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ARKANSAS ELEMENTARY ADMINISTRATORS' PERCEPTIONS OF DETERMINING TEACHER PROFICIENCY IN THE SCIENCE OF READING

By

JENNIFER L. BARBAREE

Submitted to the Faculty of the Graduate College of Arkansas Tech University in partial fulfillment of the requirements for the degree of Doctor of Education August, 2023

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DEDICATION

To my strong, encouraging family - Brandon, my husband; Brett, my son; Brynnlee, my daughter; Baxley, my daughter; John, my father-in-law; and Syble, my Mema.

ACKNOWLEDGMENTS

I would like to take this opportunity to acknowledge the supportive people who have helped me accomplish this goal. My husband, Brandon, has been my biggest encourager throughout my educational journey. He never allowed me to give up. My three children, Brett, Brynnlee, and Baxley have watched me type, get frustrated, and type some more. Through it all, Brandon and the kids have made each word in this dissertation worth it. The pride I feel when they say, "you did it", is unexplainable.

To Dr. John Freeman, my chair, who provided honest conversation, feedback, encouragement, and wisdom throughout my entire process. To my committee members, Dr. Michael Watson and Dr. Steven Bounds. Dr. Watson never missed an opportunity to ask me, "how's the writing going?" My former superintendent mentors, who believed in me, and shared that continuing my education was a required contribution to our profession. To Ms. Sandy Shepard who taught me almost everything I know about the science of reading. Sandy sparked my interest in knowing exactly why the science of reading was important, and she paved the way for me to "fact check" all of the new information I was learning.

ABSTRACT

ARKANSAS ELEMENTARY ADMINISTRATORS' PERCEPTIONS OF DETERMINING TEACHER PROFICIENCY IN THE SCIENCE OF READING

Jennifer L. Barbaree

The science of reading has become a buzzword in education across the nation. In 2017, the Arkansas General Assembly passed the Right to Read Act (Right to Read Act, 2017). The law requires all elementary core (reading, mathematics, science, and social studies) teachers, kindergarten through sixth grade, and all kindergarten through twelfth-grade special education teachers to be proficient in scientific reading instruction (Right to Read Act, 2017). The law also requires all educators with an Arkansas Teaching License to know the scientific reading process (Right to Read Act, 2017). After the 2017 legislative session, the Arkansas Department of Education launched the Reading Initiative for Student Excellence (RISE; Right to Read Act, 2017). This qualitative study involved Arkansas elementary principals that were identified as certified assessors. As certified assessors, these principals observe teachers seeking a demonstration of proficiency in the science of reading. The individual interviews were conducted virtually during the 2022-2023 school year. The participants answered 13 questions and discussed three artifacts. The responses were collected, analyzed, and coded into emerging themes. These findings resulted in implications for practice and future research regarding the science of reading in Arkansas. The results of this research revealed five themes: the principal's training regarding the science of reading, the principal's support and resources, the principal's educational background, the principal's

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classroom observations, and the building principal's beliefs regarding the science of reading.

Keywords: Science of Reading, teacher assessment

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CHAPTER I

INTRODUCTION

In 2017, the Arkansas General Assembly passed the Right to Read Act (Right to Read Act, 2017). The law requires all elementary core (reading, mathematics, science, and social studies) teachers, kindergarten through sixth grade, and all kindergarten through twelfth-grade special education teachers to be proficient in scientific reading instruction (Right to Read Act, 2017). The law requires all educators with an Arkansas Teaching License to know the scientific reading process (Right to Read Act, 2017). After the 2017 legislative session, the Arkansas Department of Education launched the Reading Initiative for Student Excellence (RISE; Right to Read Act, 2017). Due to the legislation and the state initiative, reading instruction became a significant focus in Arkansas. RISE has three specific goals: "1) Sharpen the focus and strengthen instruction in the science of reading. 2) Create a community of collaboration regarding reading. 3) Build a culture of reading in the state of Arkansas" (RISE Arkansas, n.d., para. 1).

In efforts to meet goal one of RISE, "sharpen the focus and strengthen instruction in the science of reading" (RISE Arkansas, n.d., para. 1), the Division of Elementary and Secondary Education (DESE), researched, approved, and created the science of reading professional development for educators. Professional development pathways for proficiency were developed to support teachers in becoming proficient in scientific reading instruction (Prescribed Pathway Credentials, n.d.; Right to Read Act, 2017). Each professional development pathway for proficiency includes intensive professional learning for educators that focus on how the brain learns to read, defines scientific reading instruction, and what the science of reading looks like within the five major

literacy components (phonological awareness, phonics, comprehension, fluency, and vocabulary), effective instructional practices, and how to implement those instructional practices (Prescribed Pathway Credentials, n.d.).

The kindergarten through sixth-grade teacher and kindergarten through twelfthgrade special education teacher must complete two phases to be considered proficient in the science of reading (Right to Read Act, 2017). Phase I is the completion of an approved science of reading proficiency professional development pathway, and Phase II is the demonstration of teaching utilizing the science of reading (Right to Read Act, 2017). There are two ways for an educator to demonstrate proficiency. The educator must obtain a passing score on the Pearson Foundations of Reading Assessment, or the teacher must be observed by a certified assessor who would indicate the teacher to be proficient based on observational data (Right to Read Act, 2017). The Right to Read Rules and Regulations states, "a certified assessor is a licensed administrator that has completed a science of reading professional development proficiency pathway, attended an administrator specific science of reading assessor training, and whose job duties include evaluating personnel" (Rules Governing the Right to Read Act, 2020, p. 4).

Background of the Problem

According to The Nation's Report Card in 2017, the percentage of fourth-grade students performing at or above proficient on the National Assessment for Educational Progress (NAEP) in reading was 35% nationally compared to 31% of Arkansas fourth-grade students who scored at or above proficient (The Nations Report Card, n.d.). The low proficiency level in reading is a concern nationally as well as in the state of Arkansas.

Administrators serve a critical role in the success of students in the school.

According to the Arkansas Leader Excellence and Development System (LEADS) 2.0 Principal Rubric, "an effective principal ensures instructional practices are effective in meeting student needs" (Arkansas LEADS 2.0 Rubric, page 6). Based on the LEADS rubric, the building administrator is expected to be an instructional leader. Mestry (2017) noted, "At a national level, researchers concur with the belief that many principals lack the knowledge and skills to lead their schools effectively" (p. 1).

Not only is there a concern regarding instructional leadership, but the concern goes deeper when looking at the depth of knowledge around reading instruction. Jacobson et al. (1992) stated, "the quality of school principals' instructional leadership in school reading programs is directly linked to the quality of their knowledge about the reading instruction" (p. 1). Most administrators do not know the reading research because they were never taught it in their undergraduate education courses (Kim & Snow, 2021). If the administrator was a reading teacher previously, they most likely taught reading utilizing balanced literacy because that is what their college preparation program taught them (Leowus, 2019). There is controversy regarding how to teach children to read (Hanford, 2019). Kilpatrick (2015) states there is no debate; all students learn to read the same way. Students learn to read through the ability to manipulate sound at the phoneme level and through the explicit, systematic teaching of phonics and opportunities to practice these phonics skills (Kilpatrick, 2015).

Statement of the Problem

Because building-level administrators in Arkansas are responsible for identifying a teacher's proficiency in the science of reading, more research is needed to determine

building-level administrators' perceptions of determining a teacher's proficiency in the science of reading. The issue of low reading scores among students is a significant concern in the education sector. According to NAEP, 32% of American students score proficient in reading (The Nation's Report Card, 2020). Low reading scores can be attributed to various factors, including inadequate resources, lack of support from parents, and limited access to quality materials. However, school leaders' lack of literacy expertise is the most significant factor.

School leaders play a critical role in shaping the quality of education in their institutions (May & Supovitz, 2010). They are responsible for creating an environment that supports academic excellence and promotes the success of every student. The primary responsibility of school leaders is to ensure that their teachers have the necessary resources and training to deliver quality instruction. However, with a sound understanding of the science of reading, school leaders may recognize the importance of the reading curriculum and allocate adequate resources to literacy programs. This lack of attention can result in low reading scores, severely affecting students academically and personally.

Furthermore, school leaders must be able to identify students struggling with reading and provide them with the necessary support. Not only is the school leader responsible for recognizing the signs of reading difficulties among students, but they must also be able to recognize if a teacher is struggling to teach students to read. Without leadership expertise in literacy and reading instruction, students will continue to fail in reading.

Purpose of the Study

This qualitative phenomenological study explored the building-level administrator's perceptions of determining a teacher's proficiency in the science of reading. According to Arkansas law, building principals must identify whether teachers are proficient in teaching the science of reading (Right to Read Act, 2017). Because proficiency in the science of reading is a newer concept in the state of Arkansas, and principals are not identified as being proficient in the science of reading themselves, there is a need for additional research regarding the principal's perceptions.

Significance of the Study

Since it is the building administrator's role to provide instructional leadership, administrators must lead teachers in evidence-based reading instruction. This study provides insight for future building administrator preparation and professional development regarding implementing the science of reading in classrooms. This study can be replicated for all elementary building-level administrators as a means of selfevaluation and growth.

Research Question

The guiding research question for this study was as follows: What are elementary building-level administrators' perceptions of determining teacher proficiency in teaching the science of reading in Arkansas?

Definition of Terms

• **Building level administrator** – a licensed administrator who leads the teachers and students in a school.

- **Certified Assessor -** "a certified assessor is a licensed administrator that has completed a science of reading professional development proficiency pathway, attended an administrator-specific science of reading assessor training, and whose job duties include evaluating personnel" (Rules Governing the Right to Read Act, 2020, p. 4).
- Phonemic awareness "is characterized by the ability to notice, think about, or manipulate the individual sounds (phonemes) in words" (Binks-Cantrell et al., 2012, p. 154).
- Phonics "an understanding of how written letters are systematically, and predictability linked to spoken sounds and an understanding of how to apply that knowledge for the purpose of decoding and reading" (Binks-Cantrell et al., 2012, p.154).
- Phonological awareness "an understanding of the different ways in which spoken language can be broken down and manipulated" (Binks-Cantrell et al., 2012, p. 154).
- Science of Reading "the study of the relationship between cognitive science and educational outcomes, also referred to as scientific reading instruction" (Right to Read Act, 2017, p. 1).

Assumptions

In this qualitative study, it was assumed that the participants answered the questions truthfully. It is also assumed that the participants fully understand the questions being asked in the survey and by the researcher.

Limitations

Notable limitations included the interview questions that the researcher prepared. The method of collecting data was done through virtual means. Since the method of this study included interviews, the participants were not anonymous, but all efforts were made to maintain confidentiality. The intent was that each participant answered honestly and shared their proper understanding of the questions. The participant list was created utilizing administrators that have been reported as being certified assessors.

Delimitations

Since this study was qualitative in nature, the delimitations to this study included the number of participants interviewed. The researcher planned to interview at least 12 participants. There are over 200 elementary principals in the state of Arkansas, and not all principal's perceptions were included in this study.

Organization of the Study

For this study, the researcher conducted interviews. The Division of Elementary and Secondary Education (DESE) lists Arkansas-certified assessors. The researcher utilized the list of certified assessors to request participation in a one-on-one interview. During the interview, the researcher asked questions regarding the participants' perceptions of implementing the science of reading and the comfort of identifying a proficient teacher based on their own experiences.

CHAPTER II

LITERATURE REVIEW

The purpose of this study was to explore the building-level administrator's perceptions of determining a teacher's proficiency in the science of reading. The included literature provides a background of reading instruction, theories related to the science of reading, teachers' and building-level administrators' knowledge of the science of reading, the science of reading requirements in the state of Arkansas, and self-efficacy theory.

The Reading Wars

As stated by Hanford (2019), there has been controversy in education over how to teach children to read for years. Early reading instruction was based on alphabetic principles. Students were instructed to learn letters through repetition. This process was mimicked for word reading (Hanford, 2019). The assumption was that if repetition worked for learning letters, repetition could also work for learning words. William McGuffey was an academic who created the McGuffey Readers. His texts were utilized across the United States as standardized reading textbooks (Parker, 2021). When McGuffey introduced his readers, teachers needed more explicit teaching instruction. The method was predominately word reading. The McGuffey Readers became a more soughtafter series once McGuffey added to his methods of instruction and introduced educators to more than one way of teaching reading (DiObilda & Petrillo, 2020). The evolution of the McGuffey Readers stated three ways to teach reading: "Word Method," "Phonic Method," and "Combined Word and Phonic Method" (Parker, 2021, p.2). If the teacher chose the word method, students were taught to memorize whole words. When teaching the phonic method, children learn individual letters and the sounds of the letters before

learning the whole word. Last, if the teacher utilized the combined method, students were taught some letters and sounds while learning to memorize whole words (Parker, 2021). This optional way of teaching reading was considered more desirable because it evolved from others' research (DiObilda & Petrillo, 2020).

Throughout the 1800s, reading instruction included phonics and whole-word reading (Parker, 2021). However, researchers and theorists continued to vacillate regarding what works best, the whole word versus phonics. Student texts that many programs provided as a means of teaching reading were written, including diacritical marks to show the reader how to pronounce the words. These texts included phonics coding but needed to teach students the phonics rules and how to code. At the end of the century, a more systematic phonic teaching approach was introduced by Rebecca Pollard. This approach required the student to diacritically mark each word. The student had to know the phonics rule to mark the word accurately. This method of teaching reading proved to be much more complicated and complex than memorizing words (DiObilda & Petrillo, 2020). Whole-word reading became the predominant way of teaching reading throughout the early 1900s due to the rigor of teaching phonics (Parker, 2021).

Later, there was a swing back to teaching phonics. The phonics approach for reading instruction was introduced again in the mid-1900s. Jeanne Chall indicated that teaching the phonics code provided better results for readers (Parker, 2021). This uprise in teaching phonics was scrutinized due to "poorly designed" research and "inconclusive" results (Preston, 2022, p. 5) as authors published articles and books about why students struggled to read and doubt about how to teach reading spread. Parents questioned the

whole word, using repetitive methods. Many schools felt pressure and adopted programs that taught decoding using phonics (Parker, 2021).

A significant adjustment to reading instruction came in the 1970s when Kenneth Goodman introduced whole language. Goodman was adamant that teaching phonics went against how a person learns to read. Ken Goodman states, "Reading is natural; as natural as learning to speak" (Hanford, 2019; Parker, 2021). The whole language theory is grounded on the basis that students learn whole words by repetition, and when they come to a word they do not know, they ask what would make sense (Parker, 2021). Ken Goodman wrote an article stating, "Reading is a psycholinguistic guessing game" (Hanford, 2019; Parker, 2021). Whole language followers believe that if a child is surrounded by print and rich stories, they will learn to read. This approach disregards teaching students to decode words (Kilpatrick, 2015).

The U.S. Congress decided there needed to be an end to the back and forth and mandated that a panel of experts examine the scientific research on how students learn to read. In 2000, the National Reading Panel provided evidence that specific components should be included in reading instruction for children to read accurately (National Reading Panel, 2000). The report clearly rebukes the whole language theory and states that teaching phonics is the best way to teach beginning readers (Parker, 2021; National Reading Panel, 2000). Even though the panel listed clear ideas for teaching reading, the panel members were divided regarding the entire approach. Because whole language was so strongly used and liked by many, administrators and college professors used the National Reading Panel research to develop a new approach. This new approach was called balanced literacy (Parker, 2021). Balanced literacy can be described as teaching

students phonics rules to decode words and teaching students to guess words based on the context of the text (Hanford, 2019). Because balanced literacy includes whole language aspects such as whole word reading, three cueing, using pictures to help understand words and meanings, and leveled readers, there still needs to be an understanding that reading is natural.

Since the National Reading Panel released its report in 2000, scientists have addressed brain research regarding reading. Researchers such as Stanislas Dehaene conducted functional brain MRIs. The brain imaging methods observed during the MRIs verify that when the brain sees a grapheme, the phonological processor is immediately triggered, turning the printed letter into sound (Dehaene, 2013). The link between print and sound creates new brain pathways; it changes the brain (Dehaene, 2013). The scientific experiments prove that understanding phonics is necessary for reading.

In the case of teaching reading, there are countless references to the reading wars. The argument between a phonics approach versus a whole word, whole language approach is omnipresent. Hundreds of years of reading research indicate pendulum swings. There are strong opinions about how to teach a child to read. Each researcher states their research, which implies their approach is best. When reporter Emily Hanford asked Ken Goodman how he could explain cognitive science research, he made a powerful statement, "my science is different" (Hanford, 2019). This indicates that even science cannot influence some opinions.

The Science of Reading

The science of reading is a term that has been in scholarly literature since the 1700s (Shanahan, 2020). However, since 2017, the science of reading has become

ubiquitous when speaking about reading instruction in the state of Arkansas (RISE Arkansas, n.d.). According to Shanahan (2000), there are many definitions for the science of reading. Petscher et al. (2020, p. 2) state, "the science of reading is a phrase representing the accumulated knowledge about reading, reading development, and best practices for reading instruction obtained by the use of the scientific method." Arkansas legislation has defined the science of reading in the Right to Read Act (2017, p.1) as "the study of the relationship between cognitive science and educational outcomes, also referred to as scientific reading instruction." Stanford Graduate Professor Claude Goldenberg stated in a podcast, "science of reading is a buzzword that people are getting bogged down with, but reading science is research that foundational reading instruction is essential for a person becoming a fluent reader" (Lambert, 2022a). Everyday science of reading terms include phonological awareness, phonemic awareness, phonics, and morphology (Binks-Cantrell et al., 2012). Research studies have identified that the brain learns to read by consolidating orthographic and phonological word forms (Petscher et al., 2020). The RISE Arkansas (n.d.) website provides four models to support the science of reading: Simple View of Reading, Scarborough's Rope, Ehri's Phases of Word Reading, and the Four-Part Processor.

Knowledge of Scientific Instruction in Reading

There is evidence that colleges and universities need to prepare teachers for the scientific instruction of teaching reading. Malatesha Joshi et al. (2009) performed a study of 78 college and university instructors. The study results indicated that almost half of these college and university instructors needed to recognize the definition of phonemic awareness, and 75% of the professors identified balanced literacy as their reading

methodology philosophy (Malatesha Joshi et al., 2009). Research indicates that teachers need to gain knowledge of fundamental reading and a basic understanding of language structure (Bos et al., 2001). After a study of 89 teachers, Moats (1994) recommended that all teacher licensure programs for early childhood education should require basic linguistic applications and concepts to be demonstrated by teachers. Arkansas state standards for kindergarten through fifth grade include foundational reading standards. Since it is required for kindergarten through third-grade educators in Arkansas to teach these foundational standards, primary-grade educators need content knowledge of basic language constructs (Binks-Cantrell et al., 2012). According to Lyon and Weiser (2009), most teachers must still receive fundamental reading and reading development instruction.

Arkansas Law

Science of Reading

In 2017 Arkansas legislators passed several laws regarding literacy and reading. Among these was the Right to Read Act (2017). The law requires all kindergarten through sixth-grade core teachers (reading, mathematics, science, and social studies) and all kindergarten through twelfth-grade special education teachers to be proficient in scientific reading instruction (Right to Read Act, 2017). The law requires all educators with an Arkansas Teaching License to know the scientific reading process (Right to Read Act, 2017). After the 2017 legislative session, the Arkansas Department of Education launched the Reading Initiative for Student Excellence (RISE; Right to Read Act, 2017). Due to the legislation and the state initiative, reading instruction became a significant focus in Arkansas. RISE has three specific goals: "1) Sharpen the focus and strengthen

instruction in the science of reading. 2) Create a community of collaboration regarding reading. 3) Build a culture of reading in the state of Arkansas" (RISE Arkansas, n.d., para. 1). Recently, several states have approved reading legislation. In 2001 the Florida Governor created the "Just Read, Florida!" reading infinitive, which led to the passing of Florida reading legislation in 2002. Mississippi received much recognition after the 2019 NAEP scores were released, indicating significant growth in the state's fourth-grade reading scores. Dr. Kymyona Burk, on the state's education committee, attributes the growth to the Mississippi Literacy Law legislators passed in 2013 (Lambert, 2022b). Using policy to enforce a way of teaching could be problematic. Policymakers may expect excellence. However, Dr. Goldberg states, "there is no certainty; there are probabilities" (Lambert, 2022b).

Science of Reading Professional Development

The Division of Elementary and Secondary Education (DESE) has identified various professional development pathways for educators to learn about the science of reading. There are pathways for educators to gain awareness of the science of reading and to gain proficiency in the science of reading (Prescribed Pathway Credentials, n.d.). Based on the DESE website, the proficiency pathways are labeled A-V. Each of the proficiency pathways has two phases. "Phase I outlines the professional learning that meets the knowledge and practices in scientific reading instruction approved by ADE (Arkansas Department of Education). Phase II demonstrates knowledge and practices in scientific reading instruction" (Prescribed Pathway Credentials, n.d.). The following table lists proficiency pathway A-D (see Table 1). Table 1

ADE Science of Reading Proficiency Pathways A-D

Pathway A

Phase I - Successful completion of K-2 R.I.S.E. Academy (6 days w/ coaching) **Phase II** - *Observation by ADE Certified SoR Assessor (Begins 2019-2020) or passing score on Pearson Foundations of Reading Assessment

Proficiency Pathway for R.I.S.E. Trainers

K-2 R.I.S.E. Trainer

Phase I - Successful completion of LETRS Foundations training (4 days)
plus LETRS Foundations TOT training (4 days)
Phase II - Six days K-2 R.I.S.E. Training (6 days)
plus Academy TOT (6 days)

3-6 R.I.S.E. Trainer

Phase I - 3-6 R.I.S.E. training (6 days) **Phase II** - 3-6 R.I.S.E. TOT training (6 days)

Pathway B

Phase I - LETRS Foundations Training (3 days) (Available through Educational Cooperatives)
plus ADE SoR Phonological Awareness
plus ADE SoR Phonics-Decoding
plus ADE SoR Phonics-Encoding
Phase II - *Observation by ADE Certified SoR Assessor (Begins 2019-2020) or passing score on Pearson Foundations of Reading Assessment

Pathway C

Phase I - Successful completion 3-6 R.I.S.E. Training (6 days)
Phase II - *Observation by ADE Certified SoR Assessor (Begins 2019-2020) or passing score on Pearson Foundations of Reading Assessment

Pathway D

Phase I - ArkansasIDEAS Science of Reading Learning Path (a total of 14 sessions of instructional content)

plus three additional days from the following list:

ADE Science of Reading Overview

ADE SoR Phonological Awareness

ADE SoR Phonics-Decoding

ADE SoR Phonics-Encoding

ADE SoR Content-Based Morphology

ADE SoR Content-Area Reading Strategies

Phase II - *Observation by ADE Certified SoR Assessor (Begins 2019-2020) or passing score on Pearson Foundations of Reading Assessment

Note: Adapted from Prescribed Pathway Credentials, n.d.

Teacher Evaluation

According to Marzano (2012), "measuring teachers and developing teachers are different purposes with different implications" (p.14). Evaluations of teachers can lead to student improvement if done correctly. Predetermined evaluations with wordy rubrics with lengthy pre and post-teacher meetings are not the most effective way to improve student learning (Schmoker, 2013). The classroom teacher must know the subject. However, once the teacher understands the content, continuing to measure and engage the teacher in further development does not correlate to stronger student achievement (Marzano, 2013). Once the teacher knows the content, it is more important to focus on the delivery of the content. Teacher evaluations that provide coaching and teacher development opportunities can improve student performance (Schmoker, 2013).

Teacher implementation of new learning in the classroom, such as teaching reading using science, can be evaluated using Marzano's understanding of a teacher's execution: "not using, beginning, developing, applying, and innovating" (Marzano, 2013, p. 18).

Research reveals that teachers observed more frequently and provided proscribed professional development have higher student gains than educators observed less frequently (Ellett & Teddlie, 2003). The focus of teacher evaluations should be on teacher growth to improve student outcomes. An educational policy analysis of the 50 states conducted in 2009 revealed that although many states adopted policies regarding teacher evaluation systems, there needs to be more consistency regarding the evaluation system's impact on student performance (Hazi & Arredondo Rucinski, 2009).

Arkansas has adopted the developmental concept of evaluating teachers.

Arkansas' teacher evaluation system provides a lengthy rubric; however, the rubric involves a scale of teacher development. Building administrators in Arkansas are required by law to utilize the Teacher Effectiveness Support System (TESS) to evaluate teachers (Rules Governing Educator Support and Development, 2017). The TESS system is based on Charlotte Danielson's Framework. Each rubric component has a level of implementation defined as ineffective, progressing, practical, and highly effective. The Arkansas teacher evaluation system aims to establish a transparent, consistent approach that identifies effective professional practices that can be shared with stakeholders such as parents, guardians, and policymakers and impacts student achievement.

Theoretical Framework

The theory that informs this study is Self-Efficacy Theory, developed by Albert Bandura. Self-efficacy theory is used to determine behavioral change (Bandura, 1977). This theoretical framework was delineated from earlier works of Albert Bandura when he was studying social learning theory. Social learning analysis describes how people's behavior is self-generated (Bandura, 1971). "Self-efficacy is an individual's belief in their capacity to execute behaviors necessary to produce specific performance outcomes" (Carey & Forsyth, 2009, p. 1). Bandura's studies revealed that humans were more influenced depending on how they felt about the experience (Bandura, 1977).

Four experiences influence cognitive behavioral changes: mastery experiences, vicarious learning, verbal persuasion, and emotional arousal. These experiences are listed as the most decisive influence on self-efficacy to the weakest force. Mastery experiences are those that the individual participates in the event. Self-efficacy has a more significant

impact when one participates and experiences personal mastery. Experiences that people watch others model a specific performance are considered vicarious experiences. Vicarious experiences rely on social comparison to influence self-efficacy (Bandura, 1977).

Verbal persuasion is more commonly utilized for behavioral change because it is more accessible. Verbal persuasion is a form of coaching others. People are provided with differentiated feedback on specific performances. The least compelling self-efficacy experiences are those of emotional arousal. Emotional arousal may cause anxiety, leading to negative beliefs in one self's ability (Bandura, 1977).

Building administrators have been tasked with determining if the classroom teacher is proficient in implementing the science of reading. As part of administrator training, they are provided ways to help teachers to become proficient. The self-efficacy theory can be applied to the administrator's approach to growing teachers. Bandura outlines four experience situations with self-efficacy outcomes (Bandura, 1977). If administrators could provide three (mastery experiences, vicarious learning, and verbal persuasion) of the various experiences and avoid one (emotional arousal), they could impact the teacher's science of reading proficiency.

Bandura explains that there are discrepancies within the experiences of the selfefficacy theory. If the expectation of the outcome needs to be clarified or specific enough, there will be differing beliefs of oneself (Bandura, 1977). Based on this revelation, it is essential to ensure administrators have clarity regarding the science of reading and how their role can impact the implementation of the science of reading.

CHAPTER III METHODOLOGY

The purpose of this chapter is to describe the methodology utilized in this study to answer the research question. First, the chapter describes the participants involved in the study. Next are descriptions of the instruments the researcher used in the study. Finally, the chapter describes the process the researcher used to collect the study's data.

This phenomenological study explored the building-level administrator's perceptions of determining a teacher's proficiency in the science of reading. Because building-level administrators in Arkansas are responsible for identifying a teacher's proficiency in the science of reading, more research is needed to determine building-level administrators' perceptions of determining a teacher's proficiency in the science of reading.

Research Question

The guiding research question for this study is as follows: What are elementary building-level administrators' perceptions of determining teacher proficiency in teaching the science of reading in Arkansas?

The researcher interviewed building administrators identified as certified assessors for the science of reading. During the interviews, questions were asked regarding the building administrator's understanding of the science of reading, the building administrator's training, and the administrator's perceptions of the science of reading proficiency.

Research Design

Research should not be restricted to a single paradigm. Different methodologies and perspectives can be utilized to gain knowledge (Fossey et al., 2002). The research design for this study was qualitative in nature. Due to the need to know more about how building administrators perceive identifying a teacher's proficiency in the science of reading, the researcher spoke with administrators about their experiences regarding the science of reading.

Qualitative research is an approach that applies to understanding individuals' experiences (Fossey et al., 2002). The Arkansas Right to Read Act was passed in 2017 (Right to Read, 2017). Because the legislation is less than five years old, identifying a teacher's proficiency in the science of reading is new to Arkansas building principals. According to Fossey et al., "qualitative research lends itself to developing knowledge in poorly understood or complex areas of health care" (p.718). Like in healthcare, qualitative research can provide a beneficial approach to learning about newly developing topics in education. The Science of Reading is an emerging issue in the state of Arkansas. Qualitative research methods provide a more in-depth understanding of how principals perceive the science of reading (Fossey et al., 2002).

The researcher utilized individual interviews to obtain quality research to get authentic principal perspectives. The Division of Elementary and Secondary Education (DESE) has a list of certified assessors. The researcher utilized the list to seek participant participation via email invitation. Once the participant agreed to be interviewed for the study, the researcher distributed an electric form to collect demographic data. The researcher scheduled individual video interviews with each of the participants. The interviews allowed individuals' voices to be represented accurately (Fossey et al., 2002).

Research Methods

The research study refers to personal experiences regarding an educational concept. "Phenomenology aims at gaining a deeper understanding in the nature or meaning of our everyday experiences" (Patton, 2015, p. 115). To gain personal experience, the data collection was conducted in an interview format. Phenomenological research methodologies create opportunities to learn from the experiences of others (Fossey et al., 2002). Unlike grounded theory, phenomenology is "restricted to people only" as the data source (Gentles et al., 2015, p. 1776). The researcher wanted to understand what Arkansas administrators are experiencing when observing teachers regarding proficiency in the science of reading (Neubauer et al., 2019).

The approach that was taken is considered Hermeneutic phenomenology. Neubauer et al. (2019) state that "Hermeneutic phenomenology is also known as interpretative phenomenology" (p.94). The individuals being researched are influenced by the world they have lived and are currently experiencing. Because the research question pertains to an experience the individual is living, Interoperative Phenomenological analysis was the research method. The researcher actively participated in the interoperative process (Neubauer et al., 2019).

Participants

To qualify for this study, the participants must be current building administrators identified as certified assessors according to the Right to Read Act (2017). Because the research question regards an administrator's perception of identifying a teacher's proficiency in the science of reading, teachers and college professors were not considered candidates. In most qualitative studies, a predetermined sample size is hard to identify

(Gentles et al., 2015). However, in efforts to schedule and plan for the data collection portion of this study, the researcher intended to include at least 12 interview candidates. Each candidate should currently be employed as an elementary building principal that evaluates teachers within the grades of kindergarten through sixth grade in the state of Arkansas.

The researcher conducted a purposeful sampling of principals in the state of Arkansas. The intention of this study included purposeful criterion-based sampling (Patton, 1990). Patton (1990) states, "criterion sampling is to review and study all cases that meet some predetermined criterion of importance" (p. 176). Criterion sampling was considered for this study because each participant must be an elementary principal and identified as a certified assessor. Choosing these participants purposefully allows for more clarity on the research question (Patton, 1990). This form of sampling is one of the most common in qualitative research (Gentles et al., 2015). All elementary principals identified as certified science of reading assessors were sought out for interviews. The researcher chose at least eight candidates from the certified science of reading assessors list. The goal was to select candidates that represented diversity. Interviewees were a mix of gender and race. Diversity among the teacher and student demographics of the school where the building principal resides was also present. Due to interview limitations, all elementary certified assessors in the state of Arkansas will not be interviewed. Convenience sampling was utilized due to the availability of participants in the given time frame. Convenience sampling is a common form of sampling due to time constraints and funding (Patton, 1990).

Sources of Data

The researcher conducted an interpretive phenomenology analysis. In interpretive phenomenology analysis, the researcher actively interprets (Neubauer et al., 2019). The data collection for this study came from interviews and artifacts. Once the candidates consented, the researcher requested a convenient date and time for an interview. The researcher emailed confirming the date, time, and Google Meet link. The email also included a link to a Google Form and two attachments. Basic demographic data was collected via Google Forms before the interviews to save time during the interview. The Rules governing the Right to Read will be included as an attachment in the email, so the participant would have the document as a reference during the interview (Rules Governing the Right to Read Act, 2020). The researcher also provided the K-2 SoR Assessor Smart Card and the 3-6 Content SoR Assessor Smart Card for the participants to discuss during the interview. The researcher interviewed each candidate at least 30 minutes but at most an hour.

Instrument

Interview questions were developed based on the researcher's experience and interactions with administrators in the Science of Reading Assessor professional development. The researcher consulted with other researchers and science of reading trainers in Arkansas. There was a review of existing qualitative studies to gain insight into what types of questions to include. The researcher then drafted a set of open-ended questions that would allow participants to provide detailed and nuanced responses. The questions explored topics such as observing reading instruction, reading training science, and legislation's role in reading education. The researcher piloted the questions with two

principals to ensure they were easily understood. By carefully developing the interview questions that address the principal's experiences with the science of reading, the researcher gathered rich and informative data to inform this study.

Interview Questions

- 1. Please describe your training and experiences in the science of reading.
- 2. How did you obtain this training?
- 3. Based on your experience, describe what you expect to observe from a teacher proficient in the science of reading.
- 4. What specifically did you observe made you think the teacher's instruction met the science? Describe what you observed: phonics, vocabulary, etc.?
- 5. In your opinion, what are the challenges of administrators determining if a teacher is proficient in the science of reading? What are the benefits?
- 6. I provided you with the SoR Smart Cards in a previous email; describe how you use these during your observations.
- 7. If you were to describe your confidence level in determining if a teacher were proficient in the science of reading, what would it be? Why?
- 8. If there was something specific you would like to know more about regarding SoR, what would it be? Why?
- 9. I provided you with the Right to Read Rules and Regulations in a previous email. In your opinion, what are the positives regarding these rules and regulations?
- 10. What are the negatives?
- 11. Do you believe this legislation will lead to a growth in student reading achievement across the state of Arkansas? Why or why not?

- 12. Do you feel that your evaluation of the teacher's ability to teach reading will increase the reading ability of students? Why or why not?
- 13. If you could provide input or make a change to the process of teacher proficiency in the science of reading, what would you recommend?

Data Analysis

The researcher conducted individual interviews. Each interview was recorded via Google Meet. Each interview's transcripts were documented through a Google Meet application extension, Scribbl. The researcher replayed the video-recorded interview to ensure that the transcriptions were accurate. Once four interviews were conducted, the researcher began the constant comparative method (Lincoln & Guba, 1985), also known as the qualitative content analysis process (Patton, 2015). The researcher highlighted interviewee responses looking for common terminology and concepts, and began a coding process. The highlighted coded records were cut, glued to notecards, and organized into units. (Lincoln & Guba, 1985; Patton, 2015). The researcher identified commonalities, and each unit contained information to understand further the research question (Lincoln & Guba, 1985). Additionally, the researcher analyzed the units into categories. The categories for each unit were further analyzed by seeking themes (Patton, 2015).

The researcher conducted further interviews to gain as much information as possible regarding each principal's perception of evaluating a teacher for proficiency in the science of reading. Interviews were administered until it was time to stop collecting data. According to Lincoln & Guba (1985), there are "four criteria to inform such a stop:

exhaustion of sources, a saturation of categories, the emergence of regularities, and overextension" (p.350).

Summary

The qualitative approach to this study provided a deeper insight into the building administrator's perceptions of the science of reading. This chapter describes the methodology, including the instrument used to conduct the research and the data source. The study used interviews to collect data from current elementary principals certified science of reading assessors. Interview survey responses were utilized to identify patterns and categories that indicated themes that emerged among the perceptions of elementary principals determining teachers' proficiency in the science of reading (Lincoln & Guba, 1985; Patton, 2015).

Ethical Considerations

The researcher completed Collaborative Institutional Training Initiative with passing scores. Before beginning any research, the researcher submitted the IRB application, proposed interview questions, and informed consent to seek Arkansas Tech University Institutional Review Board approval. Once approval was granted, the researcher started finding qualified research candidates.

The researcher obtained several lists containing all the certified assessors' email addresses in the state of Arkansas. The Division of Elementary and Secondary Education provided the lists. The researcher began the purposeful criterion-based sampling by using the lists to send an email to seek participation. The email explained the research study and provided a short Google Form survey link. The first question in the survey asked if the administrator wanted to participate in the research study. Since the study only

researched elementary principals' perspectives, the next question inquired if the administrator was a current elementary principal. The responses were reviewed, and a list of interested, applicable candidates was created. The researcher sent an informed consent form via email to all those stating they would participate.

The researcher emailed the possible candidates a list of dates and times to conduct a virtual recorded interview. That email also included the two artifacts: Rules Governing the Right to Read Act, 2020, the K-2 SoR Assessor Smart Card, and the 3-6 Content SoR Assessor Smart Card. The researcher used video recording on Google Meet and phone recording during the interview. The researcher used the Scribbl application to transcribe the interview.

After each interview, the researcher reviewed the transcript and compared the transcript to the recording of the interview for accuracy. Once accuracy was confirmed, the researcher emailed the transcript to the participant. To maintain complete confidentiality, the researcher removed names from the transcriptions before data analysis and began identifying the transcripts by pseudonyms: Admin 1, 2, 3, 4, 5, 6, 7, 8. During the data analysis, the researcher highlighted the transcripts based on codes. Each highlighted portion was cut, taped to an index card, and labeled according to Admin 1, 2, 3, 4, 5, 6, 7, or 8.

Credibility

This phenomenological study explored the building-level administrator's perceptions of determining a teacher's proficiency in the science of reading. Because the study refers to personal experiences regarding an educational concept, the study is a phenomenological qualitative approach. "Phenomenology aims at gaining a deeper

understanding in the nature or meaning of our everyday experiences" (Patton, 2015, p. 115). This study involved eight interview candidates. Each candidate was provided with the same interview format and questions. Since the instrument in this qualitative research study was the researcher, credibility should be established (Patton, 2015, p. 653). According to Patton (2015), "credibility of qualitative inquiry depends on four distinct but related inquiry elements: systematic, in-depth fieldwork; systematic and conscientious analysis of data, the credibility of the inquirer; and readers' and users' philosophical belief in the value of qualitative inquiry (p. 653)."

Reflexivity

To establish credibility, researcher reflexivity is an essential process in this study. Reflexivity is more profound than just a reflection of the work. Reflexivity requires the researcher to take a more focused, in-depth introspection into the relationship between the researcher and the study (Patton, 2015, p. 70). "Reflexivity requires commenting on two important points: past experiences and how past experiences shape interactions (J. W. Creswell & J. D. Creswell, 2018, p. 184)."

I am a middle-aged white, middle-class Christian female in all transparency efforts. I have been married for 22 years, and we have three children. I am proud of my desire to be the best mother and wife. Being excellent in my profession is a close third of my priorities. I consider myself healthy. I am an educator. I have served as a special education teacher, third-grade teacher, fifth-grade teacher, instructional facilitator, principal, assistant superintendent, and Assistant State Superintendent for the Office of Coordinated Support and Services with the Arkansas Division of Elementary and

Secondary Education. My current role is Superintendent for a school district in the Delta region of Arkansas. This is my 19th year in education, all in the state of Arkansas.

About "past experiences" (J. W. Creswell & J. D. Creswell, 2018, pg. 184), my childhood was full of experiences. One might think I was privileged as a child based on my social demographics. As a mature adult, I find my adolescent experiences of parental mental illness, sexual abuse, and displacement efficacious. I was born in Pine Bluff, Arkansas. At the time, my mother was 18 and married to my 25-year-old deaf father. According to stories, I spent most of my baby days with my maternal grandmother and my God Mother, my aunt, 16 years older than my mother. My parents divorced when I was two, leading to seven stepdads over the next 22 years. After two suicide attempts by my mother while I was in college, she was officially diagnosed with bipolar and has been successfully medicated for 18 years.

When I was 13, I moved in with my Mema, my maternal grandmother. However, several back and forths occurred with my mother, father, and paternal grandmother throughout high school. Mema provided stability, knowledge, love, and, most of all, strength. Her actions and beliefs have no doubt impacted my beliefs and views. She was a strong, southern woman who fought for her right to vote, put herself and her little sister through high school while working, and had the dream in 1941 to become a secretary. She said, "That was a good profession for a woman, Jennifer."

I was the attention-seeking, headlice-having elementary student bored out of my mind. I thrived in high school after finding a love for basketball and teachers that were ok with my talkativeness. I also lived in a stable environment and began dating my now husband. I became an elementary teacher to make it fun and engaging for kids like me. I

was considered a teacher leader and moved quickly into administration. I have attended three different higher educational universities in the state of Arkansas. My undergraduate in Elementary Education was completed at The University of Central Arkansas. I met an Educational Specialist and master's degree at Harding University and am attending Arkansas Tech University to obtain an Educational Doctorate. When I became pregnant at 19, my Mema insisted I finish college. My goal was to be the best mom and wife ever and get a degree. I want to earn a doctoral degree for three main purposes: to set an example for my children, make a difference in the lives of others through research, study, and education, and be the first of many doctors in my family.

My professional lens is one of passion. As an educator, I must make an impact on children. As a teacher, I knew the importance of student relationships. This quickly led principals to place the "tough kids" or the "tough parents" in my classroom. I met the challenge head-on. I set out to prove that with structure, communication, and understanding, all students would love and be successful in my classroom. My experiences as a child give me a "no excuse" perspective. When a student is the victim of unfortunate (terrible, horrible) situations and experiences, I believe they should be taught not to be the victim. Providing counseling, communication, kindness, and stability can make a difference in a child's life, and I take the responsibility of helping the student see the opportunities that are before them.

My most impactful administrator was visible, provided constructive criticism, set high expectations, and held his teachers and students to the expectations. He shaped my professional lens as an administrator. After quickly moving into an administrative role, I used my educational philosophy and his model to lead my building as if it were my

classroom. According to J. W. Creswell and J. D. Creswell (2018), "past experiences shape interactions" (p. 184). One of my most significant ah-ha moments was learning that many teachers struggled with communication. I often observed teachers who did not know how to state expectations clearly. I experienced teachers that were "afraid" to call parents, and one specific teacher was "afraid" of students. Through these encounters, I decided to provide my teachers with relative and purposeful professional learning. I observed growth among my teachers and our school's community culture. I have joked that my first book will be, "Talking to Parents for Dummies." Because of these experiences, I believe in relevant, purposeful teacher training.

At the beginning of my work with the Division of Elementary and Secondary Education, I was tasked with leading a particular training. Because I have administrative experience, I was partnered with the literacy specialist that oversaw and developed the Arkansas Science of Reading professional development for teachers. We were responsible for training all building-level administrators to determine if a teacher was proficient in the science of reading. This professional development for administrators was the Science of Reading Assessor Training.

Because I am a former building administrator, who claimed to be abreast of research and law, I was surprised at how little I knew about the science of reading and all the Arkansas legislative requirements. I immediately assumed some principals had the same knowledge as me, but most knew far less. Not only do I have assumptions, but I also have a bias toward administrators that were not elementary teachers. My bias comes from my experiences with the principals that attended our assessor training. Many of the administrators in the state of Arkansas are former health, physical education, and history

teachers. There is also a large base of administrators that were secondary teachers. Considering the training was to teach administrators to look for and evaluate a teacher based on their ability to teach reading using the science of reading, most administrators had never taught reading before an administrator. Based on my encounters, it was rare for me to meet a principal that was a former kindergarten through second-grade teacher. The assessor training helped form my opinion that it would be difficult for an administrator that has yet to experience teaching foundational reading to determine if a teacher is teaching with a balanced literacy method versus a method grounded in the science of reading.

Because I am so closely involved in the science of reading research through my principals' training, I approached the research question expecting specific outcomes. I thought most principals did not know to determine a teacher's proficiency in the science of reading. However, I hoped for a better understanding of their perspectives. The interview candidates knew me in my capacity as one of the science of reading assessor trainers. It did concern me that the interviewees may not be as candid since I am the person that trained them to be knowledgeable in determining the science of reading proficiency of teachers. I am very familiar with the science of reading terminology. After conducting a trial interview, I knew it would be imperative for me to ask clarifying questions to ensure the candidate could explain the terminology instead of me making assumptions.

CHAPTER IV

FINDINGS

This research study examined the elementary building principal's perception of determining a teacher's proficiency in the science of reading. The state of Arkansas has legislation, The Right to Read Act (2017), that requires all kindergarten through sixth-grade core teachers and all kindergarten through twelfth-grade special education teachers to be proficient in scientific reading instruction. One way to gain this proficiency is to be determined proficient by a certified assessor. According to the Right to Read Rules and Regulations, "a certified assessor is a licensed administrator that has completed a science of reading professional development pathway, attended an administrator specific science of reading assessor training, and whose job duties include evaluation personnel (Right to Read Rules Governing the Right to Read Act, 2020, p. 4). The research question that steered this qualitative phenomenological study is: What is the building-level administrator's perception of determining the teacher's proficiency in the science of reading?

Participants

The administrators who participated in this study were current elementary administrators identified as certified assessors according to the Right to Read Act (2017). Due to the nature of the qualifications, the researcher conducted a purposeful criterionbased sampling of principals. Because not all principals in the state of Arkansas are elementary principals, nor are they all identified as certified assessors, the participants were purposefully chosen. Criterion sampling was used to clarify the research question (Patton, 2015).

The researcher aimed to interview 10-12 certified assessors for this research study. The researcher sent a participation request email to over 500 certified assessors. Four participants agreed to be interviewed at the beginning of the research phase. Efforts were made to include diversity among race and gender. After conducting the first four interviews, more data was needed. The researcher resent emails to solicit further participation. Four more administrators were interviewed. The researcher ended the data collection once commonalities emerged within the interview process (Lincoln & Guba, 1985). Eight elementary administrators were interviewed, including two males and six females. The candidates working locations varied. Four candidates currently work in different districts within the Central Arkansas region. Two principals represent other districts in Northeast Arkansas. One administrator is a principal in Southeast Arkansas, and one administrator is from Northcentral Arkansas. Their educational experiences ranged from 7-29 years. A description of the participants is detailed in Table 2. Table 2

Admin	Gender	Race	Years in	Years in	Taught
Notation			Edu.	Admin	reading
Admin 1	F	W	28	15	yes
Admin 2	F	W	25	3	no
Admin 3	F	В	13	5	yes
Admin 4	F	W	18	11	no
Admin 5	F	W	12	7	yes
Admin 6	Μ	В	7	3	no

Description of Building Administrator Participants

Admin 7	М	W	29	12	no
Admin 8	F	W	10	4	no

Data Analysis and Development of Themes

Due to availability and convenience, interviews were conducted and recorded via Google Meet between December 2022 and February 2023. Transcriptions of each interview were provided through a Google Meet application extension, Scribbl. The researcher utilized the video recording to ensure the accuracy of each transcript. During the interviews, the researcher assumed an active role in interpreting the information. According to Neubauer et al. (2019), interpretive phenomenology analysis provides an opportunity for authenticity. Each interviewee openly shared their thoughts and perceptions regarding the science of reading. Once interviews were complete, the researcher began the constant comparative method (Lincoln & Guba, 1985), also known as the qualitative content analysis process (Patton, 2015). The researcher examined each transcript and began highlighting and coding relevant statements to the study. During the data analysis, commonalities among the interviewees' answers emerged in the data analysis process, and the researcher grouped and regrouped codes. The commonalities were placed into categories which led to five overall concepts being identified (Saldana, 2013). Results from the data analysis are presented below.

Research Question: What are elementary building-level administrators' perceptions of determining teacher proficiency in teaching the science of reading in Arkansas?

Thirteen interview questions were developed to research the elementary principal's perceptions:

- 1. Please describe your training and experiences in the science of reading.
- 2. How did you obtain this training?
- 3. Based on your experience, describe what you expect to observe from a teacher proficient in the science of reading.
- 4. What specifically did you observe that made you think the teacher's instruction met the science? Describe what you observed: phonics, vocabulary, etc.?
- 5. In your opinion, what are the challenges of administrators determining if a teacher is proficient in the science of reading? What are the benefits?
- 6. I provided the SoR Smart Cards in a previous email to you; describe how you use these during your observations.
- 7. If you were to describe your confidence level of determining if a teacher were proficient in the science of reading, what would it be? Why?
- 8. If there was something specific you would like to know more about regarding SoR, what would it be? Why?
- 9. I provided you the Right to Read Rules and Regulations in a previous email. In your opinion, what are the positives regarding these rules and regulations?
- 10. What are the negatives?
- 11. Do you believe this legislation will lead to a growth in student reading achievement across the state of Arkansas? Why or why not?
- 12. Do you feel that your evaluation of the teacher's ability to teach reading will increase the reading ability of students? Why or why not?

13. If you could provide input or make a change to the process of teacher proficiency in the science of reading, what would you recommend?

Prior to the interview, the researcher provided two artifacts for the interviewee to refer to if needed. Artifact 1 was the K-2 Assessor Smart Card, and 3-6 Content Assessor Smart Card. Artifact 2 was a copy of The Right to Read Rules and Regulations. Each interview candidate readily answered the questions regarding the science of reading. During the data analysis of the participants' answers, five themes emerged: the principal's training regarding the science of reading, the principal's support resources, the principal's educational background, the principal's classroom observations, and the principal's beliefs regarding the science of reading.

All the interview candidates discussed their own understanding of the science of reading. According to the data analysis, the administrator's training, educational background, resources, and classroom observations shaped the principals' perceptions of determining a teacher's proficiency in the science of reading.

Theme 1: Principal's Training

Two of the interview questions centered around how the principal gained knowledge of the science of reading.

- 1. Please describe your training and experiences in the science of reading.
- 2. How did you obtain this training?

One common category was the science of reading training the principals attended. The Division of Secondary and Elementary Education, DESE, has a PBS:

ArkansasIDEAS series of online videos that provide information and learning regarding the science of reading. According to the DESE website, the ArkansasIDEAS science of reading learning path is a recommended "awareness pathway" (Prescribed Pathway Credentials, n.d.). There are 14 sessions. Four of the eight principals indicated they obtained this online training offered by the state. To be a certified assessor, the administrator must complete a proficiency pathway (Right to Read Rules Governing the Right to Read Act, 2020). The DESE website states that the 14 sessions are an awareness pathway. The four administrators that completed ArkansasIDEAS video sessions also attended three additional science of reading content days. According to the DESE website, there is a proficiency pathway, Pathway D, which includes the 14 modules along with three days (Prescribed Pathway Credentials, n.d.). Admin 6 stated that he "attended the online sessions plus the three additional days, which is a proficiency pathway." The principals obtained their training through various paths. One attended K-2 R.I.S.E., two attended 3-6 R.I.S.E, and one attended both K-2 and 3-6 R.I.S.E. According to Admin 3:

Umm So initially I went through the third through sixth grade science of reading training, um after that, um my supervisor felt like I would be a really good candidate, because I have a master's degree in reading, to kind of assist, teachers in K-2 in understanding the process.

She went on to explain what those trainings consisted of, she said:

Umm K-2 R.I.S.E. is a six-day training which includes umm content days: Science of Reading Overview, Phonological Awareness, Phonics, I think vocabulary, Fluency, and Comprehension, and the 3-6 R.I.S.E. is also a six-day training that includes some of the same days: Phonological Awareness, Phonics, an ummm Morphology, Vocabulary, Comprehension, and the last day was Putting it All Together. Three of the principals mentioned they gained knowledge from the assessor training. Admin 7 stated, "the assessor training provided is very helpful; it helped put it all together."

Admin 5 shared that:

I would say the assessor training is an overview of all science of reading content days, but it also includes opportunity for the administrator to watch videos of teachers and calibrate feedback that could be given to the teacher regarding the implementation of the science of reading.

Literacy professionals employed by DESE created all these trainings. Two of the principals stated they attended a "trainer of trainers" for K-2 R.I.S.E. According to Admin 4, "the trainer of trainers is a twelve-day training that teaches the participant a deeper understanding of the content and prepares them to become a person who can provide the six-day K-2 R.I.S.E. training." The trainer of trainers professional learning includes LETRS Foundational training developed by Louisa Moats and Carol Tolman (Schwartz, 2022). Admin 3's opinion was, "I really think it should be required for principals to get training K-2 and 3-6. I know it's not possible always, but if you're over a K-5 building somebody needs to have that training."

Admin 4 shared, "I think we've done a good job of giving kind of that formal training upfront. Teachers always say that they would like some more support, so I wonder what that support looks like for them." Admin 1 stated, "to train (emphasized) K-6 teachers on how to teach reading, THAT is a hard part of the law."

Theme 2: Principal's Educational Background

Another topic that continually occurred was the principal's background experiences in education. Almost all (seven of the eight) principals stated they did not have strong knowledge of the science of reading before becoming an administrator. Five of the eight interviewed taught secondary subjects. Admin 2 stated:

My background is not in it (literacy). I mean, I would rather do a calculus problem than watch a third-grade teacher, and trying to decide if she's proficient or not...my biggest challenge is my lack of experience with elementary and literacy...last year was awful for me...

Admin 4 recalled:

It's not something that I ever experienced when I was in school, and it wasn't how I was taught, so it's like you're reteaching yourself, and when you're reteaching yourself at an older age, sometimes it creates more of a challenging barrier.

Admin 8 shared that her "background is secondary mathematics." Admin 7 taught seventh and eighth grade social studies and elementary physical education. Admin 3 explained her experiences, "it is easier for me to understand because I have a real vast foundation on how reading works." She believed that most administrators "did not have it (vast knowledge) of reading before becoming an administrator." As a lower elementary teacher, she attended K-2 R.I.S.E. She has a Masters in reading and is a K-2 R.I.S.E. trainer of trainers.

When Admin 3 answered the question regarding an administrator's challenges determining a teacher's proficiency, she added, "if you don't have the knowledge, you

hadn't gone to school for it, you haven't been trained, then how can you assess it effectively?"

Theme 3: Support and Resources Received

Each administrator mentioned resources. The K-2 Assessor Smart Card (See Appendix B) and 3-6 Content Assessor Smart Card (See Appendix C) were among the resources. Admin 4 stated, "I originally obtained my smart card through the science of reading admin training by the state." Six of the eight administrators interviewed recalled that the smart card was provided at training and provides look fors. Admin 3 said, "knowing the smart card backwards and forwards was a focus." The researcher provided the K-2 Assessor Smart Card and 3-6 Content Assessor Smart Card as Artifact 1. When asked how he utilized the smart card, Admin 5 said, "I feel like it is a checklist, and it's got a place out there for me to make notes." Admin 4 shared:

So the smart card breaks down, so like for K-2, it gives us specific components of the science of reading that we're looking for. So in K-2, we have fundamental expectations, phonological awareness, vocabulary and oral language, phonics, and comprehension.

Each of the principals interviewed talked about the support they receive from an instructional facilitator or literacy specialist. Admin 1 said, "So I use my resources a lot, my literacy specialists." When she is observing teachers and may not know if what she is observing is following the science of reading, she will ask the literacy specialist to observe the teacher with her and provide her, as the administrator, feedback so she can learn and know. Admin 5 reflected that she felt she still received training from her literacy specialists. Not all principals interviewed had literacy specialists or instructional

facilitators on their campus; however, utilizing the literacy specialists at an educational cooperative was mentioned by two.

When principals described seeing the science of reading in the classroom, several candidates mentioned curricular materials. All eight candidates said their district had purchased literacy curriculum materials for teachers aligned with the science of reading. According to Admin 4, their school conducts walk-throughs with the curriculum team looking specifically for the utilization of the district-purchased curriculum. Two candidates mentioned the use of Heggerty for phonological awareness.

When asked how comfortable do you feel determining a teacher proficient in the science of reading, Admin 8 said:

If you asked me a year ago, it (my confidence) would have been really, really low, but it's pretty good now because of my resources. Not because of my knowledge or my experiences or anything else. But because of the resources I have.

Theme 4: Classroom Observations

Principals unanimously revealed that they utilize classroom observations to look for the science of reading. One interview question that specifically addressed observing a teacher provided various answers. Question 4 stated, What specifically did you observe that made you think the teacher's instruction met the science? Describe what you observed.

There were many mentions of informal observations via walkthroughs. During these walkthroughs, principals said they are looking for the teachers to use the correct academic language, science of reading curriculum resources, and authentic student

responses. Each principal revealed that it would be noticeable if teachers were consistent with their science of reading instruction. Admin 7 said,

The kids are responding without hesitation, the teacher just rolls, and you can tell by the words that they're going over, the rigor has increased. You cannot just put on a show, you know if you're doing it, it's gonna show that...the rigor, the regularity.

Principals mentioned they were listening for direct quotes from teachers and students when observing the teachers. They are connecting what they see and hear in the classroom to what they have learned in their training and using the K-2 Assessor Smart Card and 3-6 Content Assessor Smart Card. Principals said they were able to see evidence of the science of reading. Specific examples were, Admin 6, "I listen to the teacher and students read; they are answering comprehension questions about the story. They talked about word meanings." When Admin 1 walks through classes, she notices when the "students are combining sounds, substituting sounds and when they are deleting sounds." The Right to Read Act requires that "all kindergarten through sixth-grade core teachers be proficient in the science of reading" (2017). Admin 8 explained that he sees changes in all his teachers during his observations. He stated, "Here's what I can say, I am proud of, it (science of reading) is beyond literacy. I am seeing morphology in math and science." He went on to say, "everybody else has really bought in, and I pushed them (teachers) to do that." One principal said, "my favorite part of the job is getting in the classroom and watching the kids and the teachers interact." The interview candidates cited specific literacy components they were looking for in classrooms. Many mentioned phonics. Admin 5 said, "in the lower grades there's going to be a lot more decoding and

segmenting strategies that they (teachers) use...working on blends." Admin 1 stated, "just making sure that they're (teachers) hitting phonemic awareness, that they're hitting phonics, and that they're using assessments that they have given to know what students' needs are when grouping students." Three principals specifically observed students decoding, encoding, and producing letter sounds. Along with phonics, morphology was a common term among the eight principals. Admin 2 explained, "third through sixth grade, there's a lot more morphology that's occurring."

During these observations, principals indicated they questioned the teacher's instruction. Admin 1 said, "it took her less than five minutes to realize, she's (the teacher) not doing what we are expecting. This is something our district expects you to do." Most of the principals shared that the classroom observations afforded the opportunity to provide immediate feedback to their teachers. Admin 3 said, "if there are questions that I have, I follow up, so I can gain an understanding." One principal believed her observations and feedback of the science of reading components "positively reinforced" and "promoted performance." She felt like a "cheerleader." Admin 4 thought that principals observing teachers was a plus. She said, "I believe it will be positive because it gives the teacher immediate feedback." She added, "as an administrator, you have to be consistently going into the classrooms."

Interview question 7 asked the principals to describe their confidence level in determining if a teacher was proficient in the science of reading. Based on their answers, the training, resources, and classroom observations provided stability to be confident. Six of the eight administrators indicated that identifying kindergarten through second-grade teachers was easier than identifying their third through sixth-grade counterparts. Admin 6

said, "K2 to me is easier, I've got it because it's the basics and the fundamentals, but 3-6 is harder to me. I tend to overthink." Others had some of the same feelings. "It's more cut and dry (K-2)", Admin 2 shared. Admin 4 stated, "I am fairly confident in being able to, you know, observe a teacher while they are doing a phonics lesson." Admin 1 didn't have a concern regarding grade bands. She said, "my comfort level of collecting evidence and categorizing the evidence is pretty high, like a nine or a ten." She added:

I'm nervous about saying someone is proficient because I know what's at stake for them. And I mean, I don't want to mess that up for them, but on the flip side of that, if someone is not proficient, I don't want to mess that up for kids.

Even though most principals expressed high confidence levels in determining a teacher's science of reading proficiency, they shared challenges. Many expressed the amount of time it takes to observe all teachers and identify a preponderance of the science of reading evidence as an obstacle. Admin 7 said, "time is a challenge because I would like to observe more frequently." When Admin 1 answered, she said, "there are so many components, so being strategic about when you go in (the classroom to observe), it just takes a lot of time." One principal shared her concern of having a lot of novice teachers. She stated the need for understanding "how to support novice teachers, who are not traditional, or their college didn't teach them how to use the science of reading." Admin 2 expressed a different challenge. Her concern regarded the students' abilities. She said, "we have so many students who still need fundamentals in the fourth, fifth, and sixth grade. And those teachers still have to understand that these students need fundamentals. They (teachers) have to figure out how to bring that in."

Theme 5: The Building Principal's Beliefs Regarding the Science of Reading

There were challenges denoted from the principal's interviews about determining a teacher's proficiency in the science of reading. The data analysis revealed positive statements about the Right to Read Act's requirement for all kindergarten through sixthgrade core and kindergarten through twelfth-grade teachers to be proficient in the science of reading (Right to Read Act, 2017).

Accountability was a consistent statement from the principals. Several comments were, "the law put accountability on schools." "Schools are having to justify what needs to be occurring." "It's created accountability for schools." Admin 8 said, "The law put accountability on universities and colleges in the state of Arkansas. Because of that, we can guarantee exposure to our incoming teachers."

According to the interviewed candidates, The Right to Read Act has provided benefits to the state's literacy education of students. Several principals said they have evidence of students making gains they hadn't seen before. Admin 7 said, "the reading scores have not improved as much as we'd like, but they have improved. I believe our school had less of a dip due to COVID because our students had a strong literacy foundation." In accord, the candidates explained that the law had provided a shift in focus for districts. "It (science of reading) is in the forefront," Admin 2. The administrators shared that the state has required the science of reading to be important. Admin 2, "everything I ever go to, or read, it's (science of reading) there, and so it's being talked about and when something is being talked about and focused on, then we all deem it as important." Admin 6 said, "this is too important to get pushed to the side." One

administrator (Admin 4) shared that this requirement has provided, "the opportunity for her to support the teachers and get to see the aha moments when kids actually get it."

Five administrators had very memorable answers regarding the positive effects this law will have on students. Admin 2 said,

The Right to Read guarantees that every child has the same opportunity; in the past we unintentionally knew which kids were going to get it, and we kind of assumed which kids weren't, and that is really bad to say. We want everybody to have the same opportunities.

Admin 3 added, "I think this (the science of reading) is based on credible evidence, there are systematic expectations, and it allows us to see exactly what a kid is missing." One principal said, "theoretically, I say yes, just for the fact, we are required to inspect what we are expecting." In efforts to explain the positives, Admin 6 said, "I think that the foundation is being set, you know it's kind of like building a pyramid. You know it's not going to be fast, but once we get it, it's going to be there for thousands of years."

Summary

Five themes emerged during data analysis: the principal's training regarding the science of reading, the principal's support and resources, the principal's educational background, the principal's classroom observations, and the building principal's beliefs regarding the science of reading. The data revealed commonalities in how each candidate gained the science of reading information. Most spoke positively about their science of reading training. Admin 7 shared, "Sandy and you did a great job breaking it down for us." The K-2 Assessor Smart Card and 3-6 Content Assessor Smart Card was a resource

the candidates described as a helpful tool when observing teachers. Four administrators said they had used the Smart Cards to create their check sheet to help them observe.

The administrators' educational background experiences varied. Their perception of determining a teacher's proficiency in the science of reading was mixed. Challenges were expressed regarding the amount of time, the amount of science of reading components, and the variations of kindergarten through sixth grade. The administrators interviewed had a collective belief that the Right to Read Act (2017) provided accountability and a focus on the science of reading.

Since this was a qualitative study, it is assumed that the participants would answer the questions truthfully. The number of candidates, eight, is a limitation of this study. Not all certified assessors are represented in this research. Another limitation is that the candidates volunteered for the interview. Because each willingly volunteered, there is no anonymity.

CHAPTER V

DISCUSSION, RECOMMENDATIONS, AND CONCLUSIONS

Because building-level administrators in Arkansas are responsible for identifying a teacher's proficiency in the science of reading, more research was needed. This qualitative phenomenological study was developed to explore the building-level administrator's perception of determining a teacher's proficiency in the science of reading. The research findings of this study, its implications for practice and future research, and conclusions are shared in this chapter.

Summary of Findings

The research study of these findings centered around one research question: What is the building-level administrator's perception of determining the teacher's proficiency in the science of reading?

Eight Arkansas elementary administrators identified as certified assessors according to the Right to Read Act (2017) were interviewed. Six females and two males volunteered to participate in this study. Their educational experiences ranged from 7-29 years. Three of the eight candidates had experience teaching students to read before becoming a building administrator. Only some candidates attended the same science of reading proficiency pathway of professional development, but each had attended the science of reading assessor training.

All participants agreed to a virtual interview via Google Meet. The interviews were digitally recorded. A transcription was created by a Google Meet extension application, Scribbl. These transcriptions of the eight participants' interviews were coded and analyzed, and themes that emerged related to the research question were conveyed in

Chapter Four. The findings will be shared in the following section. The principal's revealed that their perceptions of being able to determine the science of reading proficiency of a teacher involved their knowledge and the requirement placed upon them.

Themes that emerged:

- The science of reading training each principal attended
- Each principal's teaching background/experiences
- The support and resources each principal utilized
- Classroom observations
- The building principal's beliefs regarding the science of reading

The Principal's Knowledge of the Science of Reading

The data analysis revealed that the building principal's perceptions of their knowledge of the science of reading were based on four categories: the principal's training, the principal's educational/teaching background, the principal's support resources, and the principal's classroom observations. Each principal explained the training they attended to gain science of reading knowledge. The Right to Read Rules and Regulations states, "a certified assessor is a licensed administrator that has completed a science of reading proficiency professional development pathway, attended an administrator specific science of reading assessor training, and whose job duties include evaluation of personnel (Right to Read Rules Governing the Right to Read Act, 2020, p. 4). The Right to Read Rules indicate that all certified assessors must attend a science of reading professional development pathway. According to the DESE RISE website, there is more than one pathway (Prescribed Pathway Credentials, n.d.). The administrators interviewed had various training experiences. Each shared how their training influenced their knowledge and confidence in determining a teacher proficient in the science of reading.

Three of the eight administrators stated they taught students to read before becoming an administrator. Only one of these three revealed that she taught students to read utilizing her science of reading training before becoming a building administrator. Five of the administrators shared that they taught secondary subjects. Seven of the principals indicated they were only familiar with the science of reading once they began receiving the training as an administrator due to the state requirement. Based on the data, one principal perceived her educational teaching experience as a positive because she was exposed to foundational literacy. The other seven administrators revealed that determining their proficiency was more challenging because they did not teach foundational literacy.

Each of the administrators interviewed explained that they use resources to aid in understanding what the science of reading looks like in the classroom. Artifact 1, the K-2 Assessor Smart Card, and 3-6 Content Assessor Smart Card were provided by the researcher to the administrators before the interview. It is a document that principals received during the science of reading assessor training. Each candidate referred to Artifact 1 as a resource they use when entering the classrooms while looking for teachers utilizing the science of reading. According to their answers, Artifact 1 provides specific science of reading look fors when they observe a teacher. Another resource mentioned by five of the eight principals was literacy specialists or instructional facilitators. They shared that these support staff provided insight and understanding when observing teachers to ensure the teacher was teaching accurately using the science of reading. Two

of the eight administrators implied they could identify if the teacher was proficient due to feedback the literacy specialist provided when they observed the teacher together. Admin 2 said, "I know how to rate someone, but I will say with the facilitator support I have, they help me make sure I am right."

The principals all shared that they conduct classroom walkthroughs. They revealed that these walkthroughs provide opportunities for feedback to the teachers. According to the data, principals can listen for academic language, look for curricula aligned to the science of reading, and acknowledge student activity and responses regarding literacy when conducting classroom walkthroughs.

The Principal's Beliefs Regarding the Science of Reading

When asked about the Right to Read Act, the principals believed the Arkansas law had brought a focus and accountability to the science of reading. Because the law ties the science of reading proficiency to teacher licensure, the science of reading is at the forefront for educators. All core kindergarten through sixth-grade elementary teachers must be proficient in the science of reading (Right to Read Act, 2017). To be proficient, teachers are required to attend science of reading training, and their principals are required to ensure the teachers demonstrate their understanding of the science of reading through their classroom instruction. The administrators shared that focusing on the science of reading has provided students with opportunities. It was mentioned that now, every student is guaranteed the same opportunities involving fundamental reading instruction. One principal shared a concern regarding student ability. According to the principal, many upper elementary students need fundamental reading instruction, which requires third through sixth-grade teachers to utilize fundamental instruction in their

classrooms. According to him, "it is harder to see in the upper elementary classrooms." Admin 2 shared that "K-2 was more cut and dry."

The utilization of curriculum resources was shared among the administrators. The principals stated that each school has a consistent literacy curriculum aligned with the science of reading. Because there is a focus on the science of reading, the principals look for teachers using a curriculum aligned with the science of reading. One principal indicated he has documented student growth due to implementing the science of reading.

Implications for Practice

The low proficiency level in reading is a concern nationally as well as in the state of Arkansas. In 2022, 30% of Arkansas fourth-grade students scored at or above proficient in reading on the NAEP (The Nations Report Card, n.d.). Administrators serve a critical role in the success of students in the school. The implications of this research study provide insight for the state of Arkansas, school districts, and educators to provide instruction in the science of reading and to develop the principal's understanding of the science of reading to ensure all students receive fundamental reading instruction that is aligned to the science of reading.

Theoretical Implications

The data collected was from eight certified science of reading assessors. These principals are responsible for identifying the science of reading proficiency of their kindergarten through sixth-grade core teachers and their kindergarten through twelfthgrade special education teachers. The principals provided insight into their science of reading learning and their day-to-day activities regarding the science of reading. Based on the data, these principals revealed positive information regarding the implementation

of the science of reading in the state of Arkansas. During the candidate's interviews, not one principal mentioned the evaluation of a special education teacher. One of the eight stated she utilized her science of reading training as a classroom teacher, making it easier to identify if a teacher was teaching using the science of reading. The other seven principals shared that they are conducting classroom observations looking for something they have never implemented as a classroom teacher. The building principals' perceptions of determining a teacher's proficiency are based on their knowledge and support resources.

According to the literature, teachers need to gain knowledge of fundamental reading and a basic understanding of language structure (Bos et al., 2001). The administrators revealed they could provide immediate science of reading feedback to teachers when conducting classroom walkthroughs. They can provide this feedback due to their learning and their support resources. The principals stated that classroom consistency helps with giving immediate positive or corrective feedback to the teachers. The Arkansas goal is for all teachers to be proficient in the science of reading instruction. According to the self-efficacy theory, constructive feedback can lead to growth. "Self-efficacy is an individual's belief in their capacity to execute behaviors necessary to produce specific performance outcomes" (Carey & Forsyth, 2009, p. 1).

Practical Implications

The Right to Read Act (2017) has been amended in 2019 and 2021 to include updates. The law has many requirements for school districts. These requirements address the science of reading professional development a district must provide, the professional learning the teacher must have regarding awareness or proficiency in the science of

reading, the curriculum a district is using to teach students to read, the programs colleges and universities in the state must provide for their educator preparation program, and the law states that there will be an educator ombudsman who will ensure each district is meeting these rules (Right to Read Act, 2017). Violators of the law will be placed in probationary status and could lose 10% monthly of the district's foundation funding if not corrected (Right to Read Act, 2017). Arkansas has its implications if the district does not comply with the law. However, this study has highlighted an administrator's perspective of the law's intent. The principals interviewed believe the law has placed accountability on schools to learn about the science of reading and teach students to read. The study showed that the principals interviewed spent time in classrooms looking for the science of reading.

For the State of Arkansas

The term science of reading has been prevalent in Arkansas since 2017 (Right to Read Act, 2017). According to Shanahan (2020, p. S235), "science of reading is term that has been used for more than 200 years." Because of the Right to Read Act, Arkansas educators must be trained and proficient in the science of reading. One way for a teacher to be identified as proficient in the science of reading is to be evaluated by a certified assessor (Right to Read Act, 2017). This study provides insight into eight Arkansas-certified assessors' thoughts and perceptions regarding the science of reading and the Right to Read Act. Each of the administrators discussed the science of reading training they received. Admin 1 shared that "K-2 R.I.S.E provided information about phonological awareness and foundational reading." Two of the participants revealed they were trained to be K-2 R.I.S.E. Trainer of Trainers and that training gave them the ability

to support a teacher in the science of reading. Only three of the participants had educational experience teaching students to read. One of the three taught using her science of reading training. Five of the eight were secondary teachers before becoming administrators.

According to the Right to Read Act (2021), all kindergarten through sixth-grade core teachers and all kindergarten through twelfth-grade special education teachers will be proficient in the science of reading by the beginning of the 2023 school year. Each school district must report the teacher's proficiency in the state-mandated database. Arkansas will soon have data that indicates whether a teacher is proficient in the science of reading. Many of those teachers will have been identified as proficient by the building administrator. The eight Arkansas participants of this study implied confidence in determining a teacher's proficiency. Admin 7 stated, "so, yea, I feel pretty good about it, umm we've had the training since the beginning."

This study provides administrative support for the Arkansas law, The Right to Read Act (2017). The principals shared that the law has focused on the science of reading. This focus has provided more opportunities for students. According to these eight administrators, all their current schools have literacy curriculum resources aligned to the science of reading. This study provides data that Arkansas teachers and principals participate in various science of reading professional development pathways. The DESE, RISE website lists the science of reading professional development pathways (Prescribed Pathway Credentials, n.d.). The implication of this study discloses that there are teaching ability gaps. In this study, administrators shared that even though they attended science of reading training, their educational teaching experiences influenced their understanding of

the science of reading and their confidence level when determining a teacher's proficiency in the science of reading. Arkansas may need to require a more prescribed science of reading professional development pathway based on the administrator's background.

Two administrators shared that they saw a gap in novice teachers' abilities. It was shared that novice teachers had so much to learn, and they did not learn the science of reading in school. The Rules and Regulations Governing the Right to Read (2020, p. 6) states, "A provider of a state-approved educator preparation program, graduate program, or alternative preparation program shall include in its annual report to the Division a description of the provider's program to prepare educators to teach reading using scientific reading instruction." Arkansas may need to look further into the educator preparatory programs to ensure consistency in how the science of reading and foundational reading is being taught to preservice educators.

For School Districts

During the interviews, most principals shared that they relied on support from instructional facilitators or literacy specialists. Only some of the principals had these district personnel. Implications for districts could be employing instructional facilitators or literacy specialists with a strong understanding of foundational reading. The administrators revealed that instructional facilitators and literacy specialists provided a layer of support for teachers and support for them when observing teachers for proficiency.

Principal perceptions indicate that administrators with educational teaching experience in foundational reading had stronger confidence in determining a teacher's

proficiency in the science of reading. An implication for a district may be to seek experienced foundational reading teachers as kindergarten through sixth-grade administrators when hiring.

Recommendations for Future Studies

This study explored authentic beliefs about the administrator's perceptions of determining a teacher's science of reading proficiency. The themes revealed implicate the principals relying on their knowledge and support resources to identify a teacher's proficiency in the science of reading. As a follow-up to this study, future researchers could expand this to include more principal interviews representing a larger variety of schools and all grade bands. Future researchers could provide a foundational literacy survey to the principals before the interview to compare actual knowledge versus perceptions.

Because the implementation of the science of reading began in 2017 and the COVID pandemic took place spring of 2020, there is a need for further research regarding the science of reading in Arkansas. Not all educators were trained in the science of reading in 2017. The state began to train administrators in 2019. When COVID happened, trainings were paused. Currently, there needs to be more consistent student data. Future studies should be suggested to include teachers and their perceptions of their ability to teach using the science of reading versus their current foundational literacy knowledge.

According to The Right to Read, state-wide data should indicate teacher proficiency in the science of reading proficiency available in the 2023-2024 school year (Right to Read Act, 2017). A recommendation would be to compare teacher proficiency

ratings to student reading performance. According to NAEP, in 2022, 30% of Arkansas fourth graders scored proficient in reading (The Nations Report Card, n.d.). Will the proficiency rate increase if students are taught by a teacher proficient in the science of reading?

Conclusions

The purpose of this study was to explore the building-level administrator's perceptions of determining a teacher's proficiency in the science of reading. This chapter's findings identified the five themes which emerged during the interviews. The themes were: the administrator's training, educational background, resources, and classroom observations shaped the principals' perceptions of determining a teacher's proficiency in the science of reading. These findings were examined closely in this chapter, and implications were identified. Building administrators believed their knowledge of the science of reading grew through training, support resources, and classroom observations. The principals shared that the Right to Read Act (2017) made the science of reading at a forefront in education and placed accountability on schools.

Implications for the state of Arkansas and school districts were provided. Recommendations for future research were shared with three areas of study: (a) an expanded study of building principals; (b) a study of building principal's foundational literacy knowledge versus their perceptions of their knowledge; (c) a comparison of the teacher's knowledge of the science of reading versus student reading ability.

REFERENCES

Arkansas LEADS 2.0 Principal Rubric (2022). Leader excellence and development system. Division of Elementary and Secondary Education. https://dese.ade.arkansas.gov/Files/20201123105718_LEADS_2.0_Principal_Rub ric.docx-3.pdf

Bandura, A. (1971). Social learning theory. General Learning Press. http://www.asecib.ase.ro/mps/Bandura_SocialLearningTheory.pdf

- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215. http://doi.org/10.1037/0033-295X.84.2.191
- Binks-Cantrell, E., Joshi, R., & Washburn, E. (2012). Validation of an instrument for assessing teacher knowledge of basic language constructs of literacy. *Annals of Dyslexia*, 62, 153-171. http://doi.org/10.1007/s11881-012-0070-8
- Bos, C., Mather, N., Dickson, S., Podhajski, B., & Chard, D. (2001). Perceptions and knowledge of preservice and inservice educators about early reading instruction. *Annals of Dyslexia*, 51(1), 97-120. http://doi.org/10.1007/s11881-001-0007-0
- Carey, M., & Forsyth, A. (2009). Teaching tip sheet: Self-efficacy. American Psychological Association. https://www.apa.org/pi/aids/resources/education/selfefficacy
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design* (5th Edition). Sage Publications, Inc.
- Dehaene, S. (2013, April 30). *Reading the brain*. YouTube. https://youtu.be/MSy685vNqYk

- DiObilda, N.A., & Petrillo, R.L. (2020). Beginning reading instruction in the nineteenth century: The path towards eclecticism. *American Educational History Journal*, 47(1), 117-141. https://www.proquest.com/scholarly-journals/beginning-readinginstruction-nineteenth-century/docview/2445578494/se-2
- Ellett, C. D., & Teddlie, C. (2003). Teacher evaluation, teacher effectiveness and school effectiveness: Perspectives from the USA. *Journal of Personnel Evaluation in Education*, 17(1), 101-128. https://doi.org/10.1023/A:1025083214622
- Fossey, E., Harvey, C., McDermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. *Australian and New Zealand Journal of Psychiatry*, 36, 717-732. https://doi.org/10.1046/j.1440-1614.2002.01100.x
- Gentles, S., Charles, C., Ploeg, J., & McKibbon, K. A. (2015). Sampling in qualitative research: Insights from an overview of the methods literature. *The Qualitative Report*, 20(11), 1772-1789. https://doi.org/10.46743/2160-3715/2015.2373
- Hanford, E. (2019). At a loss for words: How a flawed idea is teaching millions of kids to be poor readers. APM Reports.

https://www.apmreports.org/episode/2019/08/22/whats-wrong-how-schoolsteach-reading

Hazi, H. M., & Arredondo Rucinski, D. (2009). Teacher evaluation as a policy target for improved student learning: A fifty-state review of statute and regulatory action since NCLB. *Education Policy Analysis Archives*, 17(5), 1-22.
https://epaa.asu.edu/index.php/epaa/article/view/7/7

- Jacobson, J., Reutzel, D., & Hollingsworth, P. (1992). Reading instruction: Perceptions of elementary school principals. *The Journal of Educational Research*, 85(6), 370-380. http://doi.org/10.1080/00220671.1992.9941140
- Kilpatrick, D. (2015). *Essentials of assessing, preventing, and overcoming reading difficulties*. Wiley and Sons, Inc.

Kim, Y., & Snow, C. (2021). The science of reading is incomplete without the science of teaching reading. *The Reading League Journal*, 2(3), 5-13. https://eric.ed.gov/?id=ED623342

- Lambert, S. (Host). (2022a, May 4). Why skepticism is essential to the science of reading, with Dr. Claude Goldenberg. (S5-E6) [Audio podcast episode]. *The Science of Reading*. Amplify Education. https://amplify.com/science-of-readingthe-podcast/
- Lambert, S. (Host). (2022b, May 18). Unlocking change through literacy legislation: Dr.
 Kymyona Burks. (S5-E7) [Audio podcast episode]. *The Science of Reading*.
 Amplify Education. https://amplify.com/science-of-reading-the-podcast/
- Leowus, L. (2019). Data: How reading is really being taught. *Education Week*. https://www.edweek.org/teaching-learning/data-how-reading-is really-being-taught/2019/12

Lincoln, Y., & Guba, E. (1985). *Naturalistic Inquiry*. Sage Publications, Inc.

Lyon, G., & Weiser, B. (2009). Teacher knowledge, instructional expertise, and the development of reading proficiency. *Journal of Learning Disabilities*, 42(5), 475-480. http://dx.doi.org/10.1177/0022219409338741

- Malatesha Joshi, R., Binks, E., Hougen, M., Dahlgren, M. E., Ocker-Dean, E., & Smith,
 D. L. (2009). Why elementary teachers might be inadequately prepared to teach reading. *Journal of Learning Disabilities*, 42(5), 392-402.
 https://doi.org/10.1177/0022219409338736
- Marzano, R. J. (2012). The two purposes of teacher evaluation. *Educational leadership*, 70(3), 14-19. https://eric.ed.gov/?id=EJ1002836

May, H., & Supovitz, J. (2010). The scope of principal efforts to improve instruction.
 Education Administration Quarterly, 47(2), 332-352.
 https://doi.org/10.1177/0013161X10383411

- Mestry, R. (2017). Empowering principals to lead and manage public schools effectively in the 21st century. *South African Journal of Education*, *37*(1), 1-11. http://doi.org/10.15700/saje.v37n1a1334
- Moats, L. C. (1994). The missing foundation in teacher education: Knowledge of the structure of spoken and written language. *Annals of Dyslexia*, 44(1), 81-102. https://doi.org/10.1007/BF02648156
- National Reading Panel (U.S.), (2000). Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction. *National Institute of Child Health and Human Development* & *National Institutes of Health*.

https://www.nichd.nih.gov/sites/default/files/publications/pubs/nrp/Documents/re port.pdf

- Neubauer, B., Witkop, C., & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. *Perspect Med Educ.* 8, 90-97. https://doi.org/10.1007/s40037-019-0509-2
- Parker, S. (2021, December 23). A brief history of reading instruction. Parkerphonics.com. https://www.parkerphonics.com/post/a-brief-history-ofreading-instruction
- Patton, M. (2015). *Qualitative research & evaluation methods* (4th Edition). Sage Publications, Inc.

Petscher, Y., Cabell, S.Q., Catts, H.W., Compton, D.L., Foorman, B.R., Hart, S.A.,
Lonigan, C.J., Phillips, B.M., Schatschneider, C., Steacy, L.M., Terry, N.P., &
Wagner, R.K. (2020). How the science of reading informs 21st-century education. *Reading Research Quarterly*, 55(S1), S267- S282. https://doi.org/10.1002/rrq.352

- Prescribed Pathways. (n.d.). Division of Elementary and Secondary Education. https://dese.ade.arkansas.gov/Offices/learning-services/risearkansas/prescribedpathway-credentials
- Preston, T. (2022). A look back: A chronicle of Kappan's coverage of the reading wars. *Phi Delta Kappan*, *103*(8), 5-7. https://doi.org/10.1177/00317217221100000

Right to Read Act, Arkansas Stat. § 6-17-429 (2017). https://law.justia.com/codes/arkansas/2017/title-6/subtitle-2/chapter-17/subchapter-4/section-6-17-429/

RISE Arkansas. (n.d.). The Division of Elementary and Secondary Education. https://dese.ade.arkansas.gov/Offices/learning-services/risearkansas#:~:text=in%20your%20browser.-

,R.I.S.E.,homes%2C%20schools%2C%20and%20communities

Rules Governing the Right to Read Act. (2020). The Division of Elementary and Secondary Education.

https://dese.ade.arkansas.gov/Files/20201102115159_ADE%20360%20FINAL--%20Right%20to%20Read.pdf

- Schmoker, M. (2013). Why complex teacher evaluations don't work. *Colleagues*, *10*(1), Article 5. https://scholarworks.gvsu.edu/colleagues/vol10/iss1/5
- Shanahan, T. (2020). What constitutes a science of reading instruction? *Reading Research Quarterly*, 55(S1), S235-S247. https://doi.org/10.1002/rrq.349

The Nations Report Card. (n.d.) National assessment of educational progress. https://www.nationsreportcard.gov/reading/nation/achievement/?grade=4

APPENDICES

APPENDIX A: ATU IRB Approval Letter



OFFICE OF RESEARCH AND SPONSORED PROGRAMS

1509 North Baulder Avenue Administration, Room 207 Russellville, AR 72801 4 479-880-4327

🐐 www.stu.edu

November 9, 2022

To Whom It May Concern:

The Arkansas Tech University Institutional Review Board has approved the IRB application for Jennifer Barbaree's proposed research, entitled "Elementary administrator's perception of determining teacher proficiency in the science of reading." The Institutional Review Board used an expedited review procedure under 45 CPR 46.110 (6)(7). Please use number I-2022-12 when referencing this study.

Please note that in the event that any of the parameters of the study change, the researcher may be required to submit an amended application.

Please proceed with your research. We wish you success with this endeavor.

Sincerely,

Instelle

Tennille Lasker-Scott, Ph.D. Institutional Review Board Chair Arkansas Tech University

APPENDIX B: K-2 Assessor Smart Card

Fundamental Expectations

- Utilize appropriate assessment data to guide instruction. (TESS 1f, 3d)
- Teach skills and concepts in an explicit, accurate and effective way. (TESS 1a.3a)
- Engage students in the learning. (TESS 3c)

K-2

- Adapt instruction to support student understanding, (TESS 3e) Design instruction to move from accuracy to stability to automaticity in all sub-skills (fluency). (TESS 1e, 1f)
- Utilize multisensory techniques when appropriate. (TESS 3c) Pose purposeful questions. (TESS 1a, 3b)
- •
- Group students based on skill needs rather than reading levels. (TESS 1a, 2c) . Use a gradual release of responsibility model in literacy instruction (I do, we do, you do). (TESS 1a, 3c)
- Provide access and opportunity to explore a variety of texts to purposefully engage students. (wordless, decodable, controlled vocabulary, early chapter books, graphic novels, magazines, non-fiction, etc.) (TESS 1b, 1d, 3c)

Phonological Awareness

- Incorporate previously taught materials into lessons (TESS 1e)
- Implement a systematic and explicit phonological awareness program or
- continuum (word, syllable, onset-rime, phoneme) (TESS 1a, 1e) Implement a systematic and explicit phonemic awareness progra
- continuum (identification, isolation, categorization, blending, segmenting, addition, deletion, substitution) to the level of automaticity. (TESS 1a, 1e)
- Model the correct pronunciation of vowel and consonant phonemes for students. (TESS 1a, 3a)
- Teach the phonemes explicitly by focusing on the articulatory features. (TESS 1a, 3a)

Vocabulary

- Purposefully select tier 2 words to build depth of vocabulary from texts read aloud. (TESS 1a, 3c) .
- Utilize explicit strategies to introduce and promote understanding of vocabulary (contextual examples such as pictures, models, graphic organizers, simple explanations, etc.; provide student friendly definitions; repeated exposure to words in different contexts; word networks of multiple meaning words). (TESS 1b, 1d, 3c)
- Use robust vocabulary and provide opportunities for students to practice using new words in order to foster word consciousness. (TESS 3a)
- Use prefixes, suffixes and base words to determine word meaning (TESS
- 1a, 1b)

Oral Language

- Create a collaborative learning environment for student participation.
- (TESS 2a) Engage students in familiar oral language routines. (TESS 3a)
- Facilitate meaningful discourse between/among students. (TESS 2a, 3b)
- Model the use of academic language. (TESS 3a)

Phonics

- Teach letter ID; Link sounds to letter(s) and letter formation by teaching the letter(s) that represent the target sound and how those letters are formed. (TESS 1a, 3c)
- Teach syllable types and syllable division rules to decode unknown words. (TESS 1a, 3c)
- Follow a systematic, explicit routine for decoding instruction: review; introduce new skill with auditory discovery, followed by visual discovery; use a keyword; practice reading words, phrases and sentences. (TESS 1a, 1e, 3c)
- Teach decoding and encoding of irregular words in a systematic way,
- focusing on the sounds and regular parts of the word. (TESS 1a, 3c) Utilize decodable texts to practice letter/sound knowledge, syllable dge, syllable patterns
- and morphological units in decoding, (TESS 1a, 1d, 3c)
- Follow a systematic, explicit routine for encoding instruction: review; introduce new skill with auditory discovery, followed by visual discovery; practice writing words, phrases and sentences. (TESS 1a, 1e, 3c) Support spelling using a sound wall. (TESS 1a, 2c)
- Incorporate morphology instruction, as appropriate by standards. (TESS 1a, 3c)

Comprehension

- Identify unclear/challenging text and guide students to infer meaning
- through scaffolding and oral language discussion. (TESS 1b, 1d) Read aloud texts that are above the decoding ability of the students to foster
- deeper conversations about comprehension. (TESS 1b, 1d, 3c) Teach students to ask and answer questions about text. (TESS 3b)
- Build students' background knowledge around texts/topics they are reading
- about (TESS 1a, 1b, 3a) Teach students to use background knowledge to make inferences. (TESS 1b,
 - 3a, 3c)
- Plan lessons across a variety of genres. (TESS 1a, 1d) Teach students how to use text features and structure to aid comprehension.
- (TESS 1a, 3c) Teach specific ways to monitor and repair comprehension breakdowns.
- (TESS 1a, 1e)

APPENDIX C: 3-6 Content Assessor Smart Card

3-6 / Content

Fundamental Expectations	Collaborative Communication			
 Utilize appropriate assessment data to guide instruction. (TESS 1f, 3d) Teach skills and concepts in an explicit, accurate and effective way. (TESS 1a, 3a) Engage students in the learning. (TESS 3c) Adapt instruction to support student understanding. (TESS 3c) Utilize multisensory techniques when appropriate. (TESS 3c) Elicit and use evidence of student thinking. (TESS 3b) Pose purposeful questions. (TESS 1a, 3b) Use a gradual release of responsibility model in literacy instruction. (I do, we do, you do) (TESS 1a, 3c) Advocate for students to get needed interventions if they have reading difficulties. (TESS 3e, 4d) 	Control Control Communication Control Control Communication Create a collaborative learning environment for student participation (TESS 2a) Model the use of academic language (TESS 3a) Facilitate meaningful content discourse between/among students. (TESS 1a, 1b, 3a) Foster curiosity and learning through talk and inquiries. (TESS 1b, 3a) Morphology Follow a systematic, explicit routine for morphology instruction. (Example: Introduce the new morpheme, practice reading, spelling, and defining words with the new morpheme, incorporate opportunities to practice building words with the new morpheme, practice reading new words in context.) (TESS 1a, 1e) Connect morpheme(s) to grammar. (TESS 1a, 1e, 3c) Compare and contrast morphemes. (TESS 1a, 3a) Build networks of word families (e.g., instruct, destruct, construct, etc) and use across content areas. (TESS 1a, 1e, 3a) Demonstrate understanding of cognates to support ELL's. (words in two languages that share a similar meaning, spelling and pronunciation. For example: artist, artista) (TESS 1a, 3a, 3e) Comprehension Identify unclear/challenging text and guide students to infer meaning through scaffolding and rai language discussion. (TESS 1b, 1d) Ask and answer open-ended questions (text based when applicable). (TESS 1b, 3a, 3c) Teach students to use background knowledge around texts/topics they are reading about. (TESS 1a, 1a, 3, 4)			
 Vocabulary Use robust domain specific vocabulary and provide opportunities for students to practice using new words in order to foster word consciousness. (TESS 3a) Use structural analysis to determine word meaning (root/base; prefix, suffix) (TESS 1a, 3a) Use classroom talk to formalize definitions (students do, talk, read, write). (TESS 1e, 3a, 3c) Foster curiosity and learning through talk and inquiries. (TESS 1b, 3a) Teach strategies for determining figurative, connotative, and technical meanings of words. (TESS 1a, 3c) Teach use of precise vocabulary to convey nuanced meaning. (TESS 1a, 3c) Purposefully select a variety of words to build depth of vocabulary. (TESS 1a, 3c) 				
Interventions for Word Recognition (TESS 3c, 3e) Check phonological awareness ability using the PAST. Intervene for phonological deficits using manipulatives/1 minute drills. Check letter/sound proficiency. Build fluency using decodable texts. Teach syllable types. Teach syllable division patterns. Teach morphology to increase word recognition. Provide access to grade appropriate text. Support spelling using a sound wall.	Interventions for Comprehension (TESS 3c, 3e) Provide instruction to build language comprehension. Teach vocabulary. Build background knowledge and help access prior knowledge. Clause/phrase analysis for sentences with complex punctuation. Guide students to understand how the author builds cohesion. Utilize knowledge of morphology to help make meaning. Guide students in navigating text. Use and connect different types of models to explain concepts. Adapt and modify complex texts.			

005.15

ARKANSAS DIVISION OF ELEMENTARY AND SECONDARY EDUCATION RULES GOVERNING THE RIGHT TO READ ACT Effective Date: June 5, 2022

1.00 REGULATORY AUTHORITY

1.01 The State Board of Education enacted these rules pursuant to its authority as set forth in Ark. Code Ann. §§ 6-11-105, 6-17-402, 6-17-429, and 25-15-201 et seq.

2.00 DEFINITIONS

- 2.01 "Division" means the Division of Elementary and Secondary Education of the Arkansas Department of Education.
- 2.02 "Prescribed pathway" means approved professional development that meets the criteria established by the Division.
- 2.03 "Public school district" includes traditional public schools, open-enrollment charter schools, and district conversion charter schools.
- 2.04 "Science of reading" is the study of the relationship between cognitive science and educational outcomes, also referred to as scientific reading instruction.
- 2.05 "Structured literacy" is the approach by which licensed personnel teach reading in an explicit, systematic, cumulative, and diagnostic manner.

3.00 REQUIRED PROFESSIONAL DEVELOPMENT IN SCIENTIFIC READING INSTRUCTION

- 3.01 By the beginning of the 2019-2020 school year, a public school district, including an open-enrollment public charter school, shall establish the professional development program as required by Section 3.03 and the program shall be provided on an annual basis after the professional development in Section 4.02 is complete.
- 3.02 Beginning with the 2018-2019 school year, a public school district, including an open-enrollment public charter school, shall provide the following professional development in scientific reading instruction:
 - 3.02.1 For teachers licensed at the elementary level in kindergarten through grade six (K-6) teaching math, science, social studies, or English language arts, teachers with a special education license in kindergarten through grade twelve (K-12), and teachers licensed as reading specialists in kindergarten through grade twelve (K-12), professional development for one (1) of the

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