risk readers improve phonemic awareness in kindergarten at Mayberry Elementary so they become successful readers

**Conceptual frameworks:** collaboration, at-risk readers, phonemic awareness, professional development, data talks, and PLCs

**Statement of consent:**

This focus group is part of an applied research study to fulfill partial requirements for a Doctor of Education degree for Michelle Nowell from The University of Mississippi. The study is analyzing if the Michael Heggerty Phonemic Awareness Model is helping at-risk readers in phonemic awareness in kindergarten at Mayberry Elementary so they can become successful readers. Any questions regarding the project and its findings can be emailed to: mwnowell@go.olemiss.edu

Any questions can also be directed to the Dissertation Chair, Dr. Jill Cabrera Davis, by email at The University of Mississippi: jdcabrer@olemiss.edu

Thank you for taking the time to speak with me about your experience as a teacher. The information you provide today will help us understand the implementation of the Michael Heggerty Phonemic Awareness Model. Protecting your rights is of the utmost importance to us. Any identifiable information will be removed from the responses you give. We want you to feel comfortable answering any questions fully and honestly. With that being said, are you willing to proceed with the focus group?

1. Tell me what you learned from your colleagues today in the PLC.

2. What can you implement in your classroom based on today’s meeting?

3. What phonemic awareness skill in the Michael Heggerty Phonemic Awareness Model is the most difficult for you to teach?

4. Would you be willing to share this information with your colleagues in the next PLC meeting?

5. How can I, as the instructional leader, better help you implement the new model?

6. What would you like to see us cover in the next PLCs?

7. Do you feel the PLCs are beneficial in the implementation of the Michael Heggerty Phonemic Awareness Model?
Appendix E

Teacher Interview Protocol Post-Implementation

Research Topic: At-risk readers in kindergarten at Mayberry Elementary

Research Questions:

1. Did the implementation of the Michael Heggerty Phonemic Awareness Model result in improved phonemic awareness to at-risk kindergarten students at Mayberry Elementary?

2. What were teachers’ perceptions of their efficacy in teaching phonemic awareness to at-risk students while implementing the Michael Heggerty Phonemic Awareness Model?

3. What were teachers’ perceptions of the training they received with the Michael Heggerty Phonemic Awareness Model?

4. What were the perceived benefits of the Michael Heggerty Phonemic Model?

5. Was the program implemented as it was designed?

Conceptual Frameworks: teacher efficacy, at-risk readers, Michael Heggerty Phonemic Awareness Model

Statement of Consent:

This post-implementation interview is part of an applied research study to fulfill partial requirements for a Doctor of Education degree for Michelle Nowell from The University of Mississippi. The study is analyzing if the Michael Heggerty Phonemic Awareness Model is helping at-risk readers improve in phonemic awareness in kindergarten at Mayberry Elementary so they can become successful readers. Any questions regarding the project and its findings can be emailed to: mwnowell@go.olemiss.edu

Any questions can also be directed to the Dissertation Chair, Dr. Jill Cabrera Davis, by email at The University of Mississippi: jdcabrer@olemiss.edu

Thank you for taking the time to speak with me about your experiences with Michael Heggerty Phonemic Awareness Model. The information you share with me will be used to help us better understand the implementation of the model, and building teacher efficacy in supporting at-risk readers. Your name or other identifiable information will not be attached to any reporting of findings that are gathered. I want you to feel comfortable sharing your thoughts and perceptions. Are you willing to precede with this interview?
Teacher Interview Questions

Icebreaker

1. Tell me about the theme in your classroom décor.

At-risk Readers

2. Tell me how your school helped at-risk readers before implementing the Michael Heggerty Phonemic Awareness Model.

3. Has your approach to teaching reading changed after implementing the Michael Heggerty Phonemic Awareness Model?

4. Have your experiences changed with at-risk readers after implementing the Michael Heggerty Phonemic Awareness Model?

5. Are at-risk readers identified in a different way after implementing the Michael Heggerty Phonemic Awareness Model?

6. After implementing the Michael Heggerty Phonemic Awareness Model, how has your role changed in helping at-risk readers?

7. What part of the Michael Heggerty Phonemic Awareness Model do the children find most engaging?

8. What part of the Michael Heggerty Phonemic Awareness Model do the children find least engaging?

Michael Heggerty Model Components (goals, content, teaching, professional development)

9. Tell me how the Michael Heggerty Phonemic Awareness Model impacted reading instruction.

10. What are the expectations of teachers about reading instruction after using the Michael Heggerty Phonemic Awareness Model?

11. What are the demands on teachers, specifically around reading instruction after using the Michael Heggerty Phonemic Awareness Model?

12. What resources are needed to implement the Michael Heggerty Phonemic Awareness Model?
13. What professional development is needed for the Michael Heggerty Phonemic Awareness Model?

**Teacher Efficacy and Model Impact**

14. What role has the Michael Heggerty Phonics Model had in your school?

15. What do you think contributed to these outcomes?

16. Where is your school in the implementation process?

17. Do you think the Michael Heggerty Phonemic Awareness Model will be sustainable? Why or why not?

18. What successes do you attribute to the Michael Heggerty Phonemic Awareness Model?

19. What challenges remain with implementing the Michael Heggerty Phonemic Awareness Model?

20. What recommendations do you have for using the Michael Heggerty Phonemic Awareness Model?

21. Is there anything else you would like to add?
Appendix F

Teacher Survey Protocol

Teacher PLCs Survey Questions

**General Research Topic:** to help at-risk readers improve phonemic awareness in kindergarten at Mayberry Elementary so they can become successful readers.

**Specific Research Questions:**

- Did the implementation of the Michael Heggerty Phonemic Awareness Model result in improved phonemic awareness among at-risk kindergarten students at Mayberry Elementary?
- What were teachers’ perceptions of their efficacy in teaching phonemic awareness to at-risk students while implementing the Michael Heggerty Phonemic Awareness Model?
- What were teachers’ perceptions of the training they received with the Michael Heggerty Phonemic Awareness Model?
- What were the perceived benefits of the Michael Heggerty Phonemic Awareness Model?

**Conceptual frameworks:** collaboration, Michael Heggerty Phonemic Awareness Model, teacher efficacy, at-risk readers, and PLC

**Statement of Consent:**

This survey is part of an applied research study to fulfill partial requirements for a Doctor of Education degree for Michelle Nowell from The University of Mississippi. The study is analyzing if the Michael Heggerty Phonemic Awareness Model is helping at-risk readers improve phonemic awareness in kindergarten at Mayberry Elementary so they can become successful readers. Any questions regarding the project and its findings can be emailed to: mwnowell@go.olemiss.edu

Any questions can also be directed to the Dissertation Chair, Dr. Jill Cabrera Davis, by email at The University of Mississippi: jdcabrer@olemiss.edu

Thank you for taking the time to fill out this survey about your experiences as a teacher. The information you provide today will help us understand the role PLCs have in the implementation of the Michael Heggerty Phonemic Awareness Model. Protecting your rights is of the utmost importance to us. Any identifiable information will be removed from the responses you give. We want you to feel comfortable answering any questions fully and honestly. With that being said, are you willing to proceed with this survey?
<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Agree</th>
<th>Somewhat Agree</th>
<th>Somewhat Disagree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The PLCs were purposeful in the implementation of the Michael</td>
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<td>2</td>
<td>3</td>
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<td></td>
<td>Heggerty Phonemic Awareness Model.</td>
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<tr>
<td>2.</td>
<td>The PLCs promote organizational change.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3.</td>
<td>The PLCs contribute to being a lifelong learner.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4.</td>
<td>The PLCs improved my knowledge of ways to teach at-risk readers.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>5.</td>
<td>Has the Michael Heggerty Model contributed to this improvement?</td>
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<td>2</td>
<td>3</td>
<td>4</td>
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<td>6.</td>
<td>I have changed as the instructional leader in my classroom</td>
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<td>3</td>
<td>4</td>
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<td></td>
<td>as a result of the collaboration in the PLCs.</td>
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<td>7.</td>
<td>After participating in PLCs, I feel more comfortable sharing</td>
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<td></td>
<td>with my colleagues.</td>
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<td>8.</td>
<td>My school is moving in the right direction in helping at-risk</td>
<td>1</td>
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<td></td>
<td>readers improve phonemic awareness.</td>
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<tr>
<td>9.</td>
<td>Teachers feel comfortable using the Michael Heggerty Model.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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Appendix G

Data Talk Observation Checklist

Statement of Consent:

This observation is part of an applied research study to fulfill partial requirements for a Doctor of Education degree for Michelle Nowell from The University of Mississippi. The study is analyzing if the Michael Heggerty Phonemic Awareness Model is helping at-risk readers improve phonemic awareness in kindergarten at Mayberry Elementary so they can become successful readers. Any questions regarding the project and its findings can be emailed to: mwnowell@go.olemiss.edu

Any questions can also be directed to the Dissertation Chair, Dr. Jill Cabrera Davis, by email at The University of Mississippi: jbcabr@olemiss.edu

The researcher will observe while leading at every data meeting. The teachers will be actively engaged in the meeting. The researcher will take field notes as the meeting progresses. Upon the conclusion of each data meeting, the researcher will use the observation checklist for data collection.

Rate each question by indicating the most appropriate response: often, sometimes, seldom or never.

1. Were the teachers prepared to discuss their students’ data upon the start of the data talk?

2. Was every teacher actively engaged in making decisions based on the data?

3. Were lessons plans and assessments discussed based on existing data?

4. Were all teachers participating in the data talks?

5. Were teachers using data to make adjustments to their lesson plans and common assessments?

6. Did teachers seem to feel comfortable collaborating and making plans for the next data talk?
VITA

Michelle White Nowell

EDUCATION

1993
Master of Science, Educational Leadership, Mississippi State University

1987
Bachelor of Science, Elementary Education, Mississippi State University

1985
High School Diploma, Kosciusko High School

ACADEMIC EMPLOYMENT

1996-Present
Principal, Kosciusko School District, Kosciusko Lower Elementary

1993-1998
Director, LEAP Center, Kosciusko School District

1990-1996
Elementary Teacher, Kosciusko School District, Kosciusko Lower Elementary

1988-1990
Elementary Teacher, Durant Municipal School District, Durant Elementary

1988-1989
Elementary Teacher, Choctaw County School District, Ackerman Elementary

PROFESSIONAL CREDENTIALS

K-4 Elementary Education, Mississippi License

4-8 Elementary Education, Mississippi License

Administrator, Career Level, Mississippi License

CITI Training Certification (Research Ethics)
PROFESSIONAL AFFILIATIONS

National Institute for School Leadership (NISL)
Mississippi Professional Educators (MPE)
Mississippi Association of School Administrators (MASA)
Phi Kappa Phi
Gama Beta Phi
State Superintendent of Education’s Principal Advisory Council

AWARDS

Life Changer Nominee, Kosciusko Lower Elementary, 2018
Central Mississippi Top 40 Under 40, 2006
Best Woman Boss, Star-Herald, 1998
President Award, Kosciusko Chamber of Commerce, 1998
Best Woman Boss of the Year, Kosciusko Lower Elementary, 1998
Teacher of the Year, Kosciusko Lower Elementary, 1995
Leadership Tomorrow, Kosciusko-Attala County, 1992